#### Assignment

- 1. EC2 instances (2 machines 1st machine name, 2nd machine sur name)
- 2. EBS volume
- 3. Snapshot
- 4. AMI
- 5. Load Balancer
- 6. VPC with 2 public subnets & 2 private subnet having Internet gateway and NAT gateway
- 7. VPC Peering

Note: Follow the powerpoint for VPC & VPC peering architecture and reiterate.

User your names & Sur names with all the practical topics and share the screen shots and step wise information.

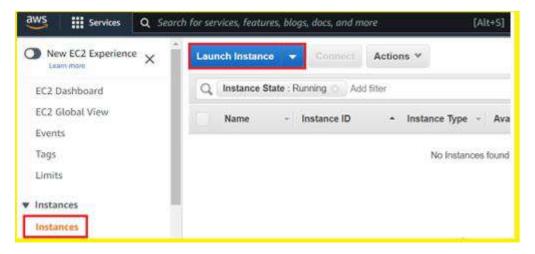
- 1. Create & connect an amazon Linux AWS EC2 machine: Created two EC2 instances
  - a) Login into the AWS console page
  - b) Once you login go to Services.
  - c) Services -> Compute -> EC2

all multime	
All services	EC2
	Virtual Servers in the Cloud
Analytics	VPC
Application Integration	Isolated Cloud Resources
🖘 AR & VR	Console Home
AWS Cost Management	
Blockchain	EC2 Image Builder
Business Applications	A managed service to automate build, customize and deploy OS images
Compute	Route 53
Containers	Scalable DNS and Domain Name Registration
8 Customer Enablement	S3
🛱 Database	Scalable Storage in the Cloud

d) Then go to instances and click on Launch Instance:

aws Services Q Search (	for services, features, blogs, docs, and mo	re	[Alt+5]
New EC2 Experience	Resources		
EC2 Dashboard			
EC2 Global View	You are using the following Amaz	on EC2 res	ources in the US West (Oregon) Regi
Events	Instances (running)	0	Dedicated Hosts
Tags			
Limits	Instances	3	Key pairs
▼ Instances	Placement groups	o	Security groups
Instances	Volumes	0	
Instance Types			
Launch Templates Spot Requests	Easily size, configure, and Wizard for SQL Server. Lea		rosoft SQL Server Always On availab

e) Then click on Launch instance option:



f) Then give the name to the instance machine:

IC2 > Instances > Launch an Instance	▼ Summary
Launch an instance 📷	Number of instances. W/o
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.	1
	Software Image (AMI)
Name and tags Inte	Amazon Linux 2 Kernel 5.10 AMLread more ami-0705208e903559xa
Name	Virtual server type (instance type)
azeez Add additional tags	t2.micro
	Firewall (security group)
	New security group
<ul> <li>Application and OS Images (Amazon Machine Image) use</li> </ul>	Storage (volumes)
An AMI is a temptate that contains the software configuration toperating system, application server, and applicational required to launch your instance. Search or Browse for AMIs If you don't see what you are looking for below	1 volume(s) - 8 GiB
	(i) Ernes Harris ha concertification and the State of X
Q. Search our full catalog including 1000s of opplication and OS images	Cancel Launch instance
	Contract Contract Contract

g) Then select OS Image and the version:

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	SUSE	Q
aws	Mac	ubuntu <sup>e</sup>	Microsoft	📥 Red Hat	SI	Browse more AN Including AMIs fro AWS, Marketplace a the Community
Amazon Machi					ų	
ami-08e2d37b6	5a0129927 (64-b)	- Kernel 5.10, 55 t (x86)) / ami-0d70 led: true Root de	650c3afa9cf54 (6	4-bit (Arm))		Free tier eligible
	1911 - ENA 61201	eu: true Root o	ence type: eus			

h) Under the Instance type: Select – t2.micro machine

istance type		
t2.micro Tanily: 12 1 vCPU 1 GB Memory On-Demand Linux pricing: 0.0116 USD per Hour	Free tier eligible 🔻	Compare instance types
family: 12 1 vCPU 1 Gib Memory	Free tier eligible	Compare instance type

i) Then select the keypair, if you don't have the keypair please click on "create new keypair"

<ul> <li>Key pair (login) Info You can use a key pair to securely connect to your instance. Ensure that you have access to the the instance.</li> </ul>	e selected key pair before you launch
Key pair name - required	
TestAzeez	C Create new key pair

- j) Under network settings, use the existing network and go to the next step:
- k) Under Configure storage, please provide our required configure storage:

avvs	III Services Q. Search for services, features, blogs, docs, and more [Alt+S
=	▼ Configure storage Info
	1x 8 GiB gp2   Root volume
	Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magn
	Add new volume
	0 x File systems

1) Provide the number of instances we required: 1

Number of instances Info 1	
ami-08e2d37b6a0129927	
Virtual server type (instance type)	
t2.micro	
Firewall (security group)	
New security group	
Storage (volumes)	
1 volume(s) - 8 GiB	
Cancel	Launch instance

# m) Then go to EC2 instances again:

I have Created 2 EC2 Instances first on is azeez and another one is Mohammad

> Instances > Launch an Instance	▼ Summary
unch an instance տ	Number of instances info
izon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by owing the simple steps below.	1
	Software Image (AMI)
Name and tags win	Amazon Linux 2 Kernel 5:10 AMLread more ami-0705205e993559cea
Name	Virtual server type (instance type)
azeez Add additional tags	t2.micro
	Finewall (security group)
	New security group
<ul> <li>Application and OS Images (Amazon Machine Image)</li> </ul>	Storage (volumes)
An AMI is a template that contains the software configuration (operating system, application server, end applicational required to launch your instance. Search or Browne for AMIs if you don't see what you are looking for below	1 volume(s) - 8 GiB
	Construction for the second first same institution Table X
Q, Search our full catalog including 1000s of application and OS images	
	Cancel Launch instance
2 > Instances > Launch an instance	▼ Summary
2 > Instances > Launch an imitance	
aunch an instance 📷	Number of instances toto
aunch an instance me nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by llowing the simple steps below.	Number of instances toto
aunch an instance Infe nazon EC2 allows you to create virtual machines, or lestances, that run on the AWS Cloud. Quickly get started by	Number of instances infe
aunch an instance me nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by llowing the simple steps below.	Number of instances two 1 Software Image (AMI) Amazon Linux 2 Kernel 5.10 AMI_read more
aunch an instance Infe nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by Bowing the simple steps below. Name and tags Infe	Number of instances infe 1 Software Image (AMI) Amazon Linux 2 Kernel 5.10 AMI_read more ami-0705256:0936:50ea
aunch an instance tore nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by llowing the simple steps below. Name and tags tore	Number of instances infe 1 Software Image (AMI) Amazon Linux 2 Kernel 5.10 AML_read more ami-07002086493650ces Virtual server type (instance type)
aunch an instance tore nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by llowing the simple steps below. Name and tags tore	Number of instances live  1  Software Image (AMI) Amazon Linux 2 Kernel 5.10 AML_read more ami-070b206699 5656ea Virtual server type (instance type) 12.micro
aunch an instance infe nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by lowing the simple steps below. Name and tags infe Name	Number of instances live
aunch an instance Infe nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by lowing the simple steps below. Name and tags Infe Name Mohammad Add additional tags	Number of instances line    Number of instances line
aunch an instance me nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by towing the simple steps below. Name and tags me Mohammad Add additional tags • Application and OS Images (Amazon Machine Image) info An AMI is a template that contains the software coofiguration (sperating system, applications erver, and applications) registed to.	Number of instances line   Number of instances line
aunch an instance me nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by lowing the simple steps below. Name and tags into Name Mohammad Add additional tags Add additional tags • Application and OS Images (Amazon Machine Image) into An ANI is a semplate that contains the software configuration (spensing system, application server, and applications) required to. Isonality you instance. Search or Disease for AMS if you don't see what you are isolaling for below.	Number of instances line   Number of instances line
aunch an instance me nazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by towing the simple steps below. Name and tags me Mohammad Add additional tags • Application and OS Images (Amazon Machine Image) info An AMI is a template that contains the software coofiguration (sperating system, applications erver, and applications) registed to.	Number of instances infe 1 Software Image (AMI) Amazon Linux 2 Kernel 5.10 AML_read more ami-0705286493855ea Virtual server type (instance type) 12.micro Firewall (security group) New security group Storape (volumes) 1 volume(3) = 8.6(8)

## After Creation screenshot

aun	ch instance		ons ~					Q	Δ	0	٥	0
Q, I	Filter by tags and a	rtributes or search by key	word				0	K	1 to	a of a	0.1	Ń.
h	Name -	Instance ID .	Instance Type	Availability Zone -	Instance State +	Status Checks -	Alarm Status	0. II	Public	DNS (I	Pv4)	
5	azeez	i-079004189d361dc3d	12 micro	eu-central-1b	nunning	2/2 checks	None	6	ec2-3-1	20-227	-110.e	U
	Mohammad	i-0e8818e9c94236718	t2 micro	eu-central-1b	nunning	© 2/2 checks	None	>	ec2-15	195.28	141.0	

## 2. Create Elastic Block Store:

a. Go to Elastic Block Store and select Volumes

	Concerned in				_				A 202 Million 241		_	
Images	Vol	umes (1)							C	Actions *	Crest	e volum
AMIS	Q	Search									-	1.2
AMI Catalion		Name	 iume ID	 Type		Size	w	iors v	Throughout	T. 560	nhot 🔻	Creat
Elastic Block Store			 Autoritation	 902		II GIB		100			Malaketa	2022

b. I selected 1 GiB Size and Create for create volume

EC2 / volumes / Create volume	
Create volume Info	
Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.	
Volume settings	
Volume type Info	
General Purpose SSD (gp2)	
Size (GiB) Info 1 Mirc 1 GiB, Max, 16384 GiB. The value must be an integer.	
IOPS Info	
100 / 3000 Baseline of 3 JOPS per GIB with a minimum of 100 JOPS, burstable to 3000 IOPS	

Don't create volume from a snapshot	▼ C
Encryption Info Use Amazon EBS encryption as an encryption solution for your EBS resou	urces associated with your EC2 instances.
Encrypt this volume	
Tags - optional Info A tag is a label that you assign to an AWS resource. Each tag consists of a your resources or track your AWS costs.	a key and an optional value. You can use tags to search and filter
No tags associated with the resource.	
Add tag You can add 50 more tags.	
	Cancel Create volume

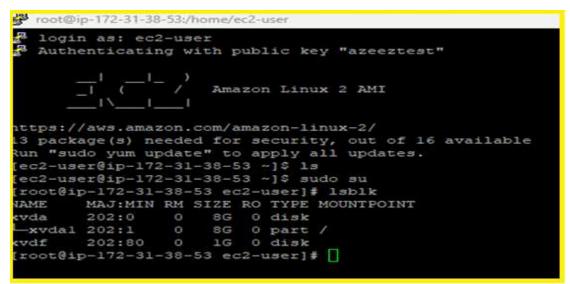
## c. Created the EBS with Name: AzeezMohammad

Vol	umes (1/4)									C	Actions 🔻	Create volume
Q	Search											< 1 > @
	Name	v	Volume ID	v	τ. τ	5 v	v	Ψ	Snapshot 🔻	v	Availabilit V	Volume state 🔍
			vst-08bccc8a14195#652		gp2	8 GiB	1	25	snap-07b45	2	eu-central-1b	(O to-use
0			vol-06da06e695d78952	6	002	8.68	1	-	snan-07b45	2	eu-central-1h	(C) In use
	AzeezMobamm	ad .	vsl-097#fe065f5fe3400		gp2	1 GiB	4		×.	2	eu-central-1b	⊘ Available

## d. After attach EBS Volume to EC2 Instance:

Volu	umes (4)											L	C	Actions ¥	Create volume
٩	Search														< 1 > @
	Name	1	Volume ID	w.	τ.	v	\$	v.		w.	Snapshot 1	7	v.	Availabilit V	Volume state v
	-		vol-08bccc8a14195f653	t)	90	2	8 G	6	1,	1	snap-07b45	1	2	eu-central-1b	@In-use
2		_		1	-	1	8.6	a			1000 075 M		- 2	the control lib	Q In case
	AzeezMohammad	5.1	vol-097efe06515fe3400	e -	gp.	2	1 G	8	1	а. С	*		2	eu-central-1b	⊙in-use
	-		vol-0e34cc11d48061c5i	L:	90	2	8 G	8	Low	1.	snap-09deb.		2	eu-central-1a	Ø In-use

e. EC2 Screen short:



#### 3. Snapshot Screenshot:

a) Go to snapshot and select create sanpshot

anvis III Services	Q Shirt	for serv	ekies, features,	Nigs,	dark, and must		[AID-5]	-		.0	•	•	Ratkfurt	Tee .	Aurorat B	M02-054	45-57+
Elantic Block Store		Snaj	pshots							C	E Bes	ycle Bin	Action	. ¥	Create	anapah	÷.
Walumes		Own	ed by our 🖤	Q	Seast										14	1.5	۲
Snapshuris		а.	Name		Seapshot ID	*	Size		Descript	Gan	1	- Stor		Snaps	hat status	w.	St
Lifecycle Mainager									io stapoho								
▼ Network & Security		-									0.01111.0						_
Security Groups																	
\$1																	

#### b) After creation

Description: AzeezMohammad snapshot

Snap	pshots (	1)					C	2	Recycle Bin	JL	Actions V	Greate sn	apshot
Owr	ved by me	۳	Q. Search									< 1	> 0
0	Name		Snapshot ID	v.	Size	.9.	Description	φ.	Storage	v	Snapshot status		Started
1	14		snap-022821bafd8d8ac9b	1	1 GiB		AzeezMohammad snapsho	ŧ	Standard		O Completed		2022/10/2

#### 4. AMI Creation:

a. First created 1 EC2 Instance with Apache php install:

Name: AzeezMohammadlampapachephp

New EC2 Experience X	Insta	inces (1/2) unio		C	Connect	Insta	ce state	•	Actions ¥	Launch Instances	
the state of the s	Q	Find instance by ettribute or bog jours	r-senisitive;							< 1	> 0
EC2 Deshbourd	Int	ince state * running X	Dear filters								
EC2 Global View	Linn										
						Mance idat	1. V.I				
Events	•	Name	V I Inveta	nce ID	1 .04	PURISCE EURO	5 M.	Instance	thhe A	Status check	Alarm stat
Events Tags	8	Name AzeraMchammadlampapachisphp	Solution and	nce to ac10:0: \$785:45		10000	80	t2.migra		2/2 shacks porced	Self- Self-

#### Apache2:



#### phpinfo.php

PHP Version 8.1.2	php
System	Linux (p-172-31-37-192 5 15 0-1019-axis #33-Usunu SNP Web Aug 17 18 33-13 UTC 2022 486_64
Build Date	Aug 8 2522 07 29 28
Build System	Litur
Server AP1	Apache 2.0 Hander
Virtual Directory Support	disatived
Configuration File (php.im) Path	Allophp® 1/mpache2
Loaded Configuration File	atoyna tapachabong in
Scan this dir for additional ini files	elolytyti Staache2cont d
Additional ini This parsed	Hattartelli, Tapachalicent d'O apocenia en Albareal, Vapachalicent d'Albarea, Natorieles Tapachalicent d'Ocaramia en Albareal, Vapachalicent d'Olbarea, Albarea, Tapachalicent d'Ocaramia, en Albareal, Vapachalicent d'Olbarea, et Albarea, Tapachalicent d'Ocaramia, Nobelea, Tapachalicent d'Olbarea, et Albarea, Tapachalicent d'Ocaramia, escando Tapachalicent d'Olbarea, et Albarea, et alba
PHPAPI	20210802
PHP Extension	24219902
Zend Extension	420210902
Zand Extansion Build	AP420210002.NTE
PHP Extension Doubt	AP(20210)021475
Debug Build	16
Thread Salety	disabled

Jbuntu@ip-172-31-37-192:~\$ php --version
PHP 8.1.2 (cli) (built: Aug 8 2022 07:28:23) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
with Zend OPcache v8.1.2, Copyright (c), by Zend Technologies
Jbuntu@ip-172-31-37-192:~\$

# b. AMIs: Created AMIs with Apache and php

C C Rec	cycle Bin	🖸 EC2 Image Builder	Actions V	Launch instance from AMI	
Owned by me 🔻	Q. Find AM	I by attribute or tog			< 1 > ⊚
		AMUID.		m I fame	Rul Contra

c. Created another EC2 instance from Image (AzeezMohammad-AMI-EC2)

Inst	ances (2) Info	C Con	nect Instan	ce state	▼ Actions ▼	Launch instances	
Q	Find instance by attribute or tog loase-se	msit/ve)				< 1	> 0
Irest	ance state = running X Cle	ar filters					
	Name	v   Instance ID	Instance state		Instance type 🛛 🛛	Status check	Alarm statu
0	AzeezMohammadlampapachephp	1-05cec20c0c3785c45	O Running	ଉତ୍ତ	t2.micro	2/2 checks passed	No atarms
0	AzeezMohammad-AMI-EC2	1-06e6dd1064e3f46e5	O Running	00	t2.micro	Ø 2/2 checks passed	No alarms

# d. AzeezMohammad-AMI-EC2 instance Apache

- → C ▲ Not secure   54	93.176.29 Apache2 Default Page
	This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should <b>replace this file</b> (located at /var/www/html/index.html) before continuing to operate your HTTP server.
	If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.
	Configuration Overview
	Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is <b>fully</b> <b>documented in /usr/share/doc/apache2/README.Debian.gz</b> . Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the <b>manual</b> if the apache2-doc package was installed on this server.
	The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:
	<pre>/etc/apache2/ / apache2.conf / ports.conf / mods-enabled / / *.load / *.conf / conf-enabled / *.conf</pre>

# e. Two applications screenshots

and the second of	ement Co. X 😰 Connect to instance (EC2 Mana) t secure   54.93.178.29/phpin/o.php	X O PHP 2.1.2 - phpinto0 X O PHP 2.12 - phpinto0 X +
	PHP Version 8.1.2	php
	System	Linux ip-172-31-41-71 5 15 0-1019-aws #23-Ubuntu SMP Wed Aug 17 18 33 13 UTC 2022 x86_64
	Build Date	Aug 8 2022 07 28 23
	Build System	Linux
	Server API	Apache 2.0 Handler
	Virtual Directory Support	dsabled
	Configuration File (php.ini) Path	/etciptp/8 1/apache2
	Loaded Configuration File	/etciptp/6_t/apache2ptp.ini
	Scan this dir for additional .ini files	/efc/php/8_1/apache2/cont.d
	Additional .ini files parsed	Attorbes 3. tagachezioent d10-opcache III, (Hophane 1 lagachezioent d10-opdo III, (Hophane 3. tagachezioent d20-asendar III, (Hophane 3. tagachezioent d10-opdo III, (Hophane 3. tagachezioent d20-exit III, (Hophane 3. tagachezioent d20-miller, Hophane 3. (Hophane 3. tagachezioent d20-b) III, (Hophane 3. tagachezioent d20-miller, Hophane 3. (Hophane 3. tagachezioent d20-exit III, (Hophane 3. tagachezioent d20-miller, Hophane 3. (Hophane 3. tagachezioent d20-exit III), (Hophane 3. tagachezioent d20-miller, Hophane 3. (Hophane 3. tagachezioent d20-exit III), (Hophane 3. tagachezioent d20-miller, III), (Hophane 3. tagachezioent d20- posit, III, (Hophane 3. tagachezioent d20-exit III), (Hophane 3. tagachezioent d20-systema III), (Hophane 3. (Hophane 3. tagachezioent d20-exit III), (Hophane 3. tagachezioent d20-systema III), (Hophane 3. tagachezioent
	PHP API	20210902
	PRP Extension	20210902
	Zend Extension	420210902
	Zend Extension Build	API420210902.NTS
	PHP Extension Build	API20210902.NTS

## 5. Load Balancer:

a. First Created the Security group Name: AzeezMohammad-ALB-security group

<ul> <li>Security group (sg-0d5bed836207)</li> <li>Details</li> </ul>	99e2   AzeezMohammad-ALB-security	group) was created successfully	
	SbedB36207199e2 - AzeezMohammad-		
sg-0d5bed836207	199e2 - AzeezMoha	mmad-ALB-security	group
Details			
Security group name	Security group ID	Description	VPC ID
AzeezMohammad-ALB- security group	<b>G</b> sg-0d5bed836207199e2	AzeezMohammad-AL8- security group	🗗 vpc-02244968 🖸
Owner	Inbound rules count	Outbound rules count	
	2 Permission entries	1 Permission entry	

b. Then Created the Target Group:

Targ	get groups (1) Info				[	C Actions 🔻	Create target grou	P
Q	Search or filter target gr	dup!					< 1 >	۲
	Name 👳	ARN 🛡	Port 🗢	Proto col v	Target type ⊽	Load balancer	VPC ID	
0	AzeezMohammad- ALB-Targetgroup	🗇 am:	80	HTTP	Instance	AzeezMohammad-ALB	vpc-02244968	

c. Added target group

Forward to	AzeezMohammad-ALE Target type: Instance, IPv4	HTTP 🔻	
Create target of			
lasic configuration lick lase: Antipy and ALB • Internet-facing • IPv4	Security groups (d) • default sg-sex9549d (2) • AssetMuhammad-ALB-security group sg-0d5bed83620719942 (2)	Network mapping Git VPC vpc-02244966 • Bu-central-10 adver-1256cate • Bu-central-10 advert 566cate • Bu-central-16	Listeners and routing Edu • HTTP:00 orbans to Associationand ACH Targetgroup (2)
		asimet-1717000a 🛃	
455-en services Cris		ndimet-17170036 🕑 Tags tolk Nore	

#### d. Associate Azeez Mohammad-ALB

2 >	Target groups										
Targ	get groups (1)	de						0	Actions ¥	0	reate target group
Q	Search or filter targe	t grev	29.								< 1 > 6
0	Name	Ψ	ARN	v	Port	Ŧ	Proto col 👳	Target type ⊽	Load balancer	v	VPC ID
0	AzeezMohamma ALB-Targetgroup		🗇 arri	tin,	80		HTTP	Instance	AzeezMohammad-i	AL8	vpc-02244968

e. With Health status:

- 22	search or filter target group						C Actio	ins 🔻		e target grou	up
	Name 🗢	ARN 👳	Port 🗢	Proto col		Target type ⊽	Load bala	ncer	~	VPC ID	
2	AzeezMohammad- ALB-Targetgroup	🗇 am:	80	HTTP	Э	nstance	AzeezMoh	ammad-ALE	e 9	vpc-0224496	8
rget	t group: AzeezMohan	nmad-ALB-	Targetgrou	= p	:						
	t group: AzeezMohan Instance ID v	nmad-ALB-	Targetgrou		: Port	v	Zone ♥	Healt statu		Health status details	
rget		Name	Targetgroup mmad-AMI-EC	p ⊽		v	Zone ⊽ eu-central- 1b		~ ~	status	

f. Go to Load balancer and Select Create Load Balancer

• Elastic Block Store	Create Load Balancer	Actions ~			0
Volumas Sitapitotti	Q. Filter by tags and at	Elbutes or search by keyward			R C None found ()
Lifecycle Manuger	C Name	- DNS name	+ State	- VPC10	- Availability Zones - Type
<ul> <li>Network &amp; Socarity Security Groups Elastic IPy</li> <li>Placement Groups</li> <li>Key Pairs</li> <li>Network Interfaces</li> </ul>			You do not herve any load b	alancers in His region.	
Load Belancing Load Belancers Target Groups Inco	Select a load balancer				

# g. APLB:

Name: AzeezMohammad-ALB

		ions '							0.01
Q,	search : AzeszMohammod	-AL8	Add Blar.					f1 - 3	2, 21,
	Name		DNS name	¥7	State	 VPC ID	Availability Zones	Ty	pe -
	AzeszMohammad-ALB		AzeezMohammad-ALB-1530		Active	vpc-02244968	eu-central-1c, eu-centr	ap	plicati

#### h. DNS:

http://azeezmohammad-alb-1530459791.eu-central-1.elb.amazonaws.com/phpinfo.php

C A hor	4 secure   azeesmohammad-alb-1530459791.eu-	central-1.elb-amazonawa.com/php/do.php	一度	37	*	
	PHP Version 8.1.2	php				
	System	Linux ip-172-31-41-71-5-15-b-1018-avis #23-Upumu SM# viter-Aug-17-18-33-13-UTC 2822-686_64				
	Build Date	Aug \$ 2023 67 28 23				
	Build System	CMUK				
	Server AP1	Apacha 2 d Handw				
	Virtual Directory Support	disatured				
	Configuration File (php.mil) Path	atopp@.tapa.ne2				
	Loaded Configuration File	Attrato/Willingache2php.w				
	Spart this dar for additional an films	arosten bewerebent d				
	Additionar Jni Tires parsed	Amoletisti Tasaanabacha (30 opache Ini, anotheti, tagaanabard (35 opache) Amoletisti Tasaanabacha Matsaanabacha Ma				
	PEP API	25210802				
	PRP Extension	26216902				

- 6. VPC with 2 public subnet & 2 Private subnet having internet gateway and NAT gateway
  - a) Create VPC & provide of VPC as 192.168.0.0/16
  - b) Before creating VPC

(our	VPCs (1) Info					C Actions V Create VPC			
Q,	Filter VPCs							$\langle 1 \rangle$	0
	Name	VPC ID	Ŷ	State	v	IPv4 CIDR	V	IPv6 CIDR	
	(4)	vpc-02244968		⊘ Available		172.31.0.0/16		2	

c) Select Create VPC

Your VPCs (1) Info						C Actions	. •	Create VP	:
Q. Filter VPCs								< 1 >	۲
D Name	v	VPC ID	v	State	v	IPv4 CIDR	v	IPv6 CIDR	
0 -		vpc-02244968		O Available		172.31.0.0/16		2	

Name: azeez-VPC-A

IPv4 CIDR:	192.168	.0.0/16
------------	---------	---------

You	r VPCs (2) Info					C Act	ions 🔻	Create VPC	
Q	Filter VPCs							< 1 >	0
0	Name	 VPC ID		State	V	IPv4 CIDR	V	IPv6 CIDR	
	azeez-VPC-A	vpc-06d032e31ae9	)3d75e	⊘ Availab	le	192.168.0.0/16		25	
		vpc-02244968	1	⊘ Availab	le	172.31.0.0/16		-	2

d) Create an Internet gateway and attach it to the VPC

Before creating we have default internet gateway

Inter	rnet gateway	ys (1/1) m	đa			0	Actions ¥	Create Internet gatewa	w.
Q,	Filter internet gi	teways.						< 1 >	0
2	Name		Internet gateway ID	v	State		VPC ID		wner
2	-		igw-ec274787		O Attached		vpc-02244968	44	02054

### e) After creation IGW Name: Azeez-VPC-A-IGW

Q	Filter internet gateways					\$ 1	> 0
	Name v	Internet gateway ID	 State	7	VPC ID	v	Owner
3	Azeez-VPC-A-IGW	igw-08e21e8bb8de481b7	⊖ Detached		-		4402054
1	(*)	igw-ec274787	O Attached		vpc-02244968		440205

f) Assign Internet gateway to VPC:

inter	rnet gateways (2)	Info				C	Actions V	Create Inter	THE S	ateway
Q,	Filter internet gateways							<	1	> ©
	Name	Ψ.	Internet gateway ID	v	State	w.	VPC ID		÷.	Owner
0	Azeez-VPC-A-IGW		igw-08e21e8bb8de481b7		⊘ Attached		vpc-06d032e31ae5	93d75e azeez-VPC	-A	4402054
11	-		igw-ec274787		⊘ Attached		vpc-02244968			4402054

- g) Create 4 subnets of which of which 2 subnets are public subnets and 2 subnets are private subnets
  - i). 2 private subnets
  - ii). 2 public subnets

#### i). 2 Private Subnets

first one Private Subnet name: Azeez-VPC-A-PrvSN1 IPv4 CIDR: 192.168.0.0/24

New VPC Experience X	Ø ¥6	ou have successfully creat	ted 1 si	ubnet: subnet-0adbf15d8520d	b1a		▼         VPC         ▼         IPv4 CIDI           vpc-02244968         172.31.10	×		
VPC dashboard	Sub	nets (4) Info						C	Actions 🔻	Create subnet
EC2 Global View 🔀 🗤	Q	Filter subnets								< 1 > @
Select a VPC 🛛 🔻		Name 🗸	28	Subnet ID	V	State		VPC	$\nabla$	IPv4 CIDR
		-20		subnet-529ecb38		⊘ Available		vpc-02244968		172.31.16.0/20
<ul> <li>Virtual private cloud</li> </ul>	D	(a)	0	subnet-1717805b		⊘ Available		vpc-02244968		172.31.0.0/20
Your VPCs	D	Azeez-VPC-A-PrvSN1		subnet-0adbf15d8520dcb1a		⊘ Available		vpc-0e6a81b32d6ac	lbec   aze	192.168.0.0/24
Subnets Route tables		-74 	1	subnet-944ecee8		⊘ Available		vpc-02244968		172.31.32.0/20

Second one Private Subnet Name: Azeez-VPC-A-PrvSN2 IPv4 CIDR: 192.168.1.0/24

0	Filter subnets						07		The group of the	
q	Filter subgets								(1)	
	Name	Ψ	Subnet ID	Ŷ	State	w.	VPC	φ.	IPv4 CIDR	
ġ.	-		subnet-529ecb38		⊙ Available		vpc-02244968		172.31.16.0/20	
			subnet-1717805b		Available vpc-022		vpc-02244968	pc-02244968		
	-		subnet-944ecce8		⊘ Available		vpc-02244968		172.31.32.0/20	
10	Azeez-VPC-A-	PrvSN2	subnet-0b13067809cfe0	:92	⊘ Availabie		vpc-06d032e31ae	93d75e   az	192.168.1.0/24	
	Azeez-VPC-A-	PrvSN1	subnet-024ff4c42e76771	21	⊘ Available	3	vpc-06d032e31a	93d75e1az	192.168.0.0/24	

## ii) 2 public subnets

first one Subnet name: Azeez-VPC-A-PubSN1 IPv4 CIDR: 192.168.2.0/24

540	nets (6) Info			C Actions V	Create subnet
Q	Filter subnets				< 1 > (
	1270322	3 4 4 4 1 4 5 m	22172	(1) (1) (1)	1122 2211
	2	subnet-529ecb38	⊘ Available	vpc-02244968	172.31.16.0/20
	14	subnet-1717805b	<ul> <li>Available</li> </ul>	vpc-02244968	172.31.0.0/20
0	Azeez-VPC-A-PubSN1	subnet-0bd03d9a578d5a2ca	<ul> <li>Available</li> </ul>	vpc-06d032e31ae93d75e   az	192.168.2.0/24
	-	subnet-944ecee8	⊘ Available	vpc-02244968	172.31.32.0/20
d.	Azeez-VPC-A-Prv5N2	subnet-0b13067809cfe0c92	⊘ Available	vpc-06d032e31ae93d75e   az	192.168.1.0/24
	Azeez-VPC-A-Prv5N1	subnet-024ff4c42e767712f	O Available	vpc-06d032e31ae93d75e az	192.168.0.0/24

Second one Subnet name: Azeez-VPC-A-PubSN2

IPv4 CIDR: 192.168.3.0/24

~	ear is a second								204.00
Q	filter subviets								$\langle 1 \rangle$
	Name		Subnet ID	v	State	Ψ.	VPC	V	IPv4 CIDR
	2		subnet-529ecb38		⊘ Available		vpc-02244968		172.31.16.0/20
1	-		subnet-1717805b		O Available		vpc-02244968		172.31.0.0/20
	Azeez-VPC-A-Pul	5SN1	subnet-0bd03d9a578d3a2ca		<ul> <li>Available</li> </ul>		vpc-06d032e31ae93d75	e ( az	192.168.2.0/24
1	-		subnet-944ecee8		⊘ Available		vpc-02244968		172.31.32.0/20
1	Azeez-VPC-A-Pul	SN2	subnet-054eb160289e3014d		⊘ Available		vpc-06d032e31ae93d75	e   az	192.168.3.0/24
1	Azeez-VPC-A-Prv	SN2	subnet-0b13067809cfe0c92		<ul> <li>Available</li> </ul>		vpc-06d032e31ae93d75	e [ az	192.168.1.0/24
	Azeez-VPC-A-Prv	SNT	subnet-024ff4c42e767712f		O Available		vpc-06d032e31ae93d75	e   az	192.168.0.0/24

### All Subnets:

Name		Subnet ID subnet-529ecb38	v.	State 🛛 🗸	VPC	v	IPv4 CIDR
- -		subnet, \$29ech38					
- T		and the second second		<ul> <li>Available</li> </ul>	vpc-02244968		172.31.16.0/20
		subnet-1717805b		⊘ Available	vpc-02244958		172.31.0.0/20
Azeez-VPC-	A-PubSN1	subnet-0bd03d9a578d3a2ca		⊘ Available	vpc-06d032e31ae93d75e1	9Z	192,168.2.0/24
Azeez-VPC-	A-PubSN2	subnet-054eb160289e3014d		⊘ Available	vpc-06d032e31ae93d75e	az	192.168.3.0/24
Azeez-VPC-	A-PrvSN2	subnet-0b13067809cfe0c92		O Available	vpc-06d032e31ae93d75e	az	192.168.1.0/24

h) Create 2 Route tables 1 for Public Route table and other one as Private Route table

Q,	Filter route table	1.					<	1 > @	
	Name			v	Explicit subnet associat	Edge associations	Main 🐨	VPC	
n.		-	ath-ade502c0		_			Ves	visc.02244968
	Azeez-VPC-A	rez-VPC-A-PubRT rtb-04a2d1eddf1692ce7			Sec		No	vpc-06d032e31a	
0	-		HD-008/2008/0845109			-	105	vpc-060032e31a	

Q	Filter route tables							1	1 ) (9)
•	Name	φ.	Route table ID	٣	Explicit subnet associat	Edge associations	Main	7	VPC
	12	_	rtb-ade502c0		141	3	Yes-	_	vpc-02244968
•	Azeez-VPC-A-Prvl	RT	rtb-07191cc1ec4159b82			-	No		vpc-06d032e3
Щ	Azeez-VPC-A-Pub	RŤ	rtb-04a2d1eddf1692ce7		-	-	No		vpc-06d032e31
	24		rtb-00a726cef7b845fd9		121	-	Yes		vpc-06d032e31

i) Associate the public subnet to public route table and private subnet to private route table

ite tables						<	1 > @
						1.0	
e V	Route table ID	ų.	Explicit subnet associat	Edge associations	Main	Ψ	VPC
	rtb-ade502c0		040	14	Yes		vpc-0224496
z-VPC-A-PrvRT	rtb-07191cc1ec4159b82		2 subnets	(#)	No		vpc-06d032e
z-VPC-A-PubRT	rtb-04a2d1eddf1692ce7		(m.		No		vpc-06d032e
me v ez-VPC-A-PrvRT ez-VPC-A-PubRT	z-VPC-A-PrvRT	rtb-ade502c0 z-VPC-A-PrvRT rtb-07191cc1ec4159b82	rtb-ade502c0 z-VPC-A-PrvRT rtb-07191cc1ec4159b82	rtb-ade502c0 - z-VPC-A-PrvRT rtb-07191cc1ec4159b82 2 subnets	rtb-ade502c0 z-VPC-A-PrvRT rtb-07191cc1ec4159b82 2 subnets -	rtb-ade502c0 Yes z-VPC-A-PrvRT rtb-07191cc1ec4159b82 2 subnets - No	rtb-ade502c0 – – Ves z-VPC-A-PrvRT rtb-07191cc1ec4159b82 2 subnets – No

coute	tables (1/4	) Info						C	Action	•	0	1.1.164	reut	te tabl	•
<b>Q</b> //	iter route tables											<	1	>	0
	Name		Route table	ID	4	Explicit subnet associa	Ed	ige asso	ciations	Main	v		VPC		
-	-		eth-ade502c	ó	_	-	-	_		Ves			YDE	02244	196
2	Azeez-VPC-A-F	PrvRT	rtb-07191cc	1ec41	\$9682	2 subnets				No			vpc	-06d03	12e
					-										
															8
Q	Field submit ass	ociation .									<	1	$\geq$	۲	
Subr	vet ID		,	r.	IPv4 CIDR		v	IPv6	CIDR					v	2
subre PrvSt	et-0513067809 N2	cfe0c92 / A	zerz-VPC-A-		192.168.1.0	/24		•							
subra PrvSI	et-024#4c42e7 N1	677121 / Ad	teez-VPC-A-		192.168.0.0	/24		-							

-	En China Shah						100	15	1000	1
Q	Filter route tables						<	1	21	0
	Name	v	Route table ID	φ	Explicit subnet associat	Edge associations	Main 🛛	VPC		
	-		rtb-adeS02c0		*	-	Yes	vpc	02244	196
1	Azeez-VPC-A-	PrvRT	rtb-07191cc1ec4	159682	2 subnets	-	No	vpc	06603	52e
2	Azeez-VPC-A-	PubRT	rtb-04a2d1eddf1	692ce7	2 subnets	-1	No	vpc	06003	l2e
										B
Su	bnet ID			IPv4 CIDR		♥ IPv6 CIDR				
	inet-Obd03d9a57 bSN1	8d3a2ca /	Azeez-VPC-A-	192.168.2.0	/24	*				
	onet-054eb16028 bSN2	9e3014d /	Azeez-VPC-A-	192.168.3.0	/24	-				

j) Connect the public route table to the internet Gateway

VPC > Houtesaddes > rtb-04a2d1 Edit routes	eddf1692067 () 16	le rover.				
Destination		Target		Status	Propagated	
192,168,0.0/16		Q, local	×	@ Active	No	
Q 0.0.000	×	Q, ige-08e21e8b8ide481b7	×	2	No	Ramave
Add route						
					Cancel	Save changes

k) Edit inbound rules add the TCP and ICMP in Security Group

Q. Filter security groups						< 1 > ©
Name	Ŧ	Security group ID 🛛 🕫	Security group name		ID	♥ Description
1 (m)		sg-09bd597c21960e880	Azeez-VPC-A-SG	vpc-	06d032e31ae93d75e	launch-wizard-12 crea
			-			
Inbound rules (3)				C	Manage tags	Edit inbound rules
Q. Filter security gring	cules					< 1 > ⊚
Name	v	Security group rule 🛡	IP version	тур	•	Protocol 🗢
0 - 0		sgr-04d3cd90387cae000	IPv4	SSH		TCP
0 -		sgr-01691428f269345	IPv4	A11 11	MP - IPv4	ICMP

VPC > Security Groups > 19 Edit inbound rule Inbound rules control the incomi	es un				ules			
Inbound rules whe								
Security group rule ID	Type tofu		Protocol	Port range	Source Infa		Description - optional	
3gr-0tb6b82f7345eaa20	All TCP	٠	109	0-8553	Arrywh 🛡	٩		Dete. ta
sgr-04d3cd90387cae000	1.22				1 Parolester	0.000/0 X		
30-04130303070307040000	55H	*	109	22	Custom ¥	Q.		Dele tit
3gr-016914284269345d7	All ICMP - IPv4	٠	1249	All	Anywh ¥	9.		Dela
						0.0.0.0 X		12

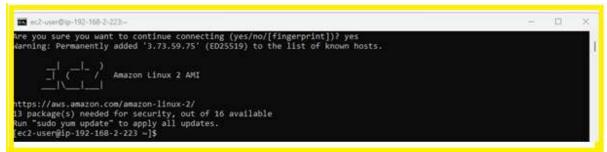
- 1) Create 2 EC2 instance 1 in Private SN1 and another 1 is Public SN1
  - i). Create EC2 instance in Private SN1

    Name: Azeez-EC2-PubSN1
    Key pair: TestAzeez
    Network Settings: azeez-VPC-A
    Subnet: Azeez-VPC-A-PrvSN1
    Auto-assign public IP: Enable
    Security group name: Azeez-VPC-A-SG
    Created EC2 instance: For PubSN1



m) Login to public subnet 1 machine try to ping and ssh (ping will get success and where ssh will fail as there is no key)

Public SN1 EC2 Console:



#### ii) Create another EC2 in Private Azeez-EC2-PrvSN1

Name: Azeez-EC2-PrvSN1 Key pair: TestAzeez Network Settings: azeez-VPC-A Subnet: Azeez-VPC-A-PrvSN1 Auto-assign public IP: Disabled Security group name: Azeez-VPC-A-SG

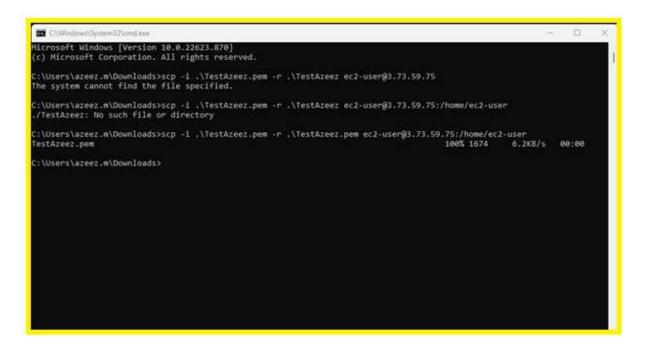
Inst	ances (2) Info		C Conne	ct	Instance state 🔻	Actions ¥	aunch instance	5	
Q	Find instance by attribute or :	tog (case-sensitive)					< 1	>	۲
Inst	ance state = running X	Clear filters							
0	Name 🛛 🔍	Instance ID	Instance state		Instance type 🗢	Status check	Alarm status	1	Avaita
0	Azeez-EC2-PubSN1	1-05073a873809f1733		ଭ୍ର	t2.micro	<ul> <li>Initializing</li> </ul>	No alarms	+	eu-cen
0	Azeez-EC2-PrvSN1	I-02aed00a4e45d5dee	@ Running	00	t2.micro	Ø 2/2 checks passed	No alarms	+	eu-cen

Ping from Azeez-EC2-PubSN1 to Azeez PrvSN1

coot@ip-192-168-2-223;/home/ec2-user	- 0.
-1 -1 -2	
/ Amazon Linux 2 AMI	
[N]	
tps://aws.amazon.com/amazon-linux-2/	
package(s) needed for security, out of 16 available	
n "sudo yum update" to apply all updates.	
c2-user@ip-192-168-2-223 ~]\$ sudo su	
oot@ip-192-168-2-223 ec2-user]∉ ping 192.168.0.196	
NG 192.168.0.196 (192.168.0.196) 56(84) bytes of data.	
<pre>bytes from 192.168.0.196: icmp_seq=1 ttl=255 time=1.21 ms bytes from 192.168.0.196: icmp_seq=2 ttl=255 time=0.521 ms</pre>	
bytes from 192.168.0.196: icmp_seq=2 ttl=255 time=0.521 ms bytes from 192.168.0.196: icmp_seq=3 ttl=255 time=0.495 ms	
bytes from 192.168.0.196: icmp_seg=4 ttl=255 time=0.462 ms	
bytes from 192.168.0.196: icmp_seq=5 ttl=255 time=0.506 ms	
bytes from 192.168.0.196; icmp seq=6 ttl=255 time=0.438 ms	
bytes from 192.168.0.196: icmp_seq=7 ttl=255 time=1.10 ms	
bytes from 192.168.0.196: icmp_seq=8 ttl=255 time=0.451 ms	
bytes from 192.168.0.196: icmp_seq=9 ttl=255 time=0.420 ms	
bytes from 192.168.0.196: icmp_seq=10 ttl=255 time=0.741 ms	
bytes from 192.168.0.196: icmp_seq=11 ttl=255 time=0.460 ms bytes from 192.168.0.196: icmp_seq=12 ttl=255 time=0.467 ms	
bytes from 192.168.0.196: icmp_seq=12 ttl=255 time=0.467 ms	

n) Copy the key pair on to public subnet machine and then from public subnet machine try to connect private subnet machine with ssh

i) Copied .pem file to Public SN1 EC2 instance



## ii) Connecting from Azeez-EC2-Pub SN1 to Azeez-EC2-Prv SN1

<pre>[root@ip-192-168-2-223 ec2-user]# pwd /home/ec2-user [root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# chmod 700 TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpfcrNt5pCo/91PYxgv83WTsXZ0zQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.214</pre>
<pre>[root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# chmod 700 TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZ0zQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).</pre>
TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# chmod 700 TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZ0zQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:44:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
<pre>[root@ip-192-168-2-223 ec2-user]# chmod 700 TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZ0zQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).</pre>
<pre>[root@ip-192-168-2-223 ec2-user]# ls TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZOzQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).</pre>
TestAzeez.pem [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZOzQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
<pre>[root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZOzQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).</pre>
The authenticity of host '192.168.0.196 (192.168.0.196)' can't be established. ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZOzQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
ECDSA key fingerprint is SHA256:1X2fkFfRvpFcrNt5pCo/9iPYxgv83WTsXZOzQT4yonY. ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
ECDSA key fingerprint is MD5:bb:77:50:b3:b2:45:4e:9f:d0:45:77:15:f9:60:9a:e1. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
Warning: Permanently added '192.168.0.196' (ECDSA) to the list of known hosts. Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
Permission denied (publickey,gssapi-keyex,gssapi-with-mic). [root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-192-168-2-223 ec2-user]# ssh -i TestAzeez.pem ec2-user@192.168.0.196 Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
The authenticity of host '192.168.0.214 (192.168.0.214)' can't be established.
ECDSA key fingerprint is SHA256:eRjZ3L+d8ygi7sg9I2QrberHdZ8POdvNohJyNk3kn+w.
ECDSA key fingerprint is MD5:56:85:1e:8a:dd:56:1a:cf:68:e8:48:db:7b:67:c3:ad.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.0.214' (ECDSA) to the list of known hosts.
÷
_  (/ Amazon Linux 2 AMI
=1 $N = 1$
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-192-168-0-214 ~]\$

o) In order to get internet on our private subnet machine then we have to create a NAT gateway in public subnet 1

NAT gateways:

Create a NAT gateways:

Name: Azeez-NAT-gateway

Subnet: Azeez-VPC-A-PubSn1

Elastic IP allocation ID: allocated

NAT	<b>gateways</b> (1	/1) Info				C	Ac	tions 🔻 🛛 G	eate l	NAT	gatew	ay
Q	Filter NAT gatew	ays							<	1	>	۲
	Name	V	NAT gateway ID	Ā	Connectivit ⊽	State	V	State message	V		Elasti	c IP addr
0	Azeez-NAT-ga	ateway	nat-0bc18d73210b10e9c		Public	🛛 Available		-			3.68.1	22.195

#### p) Edit the route table of private subnet with a route to NAT gateway

Know edit route table

Azeez-VPC-A-PrivRT Click on Routs and Edit routes

vestination		Target		Status	Propagated	
92.168.0.0/16		Q, local	×	Ø Active	No	
Q, 0.0.0.0/0	×	Q, nat-0bc15d73210b10e9c	×	-	No	Remove

After adding NAT gateway to Public SN1 connection

Microsoft Windows [Version 10.0.22623.870] (c) Microsoft Corporation. All rights reserved.
C:\Users\azeez.m\Downloads>ssh -1 "TestAzeez.pem" ec2-user@3.73.59.75 Last login: Mon Oct 31 18:02:55 2022 from 59.99.30.65
// Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/ 13 package(s) needed for security, out of 16 available Run "sudo yum update" to apply all updates. [cc2-user@ip-192-168-2-223 ~]\$ 1s "estAzeez.pem [ec2-user@ip-192-168-2-223 ~]\$ ssh -i TestAzeez.pem ec2-user@i92.168.0.214 The authenticity of host '192.168.0.214 (192.168.0.214)' can't be established. ECDSA key fingerprint is SM256:eRj23L+dByg17sg912QrberHdZBPOdvNohJyNk3kn+w. ECDSA key fingerprint is ND5:56:85:1e:8a:dd:56:1a:cf:68:e8:48:db:7b:67:c3:ad. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '192.168.0.214 (ECDSA) to the list of known hosts. Last login: Mon Oct 31 18:30:02 2022 from 192.168.2.223
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/ [ec2-user@ip-192-168-0-214 ~]\$

- q) Then login to Private subnet machine and try to ping google.com
- r) I can ping goole.com from Azeez EC2-Prv SN1

time=2.69 ms time=1.62 ms	
time=1.62 ms	
time=1.69 ms	
time=1.66 ms	
	time=1.65 ms time=1.66 ms time=1.64 ms time=1.63 ms

### ssh -i <key> -r <key> username@public:/<destination>

#### Deletion:

- 1) Route table deletion
- 2) Remove Subnet Associations (Public and private)
- 3) Delete EC2 instance
- 4) Delete NAT gateway
- 5) Internet gateways detach
- 6) Delete internet gateway
- 7) Delete subnets (Public and Private)
- 8) Delete Route Table
- 9) Delete VPC

## 7. VPC Peering

a) **Create VPC:** Go to Your VPC and select Create VPC, Name: Azeez-VPC-A, IPv4 CIDR: 10.100.0.0/16 and select create

New VPC Expension       Your VPCs (1) is/         New VPC is an exact and info         Uter target and info         Create only the VPC resource or the VPC and other networking resources.         VPC only         VPC only         VPC only         VPC only         VPC and more         Name tag - optional Creates a tag with a key of 'Name' and a value that you specify. Azer-VPC-A         IPv4 CIDR block Info	Frankfurt • ravikumarips @ 4403
WC dashbased         Q dash View Q          Pierry VVC         Every VVC         Sature vvc         Vertual pirvate diade	Actions ¥ Create VPC
EC2 Global View B State VPC VPC State VPC U State VPC U VPC U VPC U VPC U VPC VPC VPC VPC VPC VPC VPC U VPC	(1)
Filter by VPC   Lister a VPC   Virtual private cloud   Year VPC   Sabors   Resources to a VPC above   VPC settings   Resources to create info   Create only the VPC resource or the VPC and other networking resources.   VPC only   VPC and more   Name tag - optional   Creates a tag with a key of 'Name' and a value that you specify.   Azeez-VPC-A   IPv4 CIDR block Info IPv4 CIDR block Info IPv4 CIDR manual input	DR T IPv6 ODR
Virtual private cloud   Year tables   Internet gatinarys   Exerct only   Select a VPC above	0.0/16 -
Were versus         Subwits         Reverse tables         Internet gataways         Egress-only internet         Internet gataways         Egress-only internet         Internet         Create VPC Info         VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon         VPC settings         Resources to create Info         Create only the VPC resource or the VPC and other networking resources.         VPC only         VPC and more         Name tag - optional         Creates a tag with a key of 'Name' and a value that you specify.         Azeez-VPC-A         IPv4 CIDR block Info         IPv4 CIDR block Info         IPv4 CIDR manual input	
Subwest Receive tables Internet gateways Pyreca-celly internet Internet	
Resources to create info   Create only the VPC resource or the VPC and other networking resources.   VPC only   VPC only   VPC and more   Name tag - optional   Creates a tag with a key of 'Name' and a value that you specify.   Azeez-VPC-A	
Internet gataways         Epecandity internet         Executive VPC         Info         VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon         VPC settings         Resources to create       Info         Create only the VPC resource or the VPC and other networking resources.         VPC only       VPC and more         Name tag - optional       Creates a tag with a key of 'Name' and a value that you specify.         Azeez-VPC-A       IPv4 CIDR block Info         IPv4 CIDR block Info       IPv4 CIDR manual input	
Image: Create VPC info         VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon         VPC settings         Resources to create info         Create only the VPC resource or the VPC and other networking resources.         VPC only         VPC only         Name tag - optional Creates a tag with a key of 'Name' and a value that you specify.         Azeez-VPC-A         IPv4 CIDR block info         IPv4 CIDR manual input	8 8
VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon VPC settings Resources to create Info Create only the VPC resource or the VPC and other networking resources.  VPC only VPC only VPC and more Name tag - optional Creates a tag with a key of 'Name' and a value that you specify. Azeez-VPC-A IPv4 CIDR block Info IPv4 CIDR manual input	
Name tag - optional Creates a tag with a key of 'Name' and a value that you specify. Azeez-VPC-A IPv4 CIDR block Info IPv4 CIDR manual input	
Creates a tag with a key of 'Name' and a value that you specify. Azeez-VPC-A IPv4 CIDR block Info IPv4 CIDR manual input	]
IPv4 CIDR block Info O IPv4 CIDR manual input	
IPv4 CIDR manual input	
U IPAPI-allocated IPV4 CIDR DIOCK	
IPv4 CIDR	
10.100.0.0/16	

ey		Value - optional			
Q, Name	×	Q Azeez-VPC-A	×	Remove	
Add new tag					
ou can add 49 more tags					

#### Screen shot of VPC

Your	VPCs (2) Info						C Action	5 ♥	Create VPC
Q, I	Filter VPCs								< 1 > 0
0).	Name	9	VPC ID	v.	State	Ψ	IPv4 CIDR	Ψ	IPv6 CIDR
	Azeez-VPC-A		vpc-0a603088e21dd658;	z	⊘ Available		10.100.0,0/16		*
	2		vpc-02244968		<ul> <li>Available</li> </ul>		172.31.0.0/16		-

b) Create 1 Pub SN1 and 1 Prv SN1: Go to Subnet and create Pub SN1

This water picture	Q.	Obe salved				[a]	 C1.2 0
VPC dishboard BC2 Global View 🔀 🛶	Π	Neme	 Solonet ID	 State		VPC	 IPe4 CIDR
Filter by VPC	10	347	submet-S20ecb38	( Acallatio	61 - E	vpi-02344968	172.31.16.0/20
Select a VPC 🛛 🔻	10	200	submet-1717805b	O Available		vpx-07344968	172.31.0.0/20
Virtual private cloud			submet-544ecerdl	() Austholds		vpc-02244968	172.31.32.0/26
Your VPCs	1.4						

### **VPC ID:** Azeez-VPC-A

Subnet name: Azeez Pub SN1

## **IPv4 CIDR block:** 10.100.0.0./24

PC ID	_	
vpc-0a603088e21dd6582 (Azeez-VPC-A)		
ssociated VPC CIDRs		
v4 CIDRs		
0.100.0.0/16		
ubnet settings		
ecify the CIDR blocks and Availability Zone for the subnet.		
ubnet 1 of 1		
abnet 1 of 1 Subnet name create a rag what a key of Hame and a value diacyou specify. Azeez-Pub SN1	_	
Subnet name create a ray while key of Hame and a value that you specify: Azeez-Pub SN1 the name can be up to 255 characteristany. Availability Zone Info		
Subnet name create a ray while key of marine and a value diak you speciny. Azeez-Pub SN1	•	
Subnet name Create a ray while key of marine and a value diac you speciny. Azeez-Pub SN1 Marine and a value diac you speciny. Availability Zone Info Choose the zone in which your subnet will reside, or let Amazon choose one for you.	·	

## **Create Prv Sub N1:**

**VPC ID:** Azeez-VPC-A

Subnet name: Azeez Prv SN1

## **IPv4 CIDR block:** 10.100.1.0./24

c-0a603088e21dd658	32 (Azeez-VPC-A)
ssociated VPC CIDRs	
Pv4 CIDRs	
0.100.0.0/16	
	vailability Zone for the subnet.
Subnet 1 of 1	
	lame' and a value that you specify.
Azeez-VPC-Prv SN1	
The name carries op to 200	characters tong.
Availability Zone Info	enometers long. our subnet will reside, or let Amazon choose one for you.
Availability Zone Info Choose the zone in which yo No preference	our subnet will reside, or let Amazon choose one for you.
Availability Zone Info Choose the zone in which yo	our subnet will reside, or let Amazon choose one for you.
Availability Zone Info Choose the zone in which yo No preference Key	our subnet will reside, or let Amazon choose one for you.

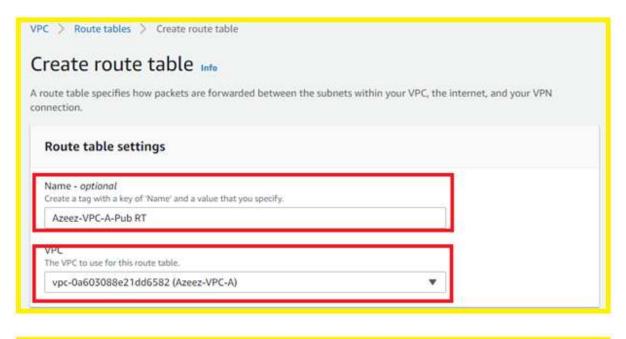
c) Create Rout Table: Go to Route table and Create route tables

VPC dashboard Route tables (2) and	C Actions	* Creat	te route table
		_	and a second second
CCI Glabal View 🖸 🏎 🛛 Q. Alter route tables			1 > 6
Tartier a VPC 🔹 🗌 🖸 Name 🤨 Route table ID 🦉 Explicit subnet associat	Edge associations	Main 🐨	VPC
- vis-01664905427w0616 -	-	Yes	vpx-0x60508
Straal private cloud	-	Yes	vpc-0224496
hur VPG			

First, I am creating Public Route table

Name: Azeez-VPC-A-Pub RT

VPC: Azeez-VPC-A



Tags A tag is a label that you assign to an AWS resource. your resources or track your AWS costs.	Each tag consists of a key and an option	al value. You can	use tags to search and filter
Кеу	Value - optional		
Q Name X	Q, Azeez-VPC-A-Pub RT	×	Remove
Add new tag You can add 49 more tags.			
		Cancel	Create route table

# Second, I am Creating Prv Route table

### Azeez-VPC-A-Prv RT

	en the subnets within your VPC, the internet, a	na
js		
ame" and a value that you specify.		
table.		
582 (Azeez-VPC-A)	•	
	and an optional value. You can use tags to search and filter	
Value - optional		
Value - optional X Q Azeez-VPC-A-P	Prv RT X Remove	
	gs ame" and a value that you specify. e table. 582 (Azeez-VPC-A)	ame" and a value that you specify.  table.  582 (Azeez-VPC-A)

Edit subnet associations:

Edit the subnet Association and select the Prv SN1 and save associations

Q,	Filter route tobles						5	1 > 6
•	Name	v.	Route table ID	v.	Explicit subnet associat	Edge associations	Main V	VPC
2	Azeez-VPC-A-Prv	RT	rtb-063ae8d5731b58628				No	vpc-0a60308
	-		rtb-01664903427ac0b16		-	1	Yes	vpc-0a60308
	17		rtb-ade502c0		99 (m)	(H)	Yes	vpc-0224496
	Azeez-VPC-A-Put	RT	rtb-062e0def0844f9f5f		ж.	-	No	vpc-0a60308
	plicit subnet as					-	Edit subnet asso	1202000

Avai	hich subnets are associate	st owners of	NE ROUTE GEBRE.			
Q	The odest executive:					< 1 > 0
•	Name	Ψ.	Subnet ID	IPv4 CIDR	IPv6 CID8	Route table ID
8	Azore-VPC-Prv SN1		subrat 0155ed95b6a50790f	10.100.1.0/24		Main inth-01664903427ac0b163
	cted subnets					
iele						
2000	wt-0155e#95b6a507f0f / /					

Edit subnet associations:

Edit the subnet Association and select the Pub SN1 and save associations

Rout	te tables (1/4	) Info				C Action	s 🔻 Crea	te route table
Q	Filter mutir tablin							(1) 0
•	Name	Ŷ	Route table ID	V	Explicit subnet associat	Edge associations	Main 🗢	VPC
0	Azeez-VPC-A-	Prv RT	rtb-065ae8d5731b58	628	subnet-0155ed95b6a50	12	No	vpc-0a603088e2
	-		rtb-01664903427ac0	616	-	-	Yes	vpc-0a603088e2
Ci -	-		rtb-ade502c0			Sec. 1	Yes	vpc-02244968
	Azeez-VPC-A-I	Pub RT	rtb-062e0def0844f9f	SF	-	-	No	vpc-0a603088e2
Ex	plicit subnet	associat	ions (0)		-		Edit subnet as	ociations
0	Find subnet as	saciation					< 1	> @
Suit	onet ID		w. IP	v4 CIDR		V IPv6 CIDR		Ψ

	subnet asso								
Avai	ilable subnets (1/	Z)							
Q	Filter solltest association						3	$t \ge 1$	Θ
	Name	Ψ.	Subnet ID	IPv4 CIDR	IPV6 CIDR	Route table ID			Ψ.
5	Azeez-Pub SN1		subrert-00206%(\$900416035	10.100.0.0/24	+:	Nain (rtb-01664903			
сц.	Apper-VPC-Prv SN1	-	subret-0155e/39326a/507/07	 10.100.1.0/24	 -	 Prv RT		in MR	
	ected subnets	SI / Azer	u-Pub SN1 X						
						Cancel	Ser	associ	rtions

Route Table of Prv and Public

Q	Filter route tables	3	(1) @				
0	Name v	Route table ID	v	Explicit subnet associat	Edge associations	Main 💎	VPC
	Azeez-VPC-A-Prv RT	rtb-063ae8d5731b580	628	subnet-0155ed95b6a50	<b>1</b>	No	vpc-0a603088e2
0		rtb-01664905427ac08	016		-	Yes	vpc-0a60508S82
		rtb-adeS02c0		*		Yes	vpc-02244968
0	Azeez-VPC-A-Pub RT	rtb-062e0def0844f9f5	5F	subnet-0b2d69c39b041	2 ····	No	vpc-0a603088e2

# d) Internet gateway:

Q. Seinch	for serv	rices fermines, Bi	igs dics in	£mine.	(AB+S)		0 4 0 1	enklars 🔹 👘 restkumargis (8 4402-0545-5
	Inter	rnet gateway	ys (1/1) .	da			C Actions *	Crusis Internet gateway
	Q	Attai internet ja	tracija					(1) 0
1		Name	÷	Internet gateway ID	÷	State	VPC ID	er Owner
1		1.4		ign ec214787		O Attached	vpx-02244968	44020545
	Q Securit	inte Q	Internet gateway     Q. Plan internet ja     Name	Internet gateways (1/1)     Q. /The internet gateways     Nama      V	🖬 Nama 🔍 Interest gateway ID	Internet gateways (1/1) who Q. Piller internet jutzneign Name V Internet gateway ID V	Internet gateways (1/1)         sets           Q. Pitter internet gateways         Q.           Name         V         internet gateway ID         V.	Internet gateways (1/1) w/w     C.     Actions ▼       Q. filter internet gateways     C.     Actions ▼       Q. filter internet gateways     VPC ID     VPC ID

Create Internet gateway: Go to internet gateway and select create internet gateway

Name: Azeez-VPC-A-IGW

Internet gateway settings				
Name tag	the street			
Azeez-VPC-A-IGW				
A tag is a label that you assign to an AWS your resources or track your AWS costs.	resource. Eac	h tag consists of a key and an optional val	ue. You can	use tags to search and fill
Key	1	/alue - optional		
		Q. Azeez-VPC-A-IGW	×	Remove
Q, Name	×	of heees the wind the	<u> </u>	Helliove
Q Name Add new tag	×	SC ALCOLOGY		Nellove
	X	Q ALCELYFORMUN		hundre

## Attach to VPC: Azeez-VPC-A

Name

-

Apere-VPC A-IGW

v

DHCP option sets

Managed prefix lists

Endpoint services

flattic IPa

Endpoints

VPC 🗦 Internet gateways 🗦 Attach to VPC (igw-026b44179255cde35)	
Attach to VPC (igw-026b44179255cde35) Info	
VPC Attach an internet gateway to a VPC to enable the VPC to communicate with the internet. Specify the VP4	C to attach below.
Available VPCs Attach the internet gateway to this VPC.	
Q vpc-0a603088e21dd6582 X	
AWS Command Line Interface command	
Cancel	Attach internet gateway

Internet gateway ID xgw-026b44179255cde55

nym ac 214 fill 1

\* State

Ortsched

() Attached

vpc.02342968

111

Owner

4402054

.

#### After attachment

inte	rnet gateways (	c) info				C	Actions V	Create intern	er gi	ite way
Q	Filter internet gotews	ori.						<	1	> @
Ċ	Name	v	Internet gateway ID	v	State	Ψ.	VPC ID	1	v.	Owner
Q.	Azeez-VPC-A-IGW	8	igw-026b44179255cde35		⊘ Attached		vpc-0a603088e21dd	6582   Azeez-VPC-	A.	4402054
	-		lgw-ec274787		⊘ Attached		vpc-02244968			4402054

## Know edit the routes

New VPC Experience X	Route	tables (1/4) unit					C	Action	. *	Conate t	1088 54	date:
/PC distributed	9,70	er, metr selfer								1.50	1.2	
C7 Global Vew 🕑 🛶			m-an/302	ne .			Ψ.		Yes		pc-022	4494
iter by VPC		Azeep VPC-A-Pub #1	rt5-063e0e	NORMAPHISE	submet, Ob2050	9:396/041	+		No	3	21.04	030
Select e VPC 🛛 💌	-									6		1
ar VPCs	Ptb-D624	OdułOE4419/St / Au	Subnet associatio		peciations	te propagatien	Tep					
we VPCs downs rate Tables	Detail	n Reaters			poclations   New	te propagation	729			tate	butes	1
rtsal private slood av VPCs downs enter tebber terriert gehewags pers-cody latemat rterrieps	Detail	anneo cenero n			naciations   Ana	te propagatien	Tep	Both	*	Lifer ( 1	_	9
wr VPCs Acousts mete Selder termer galeways precs-celly internet rieways	Detail	n name			ooclations   Rea	de propagatien	Top		٠	1		9
ke VPCs Anets terret gebekans pers-only internet	Rout Q. 1	n name	Subset annotatie			fe propagation	Tap	pott.		1	4	) »

Edit the route table and add internet gateway and save changes

stination		Target		Status	Propagated		
100.0.0/36		Q, total	×	@ Active	No		
0.0000/0	×	Q. iga-026b44179255cdc55	×	+:	No	Remove	

### e) Create EC2 Instance:

Name: Azeez-EC2-VPC-A-Pub SN1

Login into the AWS console page Once you login go to Services. Services -> Compute -> EC2

Favorites	
All services	EC2 Virtual Servers in the Cloud
Analytics	VPC
P Application Integration	Isolated Cloud Resources
🖘 AR & VR	Console Home
🚔 AWS Cost Management	
Blockchain	EC2 Image Builder
Business Applications	A managed service to automate build, customize and deploy OS images
Compute	Route 53
m Containers	Scalable DNS and Domain Name Registration
② Customer Enablement	S3
E Database	Scalable Storage in the Cloud

Then go to instances and click on Launch Instance:

New EC2 Experience ×	Resources		
EC2 Dashboard EC2 Global View		hazon EC2 res	ources in the US West (Oregon) Re
Events	Instances (running)	0	Dedicated Hosts
Tags	Construction of the second sec		
Limits	Instances	2	Key pairs
Instances	Placement groups	0	Security groups
Instances Instance Types	Volumes.	0	
Launch Templates Spot Requests	Easily size, configure, ar Wizard for SQL Server.		rosoft SQL Server Always On avai

Then click on Launch instance option:

aws iii Services Q Searc	ch for services, features, blogs, docs, and more [Alt+5]
New EC2 Experience X	Launch Instance - Connect Actions *
EC2 Dashboard	Q Instance State : Running Add filter
EC2 Global View	Name - Instance ID - Instance Type - Ava
Events	
Tags	No Instances found
Limits	
♥ Instances	
Instances	

Then give the name to the instance machine:

C2 > Instances > Launch an instance	▼ Summary
aunch an instance տ	Number of instances info
mazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by oflowing the simple steps below.	1
Name and tags Inte	Software Image (AMI) Amazon Linux 2 Kernet 5.10 AMI_Imad more
Name	ami-0705209/9935555cea Virtual server type (instance type)
Azeez-EC2-VPC-A-Pub SN1 Add additional tags	t2.micro Firewall (security group)
	New security group
<ul> <li>Application and OS Images (Amazon Machine Image) tota An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browner for AMIs If you don't see what you are looking for bettee</li> </ul>	Storage (volumes) 1 volume(s) - 8 GiB
Q. Search our full catalog including 1000s of application and OS images	Committeer to once Rest unan includes 207 X
	Cancel Launch Instance

Then select OS Image and the version:

Linux	macOS	Ubuntu	Windows	Red Hat	SUSE	Q
aws	Mac	ubuntu®	Microsoft	📥 Red Hat	Si	Browse more Af Including AMIs fro AWS, Marketplace the Community
	2 AMI (HVM) -	Kernel 5.10, SS		4. Not (Armi)		Free tier eligible

Under the Instance type: Select – t2.micro machine

Z.micro amily:12 1 vCPU 1 GIII Memory in-Demand Linux pricing: 0.0116 USD per Hour in-Demand Windows pricing: 0.0162 USD per H	Free tier eligib	e V	Compare instance types
-Demand Windows pricing: 0.0162 USD per Hour	lour		

Then select the keypair, if you don't have the keypair please click on "create new keypair"

<ul> <li>Key pair (login) Into</li> </ul>		
You can use a key pair to securely connect to your instance. Ensure that y the instance.	ou have access to the set	ected key pair before you launch
ey pair name - required		

## Edit the Network settings:

▼ Network settings Info	
VPC - required Info	
vpc-0a603088e21dd6582 (Azeez-VPC-A) 10.100.0.0/16	• C
Subnet Info	
subnet-0b2d69c39b041603f         Azeez-Pub SN1           VPC: vpc-0a603088e21dd6582         Owner: 440205455740           Availability Zone: eu-central-1b         IP addresses available: 250         CIDR: 10.100.0.0/24)	Create new subnet
Auto-assign public IP Info	
Enable	•
Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to all instance.	llow specific traffic to reach your
Create security group     Select existing security group	
Common security groups Info	
Select security groups	<ul> <li>Compare security group rules</li> </ul>
Azeez-VPC-Pub-SN-SG sg-0dc9efbf5fbc86eea X VPC: vpc-0a603088e21dd6582	

aws	Services Q Search for services, features, blogs, docs, and more [Alt+5
	▼ Configure storage Info
	1x 8 GiB gp2   Root volume
	③ Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magn
	Add new volume
	0 x File systems

Under Configure storage, please provide your required configure storage:

Provide the number of instances you required: 1 and launch instaace

1	
ami-08#2d\$7b6a0129927	3
Virtual server type (instance type)	1
t2.micro	
Firewall (security group)	
New security group	
Storage (volumes)	
1 volume(s) - 8 GiB	
<b>^</b>	
Cancel	Launch instance

🚾 ec2-user@ip-10-100-0-228-~		×
Microsoft Windows [Version 10.0.22623.870] (c) Microsoft Corporation. All rights reserved.		
C:\Users\azeez.m\Downloads≻ssh -i "TestAzeez.pem" ec2-userĝ10.100.0.116 ssh: connect to host 10.100.0.116 port 22: Connection timed out		
C:\Users\azeez.m\Downloads>ssh -i "TestAzeez.pem" ec2-user@3.72.112.186 The authenticity of host '3.72.112.186 (3.72.112.186)' can't be established. E025519 key fingerprint is SHAZ56:Q/SPTUDeNsCoQwDp5mMht5eScVMDbwgRjl2hBa0G10k. This key is not known by any other names Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Warning: Permanently added '3.72.112.186' (ED25519) to the list of known hosts.		
// Amazon Linux 2 AMI		
https://aws.amazon.com/amazon-linux-2/ 13 package(s) needed for security, out of 16 available Run "sudo yum update" to apply all updates. [ec2-user@ip-10-100-0-226 ~]\$_		

Security	Q. Tiller second	CP24PC							6.1.3	0
Security groups	Name		Security gro	- 01qu	Security	group name. 7	VPCID	w.	Description	
Network Analysis					10.00	and a second of the second	IN ATTACAN			-
Reachability Analyzer Network Access Analyzer	0		ing declarates		Azesz-V	PC-PL8-SN-55	NDK-DWERDORING	1686592	Asses-VPC-Ps	¢-5№.1
DNS firewall Rule groups Domen listo	Details	bound (siles)	Outbound ru	des   Teps	-					
Network Firewall Fremalis	Vou can now	r check networ	a connectivity with	th Reachability A	Acutyper		[	Run Reschabi	ity Analyser	×
Frewall policies	Inbound rule	es (1/1)					C Manag	e taga 🛛 🚺	dit inhund rul	-
Notwork Flepwalt rule termini	0.000									
Nortwork Propult rule groups Virtual private network (VPN)	Q. Plur serie	Ŧ		nop rule V		n 7	Турн		< 1 >	0
groups Writaal private network Write Security Groups 3 It inbound ru sond rules control the incor	Name           Name           Ng-Docieth/Stbctbess           IeS sate	w Aurest VPC Pub	59456 > 84			и <sup>и</sup>	394			0
groups Wirtaal private network (WHO) Security Groups 3 dit inbound ru sond rules control the incor	Name           Name           Ng-Docieth/Stbctbess           IeS sate	W Access VPC Pub to much the in	tocol Port	it inbound rule trange Sou		n v		v 1	hetocal	0
groups Writaal private network (VPN) Security Groups > dit inbound rules cond rules control the incor inbound rules units	Name	The second secon	tocol Port	it intround rules trange Sou		a *	Descrip		hetocal	
groups Writaal private network (VPN) Security Groups > dit inbound rules societ rules control the incor inbound rules units Security group rule 10	Name  Re-Dociette/Stbctbiess	The second secon	tocol Peri	it intround rules trange Sou	s ute why		Descrip		vetocal	
groups Writaal private network (VPN) Security Groups > dit inbound rules societ rules control the incor inbound rules units Security group rule 10	Name  Re-Dociette/Stbctbiess	To much the is	tocol Peri	trange Sou te	s ute why	Q	Descrip		vetocel	et

Once EC2 Instance created Edit Inbound rules in Security group:

### **Create another Private EC2 instance:**

C2 > Instances > Launch an instance	
aunch an instance տ	
mazon EC2 allows you to create virtual machines, or ins ollowing the simple steps below.	stances, that run on the AWS Cloud. Quickly get started by
Name and tags Info	

<ul> <li>Key pair (login) Info</li> </ul>			
You can use a key pair to securely connect to your instance. Ensure that the instance.	you have access to the se	elected k	ey pair before you launch
Key pair name - required		2	

## Edit the Network settings:

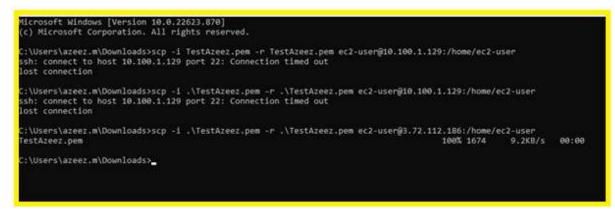
vpc-0a603088e21dd6582 (Azeez-VPC-A) 10.100.0.0/16	•	C
Subnet Info		
subnet-0155ed95b6a507f0f         Azeez-VPC-Prv SN1           VPC: vpc-0a603088e21dd6582         Owner: 440205455740           Availability Zone: eu-central-1b         IP addresses available: 251	•	C Create new subnet
Auto-assign public IP Info		
Enable	•	
Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to nstance.	1	ecific traffic to reach your
Create security group Select existing security group		
Create security group     Select existing security group		

	upt			< 1 > @
Name	ッ   Security group ID	♥ Security group nat	me 🗢 VPC ID	v Description
-	sg-Odc9efb15fbc86	eea Azeez-VPC-Pub-SN	I-SG vpc-0a603088e21dd6582	Azeez-VPC-Pub-SN-5
- I	sg-0eb29f620a0fc4	d39 Azeez-VPC-Prv-SN-	-56 vpc-0a603088e21dd6582	Azeez-VPC-Prv-SN-50
		226		
Details Inbour	d rules Outbound rules	Tags		
Inbound rules (	1/1)		C Manage tags	Edit inbound rules

Edit Inbound rules in Security group for Azeez-VPC-Prv-Sn-SG: All ICMP-IPv4

nbound rules 📷								
Security group rule ID	Type into		Protocol	Part range	Source into		Description - optional	
igr-09e4c0fe70b254522	55H	٠	104	22	Cuitom 🔻	Q		Delet e
-	AS ICMP - IPv4	۲	1017	AL	Anyah _ ¥	Q.		Delet

#### Copy. pem Local to Azeez-EC2-VPC-A-Pub SN1



ec2-user@ip-10-100-1-129:~ 64 bytes from 10.100.1.129: icmp\_seq=8 ttl=255 time=0.528 ms 64 bytes from 10.100.1.129: icmp\_seq=9 ttl=255 time=0.585 ms 64 bytes from 10.100.1.129: icmp\_seq=10 ttl=255 time=1.26 ms °Z. [1]+ Stopped ping 10.100.1.129 [ec2-user@ip-10-100-0-226 ~]\$ ^C [ec2-user@ip-10-100-0-226 ~]\$ sudo su [root@ip-10-100-0-226 ec2-user]# pwd /home/ec2-user [root@ip-10-100-0-226 ec2-user]# ls TestAzeez.pem [root@ip-10-100-0-226 ec2-user]# chmod 777 TestAzeez.pem [root@ip-10-100-0-226 ec2-user]# ls -ltr total 4 PHYPHYPHY 1 PC2-USPP PC2-USPP 1674 Nov 1 19:09 Testar [root@ip-10-100-0-226 ec2-user]# ssh -i TestAzeez.pem ec2-user@10.100.1.129 ECDSA key fingerprint is SHA256:1L11xZRPhT5KZS6CrAtuRUDwT8uZUZ+emGC2ickCd4g. ECDSA key fingerprint is MD5:a7:2e:83:6c:77:2d:2c:ce:02:9c:c7:3f:01:6f:40:le. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '10.100.1.129' (ECDSA) to the list of known hosts. Amazon Linux 2 AMI https://aws.amazon.com/amazon-linux-2/ [ec2-user@ip-10-100-1-129 ~]\$ ping google.com
PING google.com (216.58.212.142) 56(84) bytes of data.

### **Create VPC B:**

	Crasts VPC
VPC debboard	(1) 0
EQ Global View 🖸 🛶 👘 Name 🔻 VPC ID 🔍 State 🔻 IPv4 CIDII	V IPV6 COR
Filter by VPC Assez-VPC-A vpx-due01008x21606582 @Austable 10.100.0.0/16	123
felan e VPC * 🖓 - Vpc-02244968 🥝 Austable 172.11.0.0/16	
Virtual private cloud	
Teur VPCs	

Name tag – optional: Azeez-VPC-B

IPv4 CIDR: 10.200.0.0/16

Create VPC Info		
A VPC is an isolated portion of the A	WS Cloud populated by AWS objects, such as Amazon EC2 inst	ances.
VPC settings		
Resources to create Info Create only the VPC resource or the VI	PC and other networking resources.	
• VPC only	O VPC and more	
Name tag - optional Creates a tag with a key of 'Name' and	a value that you specify.	
Azeez-VPC-B		
IPv4 CIDR block Info		
IPv4 CIDR manual input		
<ul> <li>IPAM-allocated IPv4 CIDR blo</li> </ul>	ock:	
IPv4 CIDR		
10.200.0.0/16		
IPv6 CIDR block Info		
No IPv6 CIDR block		
O IPAM-allocated IPv6 CIDR blo	ock	

**Create subnet:** Create a subnet for Azeez-VPC-B

New VPC Experience X	Subi	nets (1/5) 🖬	tu.				C	Action: *	Create sale	-
VPC dashboard	Q	Film juleans							645	6
EC2 Global Vew 🔀 🐜	•	Name		Subnet ID	 State	÷	VPC		IPv4 CIDR	
Filter by VPC		-		subset-\$29ecb38	O Available		vpc-07244968		172.31.16.0/20	
Select # MPC +	10	2		submet-1717805b	() Available		vpc-02244968		172.31.0.0/20	
Virtual private cloud Your VDCs	1									8
Selecto	subre	t-0155ed95b6	a507f0f / A	zeez-VPC-Prv SN1						

#### Subnet name: Azeez-VPC-B-SN1

### IPv4 CIDR block: 10.200.1.0/24

Subnet name Create a tag with a key of 'Name' and a value that	you specify.		
Azeez-VPC-B-SN1			
Name and the spite 200 of a state burg.			
Availability Zone Info Choose the zone in which your subnet will reside,	or let Amazon choose one for you.		
No preference		•	
IPv4 CIDR block Info			1
Q 10.200.1.0/24		×	
Tags - optional			
▼ Tags - optional Key	Value - optional		-
	Value - optional Q Azeez-VPC-B-SN1	×	Remove
Q Name X		×	Remove
Key		×	Remove
Key Q Name X Add new tag		×	Remove
Q Name X		×	Remove

### Create Route table: Create route table for Azeez-VPC-B

Subnets	oute tables (5) who			C Action	0	nta roota table
Internet galaways Egens only internet gataways Certier galaways		Route table 10 v etb-061ae8d5733055628 etb-01664903427ac8h16	Explicit subnet associat subnet-0155e895b5a50 -	Edge associations - -	Hain = No Ves	VPC vpc-0a6030886 vpc-0a6030855
DHCP option sets Elestic IPs Set	ect a route table					
Route table setting	gs			_		
Name - optional Create a tag with a key of 'N		u specify.				
Azeez-VPC-2-Prv-SN-R VPC The VPC to use for this route	521.			1		
vpc-04900b00942cc87	99 (Azeez-VPC-B)		٣	1		
Tags A tag is a label that you assi your resources or track your			and an optional value. Yo	u can use tags to se	arch and filt	er
Кеу		Value - optional		-		
Q Name Add new tag You can add 49 more tags.	×	Q Azeez-VPC-2-P	rv-SN-RT X	Remove		
			Car	ncel Crea	ite route t	able

Edit subnet associations: Edit subnet association in Azeez-VPC-B-Prv SN-RT

New VPC Experience X	Route tables (1/6) into			C Actia	Oreate r	oute table
1200 C 1200 C	Q. Fitter mode safety				¢.,	1 > @
VPC dashboard BC2 Global View 🔀 🛶	0	rtb-0x156018x622x0454	-		Yes	VDE-04900
Filter by VPC	Azenz-VPC-A.Pub RT	rt5-052x03x4584419F58	subret-052469:336041	-	No	vpr-0a605
Selecta VPC .	Anes-VPC-8-Pro-SN-RT	rth-Odu/363c36643c20f	3 <b>4</b>		Pine .	vpr-04900
	*					
Your VPCs	rtb-0dcc363c9bb43e20f / Azeez					
Subsets. Brote tables Internet gateways	Details Routes Sub	tidge associat	ions Reute propagation	Taga		_
Route tables Internet geneways Egrees-only internet	Details Routes Table		ions Reute propagation	Taga	Edit subnet associa	tions
Route tables Internet getreways			lons Beuts propagation	Taga	Edit subnet associa	etions.
Roote tables Internet pateways Ogress-only internet gateways	Explicit subnet associate		ions Reuts propagation	Taga	Edit subort associa	

							< 1 >	0
		w.	IPv4 CIDR	ŵ.	IPv6 CIDR		Route table ID	
19	8433971598899		10.200.1.0/24				Mail) (15-0x356018x622x0434)	
19	823397169889	_	10.200.1.0/24	-		_	Maxi (11)-0+155018+62240454	1

Create EC2 instance: Create EC2 instance in Azeez-VPC-B-Prv SN1

EC2 > Instances > Launch an Instance
Launch an instance Info
Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.
Name and tags Info
Name
Azeez-EC2-VPC-B-SN1 Add additional tags

Edit Network settings: Edit network settings and create Security group then Launch instance.

VPC - required Info			
vpc-04900b00942cc8799 (Azeez-VPC-B) 10.208.0.0/16	¥	C	
Subnet Info			
subnet-02af38d33971b9889 VPC opc.04900b00942cc8299 Availability Zone: ou central-1c P addresses available: 25	C	Create new subnet	
Auto-assign public IP Info			
Enable			
Firewall (security groups) Info A security group is a set of firewall rules that control the traffi instance.	e for your instance. Add rules to allow	v specific	traffic to reach your
Create security group	elect existing security group		
Security group name - required			
Security group name - required Azeez-VPC-B-SN1-SG		1	
Security group name - required Azeez-VPC-B-SN1-SG This security group will be added to all network interfaces. Th 255 characters. Valid characters: a-z, A-Z, O-9, spaces, and;		rity grout	s is created. May length i

# **Edit Security Group:**

Secu	irity Groups	(1/18) Inf	. C	Actions V Export secu	rity groups to CSV 🛛 🔻	Create security group
Q	Pitter security gro	ug/5				< 1 > @
	Name	v	Security group ID 🛛 🕫	Security group name 🔍	VPC ID	♥ Description
1	-		10-00wrd6580x651843	Jaunch-witard.3	.upra02244969	launch_witterd_Tcrea
2			sg-026a1f0b231f08adb	Azeez-VPC-8-SN1-5G	vpc-04900b00942cc8799	Azeez-VPC-B-SN1-S0
Int	oound rules (	1/1)			C Manage tags	Edit inbound rules
	ound rules ( Filter security g	02018			C Manage tags	
		02018	Security group rule マ	IP version V	C     Manage tags       Type     ▼	Edit inbound rules

bound rules anto								
Security group rule ID	Type infu		Protocol	Port range	Source lusts		Description - optional	
sgr-Of5da5fax5735942a	55H		104	22	Custom *	Q		Delet
						0.000/0 X		
	All ICMP - IPv4	٠	NOME:	46	Anyadı 🔻	Q.		Delet
						0.0.0.0/0 ×		

Save rule

**VPC Peering:** Go to peering and select Create peering connection. Connect Azeez-VPC-A to Azeez-VPC-B. Create peering connection

Endpoint services	Peering connections win	C Actions • Create geering connection
NAT gataways Pearing connections	Q Pitter preving an executions	(1) 0
Security	Name V Peering connection ID V Status V	Requester VPC Accepter VPC
Network ACLs		No peering convection found
Security groups		
Network Analysis		

Peering connection setting	IS	
Name - optional Create a tag with a key of 'Name' and a va	lue that you specify.	
Azeez-VPC-Peering-A to B		
Select a local VPC to neer w	ith	
VPC ID (Requester)		
vpc-0a603088e21dd6582 (Azeez	VPC-A)	Ψ
VPC CIDRs for vpc-0a603088e21dd	6582 (Azeez-VPC-A)	
CIDR	Status	Status reason
10.100.0.0/16	Associated	÷1
Select another VPC to peer	with	
Account		
O My account		
<ul> <li>Another account</li> </ul>		
Region		
This Region (eu-central-1)		
Another Region		

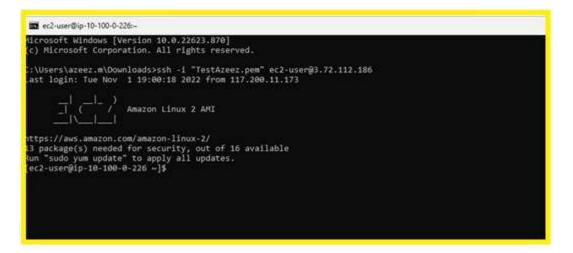
VPC ID (Accepter)				
vpc-04900b00942cc8799	(Azeez-VPC-B)		•	
VPC CIDRs for vpc-04900b0	00942cc8799 (Aze	ez-VPC-B)	10	
CIDR		Status	Status reason	
10.200.0.0/16		⊘ Associated	8	
A tag is a label that you assign t	o an AWS resource. E S costs.	ach tag consists of a key and	an optional value. You ca	n use tags to search and filter
Tags A tag is a label that you assign t your resources or track your AW Key	o an AWS resource. E S costs.	ach tag consists of a key and Value - <i>optional</i>	an optional value. You ca	n use tags to search and filter
A tag is a label that you assign t your resources or track your AW	o an AWS resource. E S costs.			n use tags to search and filter Remove
A tag is a label that you assign t your resources or track your AW Key	S costs.	Value - optional		
A tag is a label that you assign t your resources or track your AW Key Q. Name Add new tag	S costs.	Value - optional		
A tag is a label that you assign t your resources or track your AW Key Q. Name	S costs.	Value - optional		

Then select Peering machine and go to action and accept the request

Elastic IPs	A VPC peering connection pcs-0267a43d291111882 / Arzez-VPC-Peering-A to 8 has been a service and a service and	n requested.		
Managed prefix lists (ndpoints (ndpoint services	Peering connections (1/1), where Q. Ficur preside connections	G	Actions   Vess ditable  Accept request	
NAT gateways Perring connections	Name T Peering connection ID T Status T	Requestor	Report Verquest	Tyber VPC
espelity interact ACLs ansatty groups	Azeed-VPC-Pw., pcs-63b7a43x291(11882      Pending acceptance	ge-0x001	Hamage tags Delete peering connection	041003.000421187
etwork Analysis. pachalality Analyser	pcx-62b7a42st261111B82 / Azeez-VPC-Peering-A to B			
atavack Accass Analyster NS finewall ale genues	Pending acceptance     You can accept or reject this peering connection request using the "Actions" monu. You     GMT-5:30 to accept or reject the request, otherwork it expres.	have until We	dnatiday, November 9, 2022 at	×

#### Know connect:

EC2-VPC-A-PubSN1 to EC2-VPC-A PrvSN1 to EC2-VPC-B-SN1 Connected local to EC2-VPC-A-PubSN1



Next EC2-VPC-A-PubSN1 to EC2-VPC-A PrvSN1

aa ec2-user@ip-10-100-1-129:~
Microsoft Windows [Version 10.0.22623.870] (c) Microsoft Corporation. All rights reserved.
C:\Users\azeez.m\Downloads>ssh -i "TestAzeez.pem" ec2-user@3.72.112.186 Last login: Tue Nov 1 19:00:18 2022 from 117.200.11.173
// Amazon Linux 2 AMI
<pre>https://aws.amazon.com/amazon-linux-2/ 13 package(s) needed for security, out of 16 available Run "sudo yum update" to apply all updates. [ec2-usen@ip-10-100-0-226 ~]\$ ls FestAzeez.pem [ec2-usen@ip-10-100-0-226 ~]\$ sudo su [root@ip-10-100-0-226 ec2-user]# ssh -i TestAzeez.pem ec2-user@10.100.1.129 Last login: Tue Nov 1 19:13:55 2022 from 10.100.0.226</pre>
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/ [ec2-user@ip-10-100-1-129 ~]\$ _

Next ping EC2-VPC-A PrvSN1 to Azeez-EC2-VPC-B-SN1

Without edit the route table we cant ping so Know we have to Both Route tables has to update

The astrony on these	Route tables (1/6)	ido			C Actions	• Ceate	route table
VPC detributed EC2 Global Vew 🙆 🛶	Q. Filter soute tables					0	1 > 6
Fitter by VPC	D Name		(e 10 ==	Explicit subnet associat	Edge associations	Main T	VPC
Select # VPC 🛛 👻	Azeez-VPC-A-Pev I	RT rtb-Dillar	625731556628	subret-0115ad95b6a50	-	No	vpc-duktron
Virtual private cloud	18		111.000.0000			1	
Vour VPCs. Subruts	Details Renter	Subnet association	om Edge anor	ations Route propagation	Tagi		
Reete tables Internet gateways			and I makes an			-	
Egress-only internet	Routes (1)					Edit	routes
gateways Canter gateways DHCP option sets	Q. Pitter rooter				Both	* < 1	> @
	Destination		Target	* Status	w Propagater	đ	
Rische IPs							

stination		Target		Status	Propagated	
100.0.0/16		Q local	×	O Active	No	
, 10.200.1.0/24	×	Q pcx-02b7ə42d291111882	×	×	No	Remove

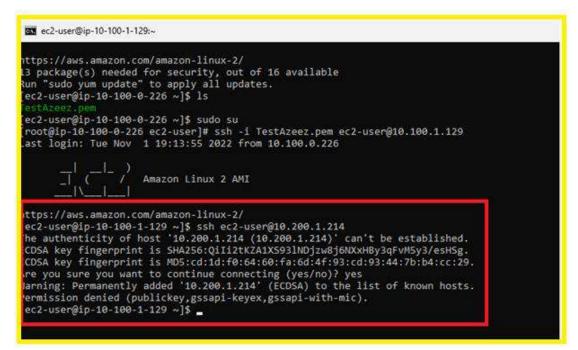
#### Next edit Azeez-VPC-B-Prv-SN

New VPC Experience X	Route tables (1/6) in	fu		C	Actions ¥	Create reste table
	Q: /iter route tables					< 1 > 6
VPC dashboard	12 *	ne-auepozau/	1.00		115	996-1469-499
ECZ Global View 🙆 🗤	17 -	rtb-0e356018e622x0434	143	-	Ves	vpc-04900b0
Filter by VPC	Acces-VPC-A-Pub	RT 115-062606605449959	subnet 062/609(398041	-	No	apr 0x60308
Select a VPC 🛛 👻	Azeez-VPC-D-Pry-1	- Hb-0dor363cHib43e20f	autoret-02a/38i/339716	-	No	vpc-0490066
Your VPCs	Details Readers	Subnet associations   Edge ass	Route propagation	Tag	0	
Virtual private cloud Your VPCs Subratis Report cables Intervet gatemasys	Details Routes (1)	Subnet associations   Edge ass	ociations Route propagation	Tag	0	Edit routes
Your VPCs Subrivitis		Subnet associations 🍴 Edge ass	sciations Route propagation	Tag	Both •	
Your VPCs Subrams Boutes Exblans Intervet gateways Egress-sofy intervet	Routes (1)	Subnet associations 🍴 Edge ass	sciations Revte propagation	Tag		Edit routes
rour VPCs Guiteretts Intervet gateways Grees-only intervet pateways	Routes (1)	Subnet associations   Edge ass	ociations Revte propagation V Status	Tag		Edit routes

Destination		Target		Status	Propagated	
10.200.0.0/16		Q, local	×	(O)Active	No	
Q, 10.100.1.6/24	×	O, pcx-02h7a42d291111883	×	÷.	No	lemove

#### Know we have to do ssh

EC2-VPC-A PrvSN1 to Azeez-EC2-VPC-B-SN1



Know we have to do ping

Unable to ping

[ro	oot@ip	-10-10	00-1-129 ec2-u	ser]# ping 1	10.200.1.	.214	
۶II	VG 10.2	200.1	.214 (10.200.1	.214) 56(84)	) bytes o	of data.	
54	bytes	from	10.200.1.214:	<pre>icmp_seq=1</pre>	ttl=255	time=0.678	ms
54	bytes	from	10.200.1.214:	<pre>icmp_seq=2</pre>	ttl=255	time=0.846	ms
54	bytes	from	10.200.1.214:	<pre>icmp_seq=3</pre>	ttl=255	time=0.875	ms
			10.200.1.214:				
			10.200.1.214:				
			10.200.1.214:				
54	bytes	from	10.200.1.214:	<pre>icmp_seq=7</pre>	ttl=255	time=0.764	ms
54	bytes	from	10.200.1.214:	<pre>icmp_seq=8</pre>	ttl=255	time=0.781	ms
			10.200.1.214:				
			10.200.1.214:				
54	bytes	from	10.200.1.214:	<pre>icmp_seq=11</pre>	l ttl=259	5 time=0.809	9 ms
200							

Know we have copy .pem file Azeez-EC2-VPC-A-Pub SN1 to Azeez-EC2-VPC-A-Prv SN1



Know connect Azeez-EC2-VPC-A-Prv SN1 to Azeez-EC@-VPC-B-SN1

