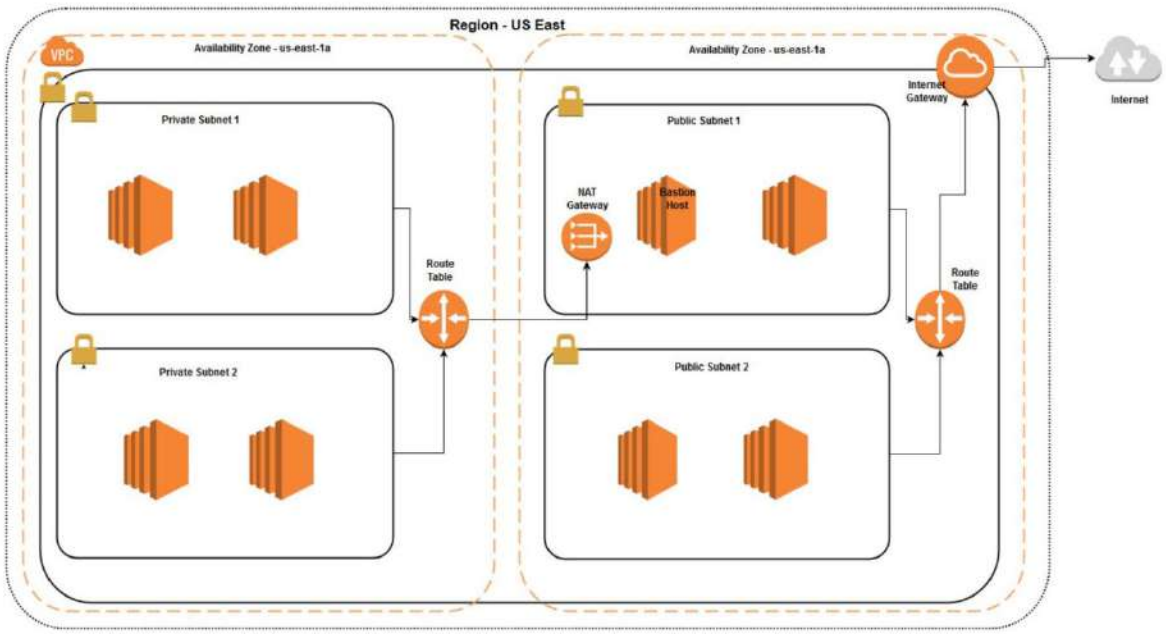
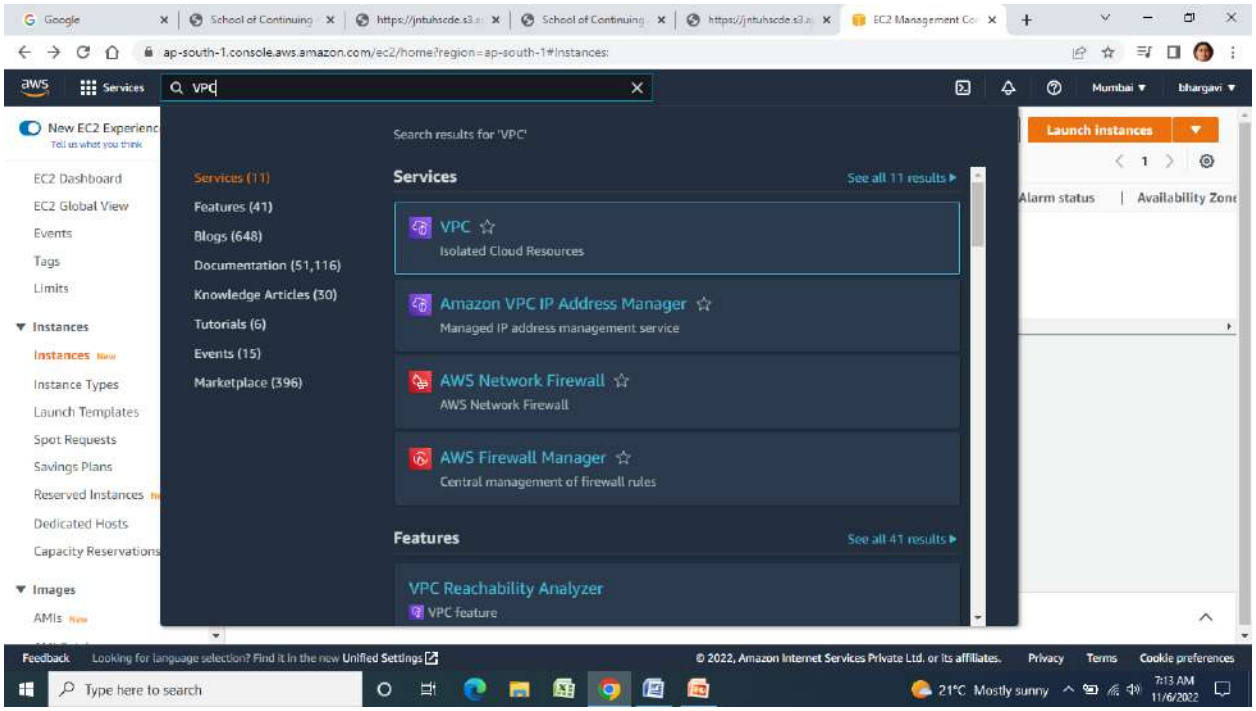
KANDADAI BHARGAVI

Assignment:

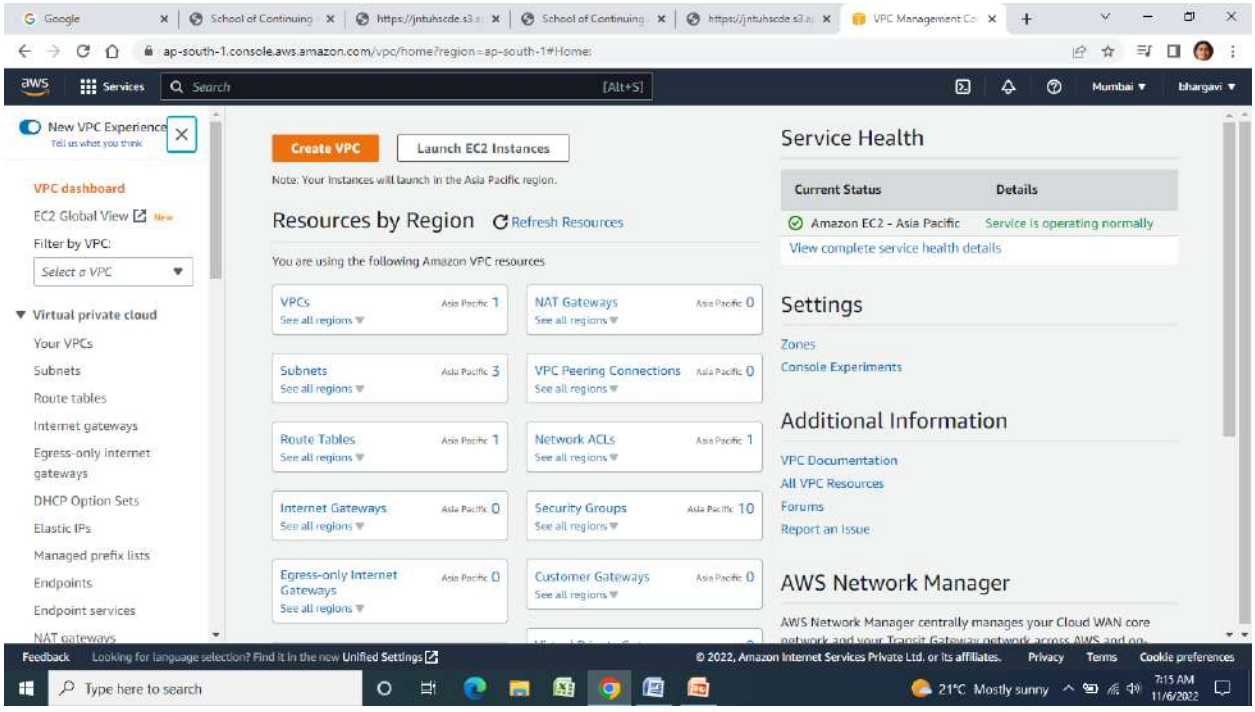
1. VPC with 2 public subnets & 2 private subnet having Internet gateway and NAT gateway



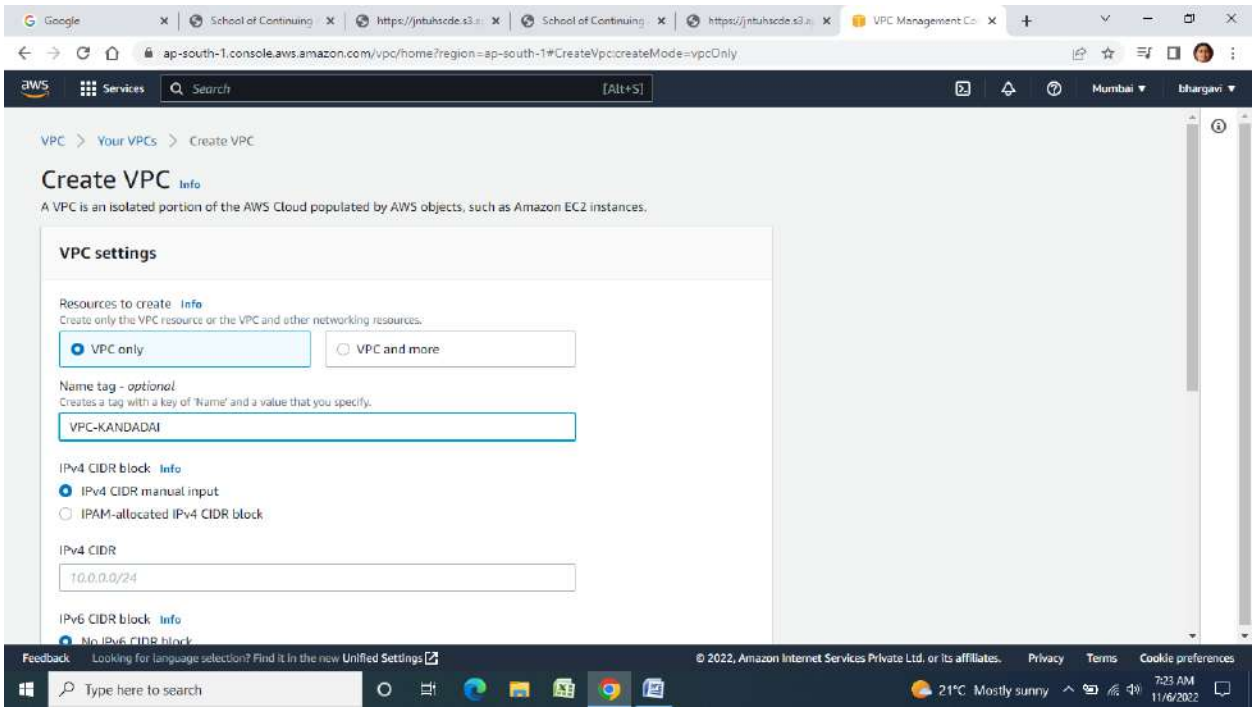
1.Go to VPC option



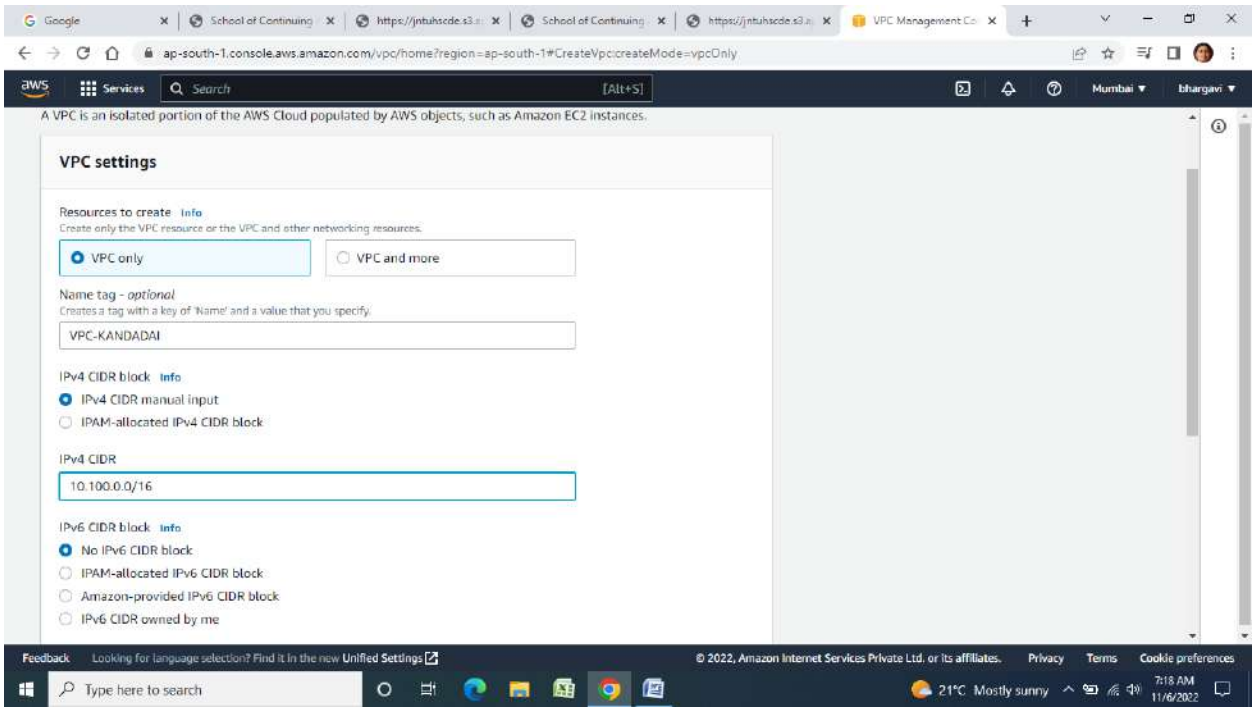
2. Select VPC- and click on create VPC option



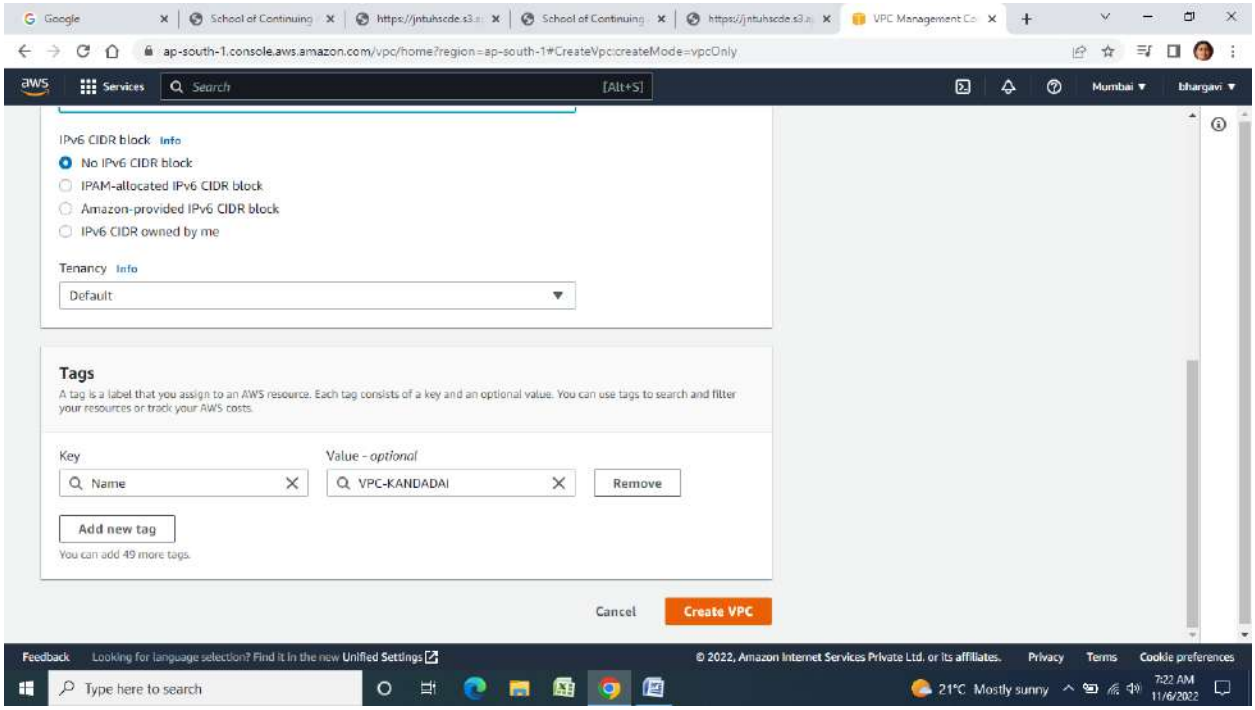
3.Select VPC only



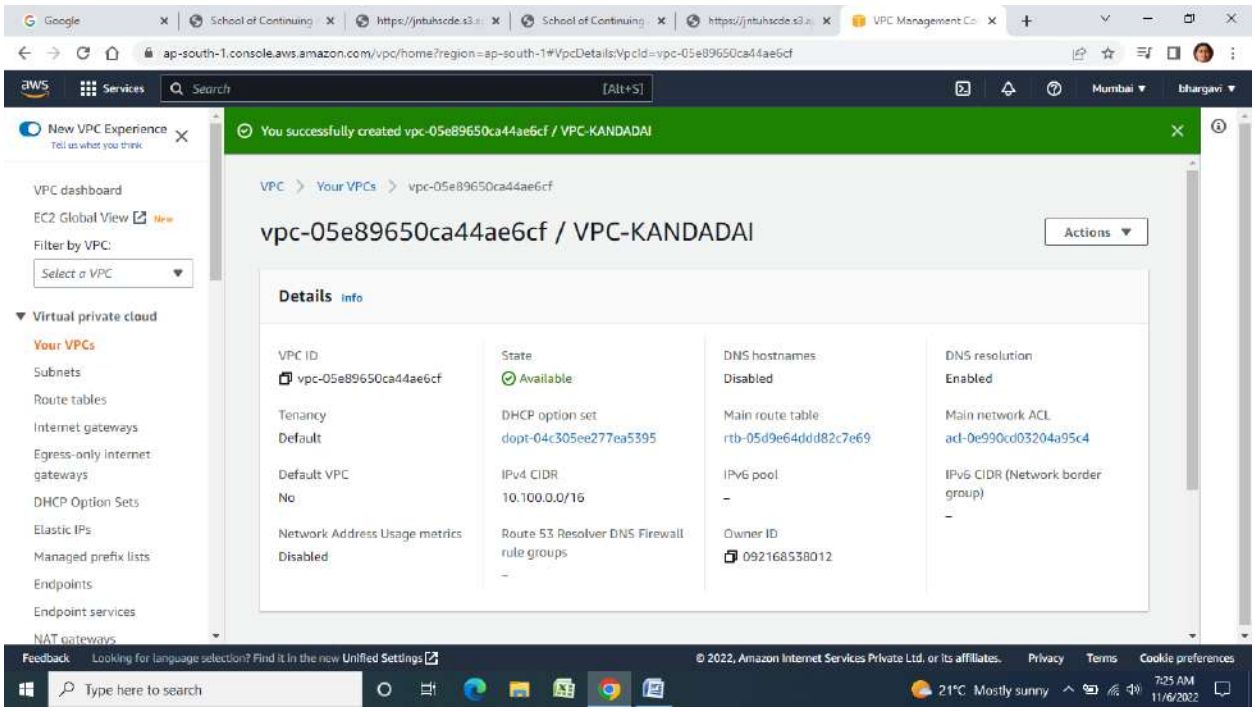
3. Give the IPV4 for VPC-10.100.0.0/16



5.Click on create VPC

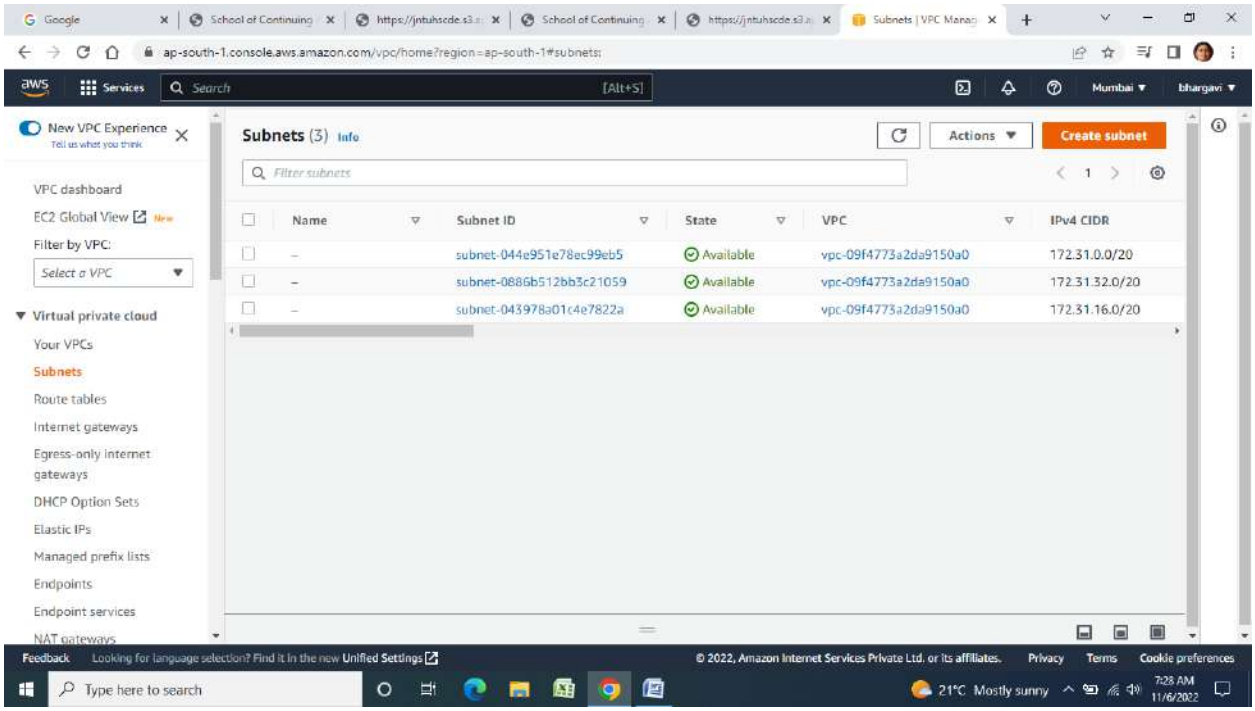


6. VPC created

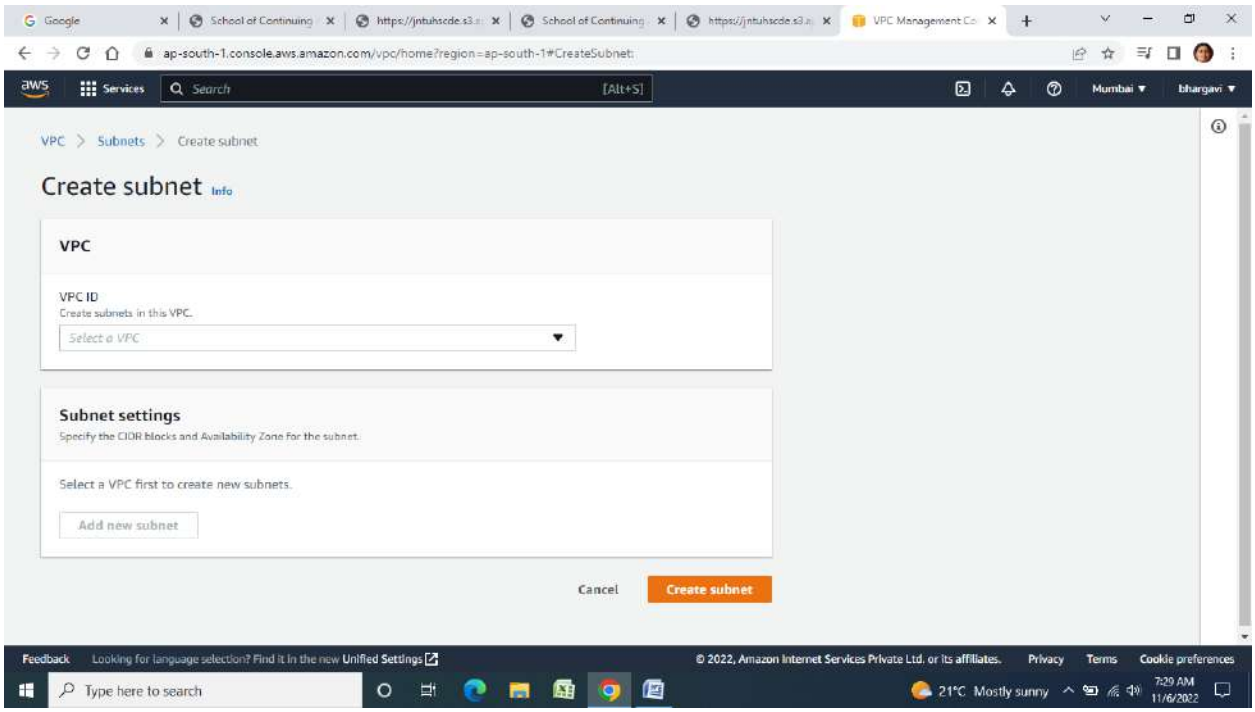


7. Now we need to create Subnets-two public &two private subnets

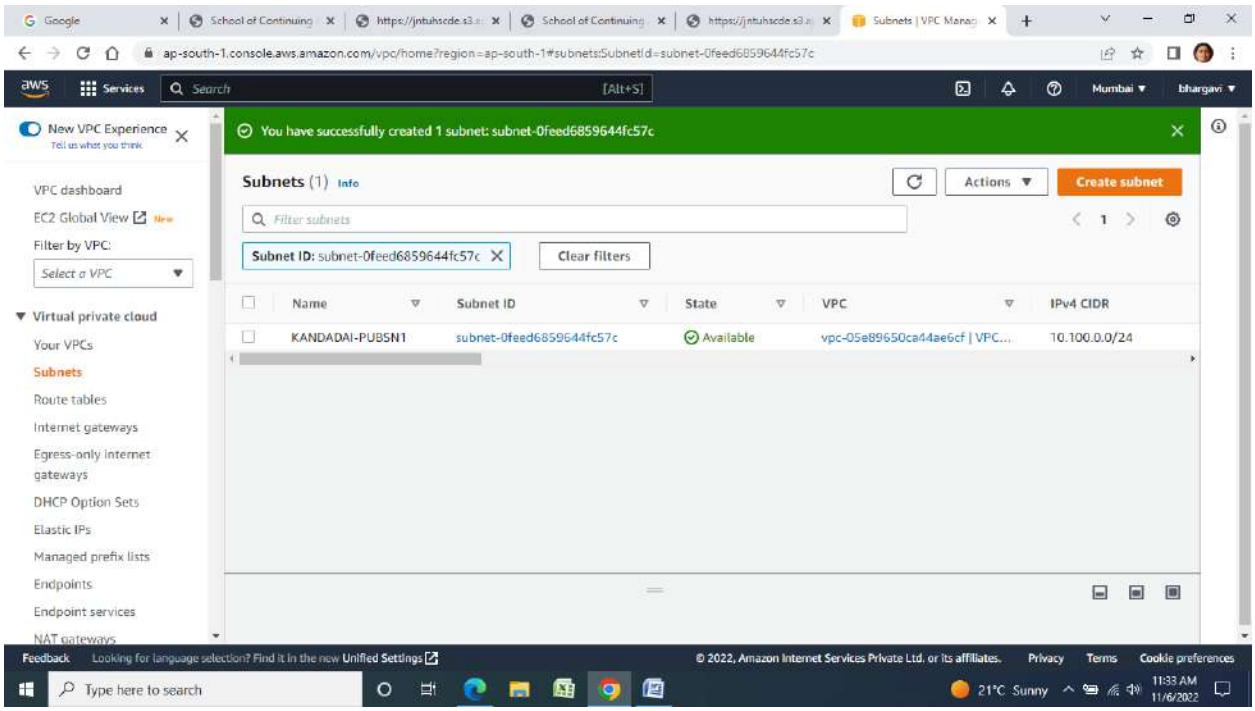
8.Select Subnet option on left pane of the window-click create subnet



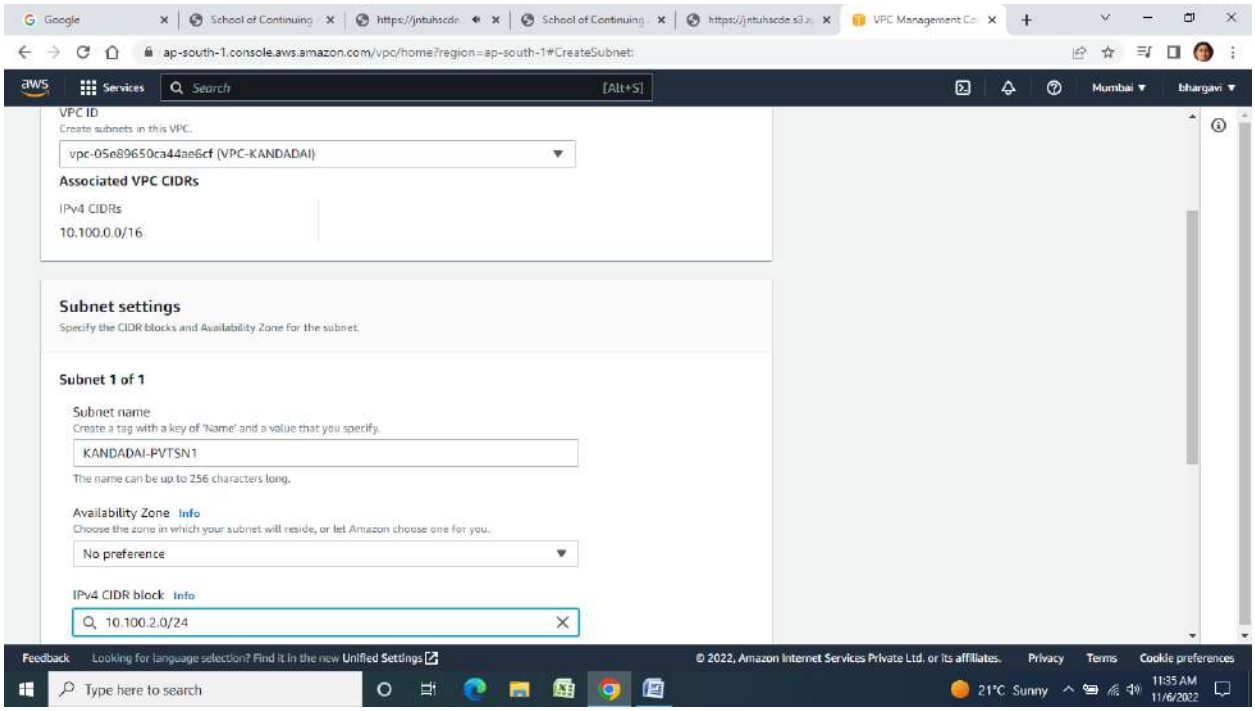
9. Select VPC that is created and fill the remaining details

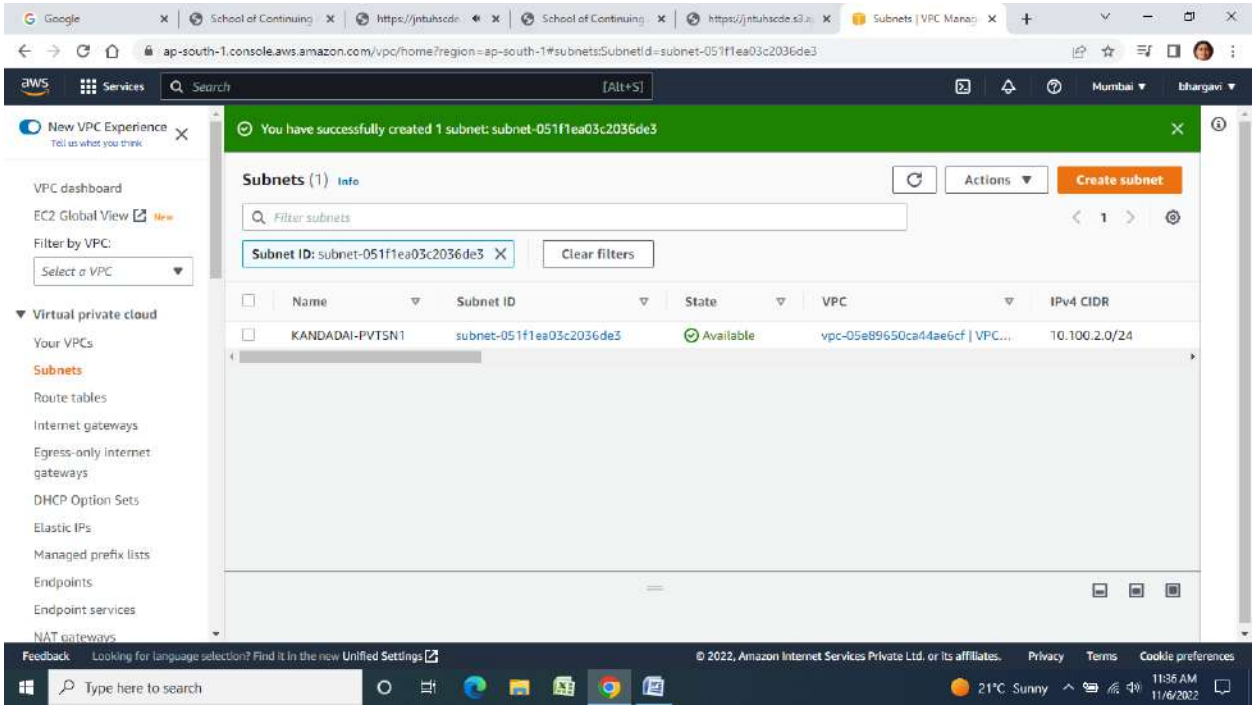


10. Create a subnet with IP-10.100.0.0/16

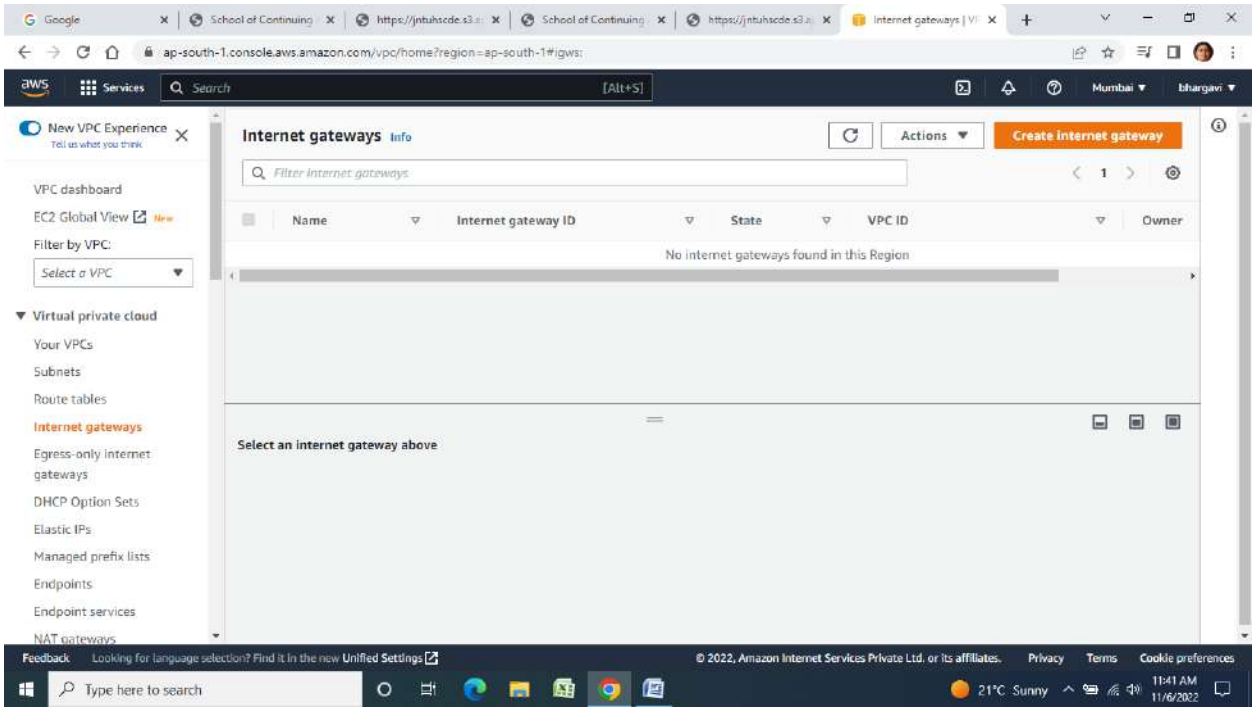


11. Create one private subnet-10.100.2.0/24

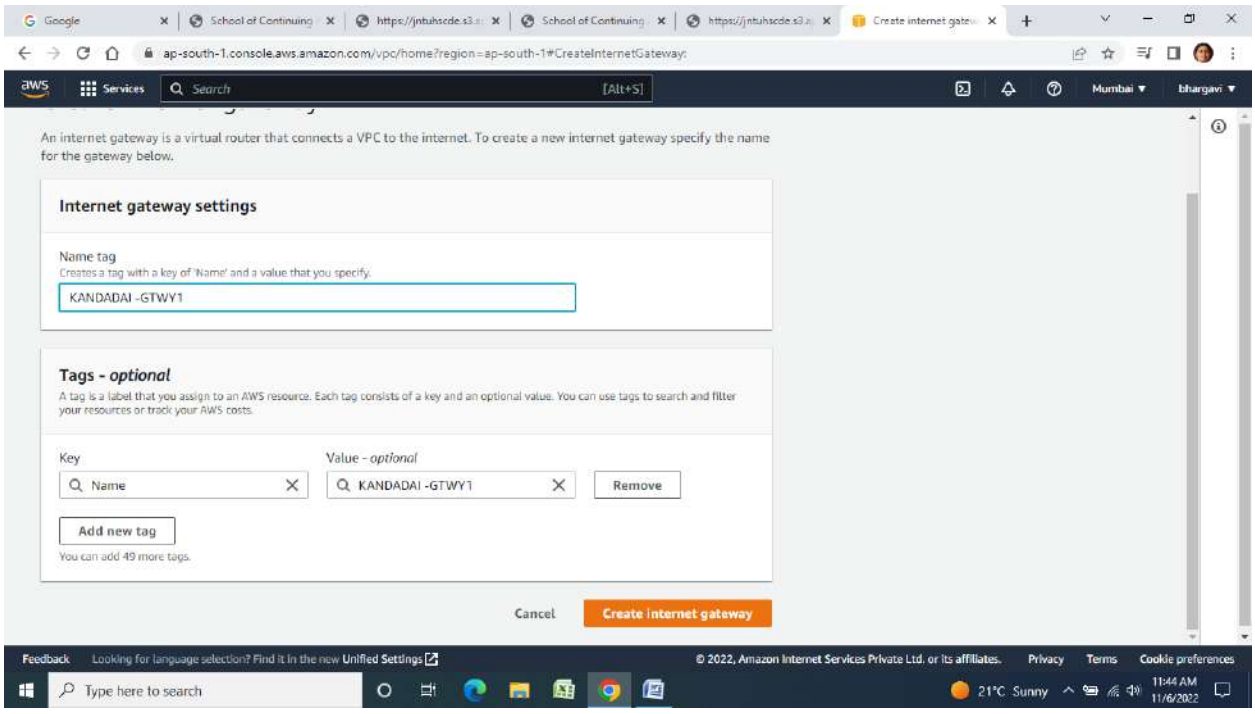




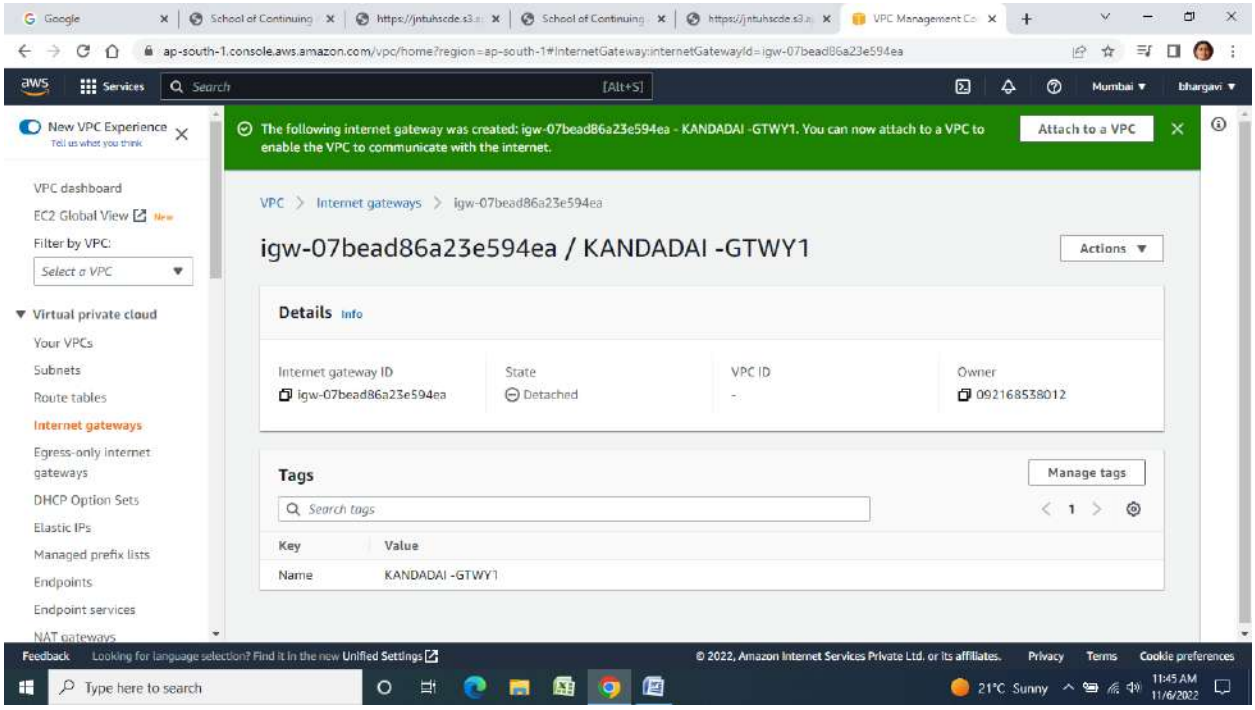
12.Now create internet gateway-selecting an option at the left pane of window



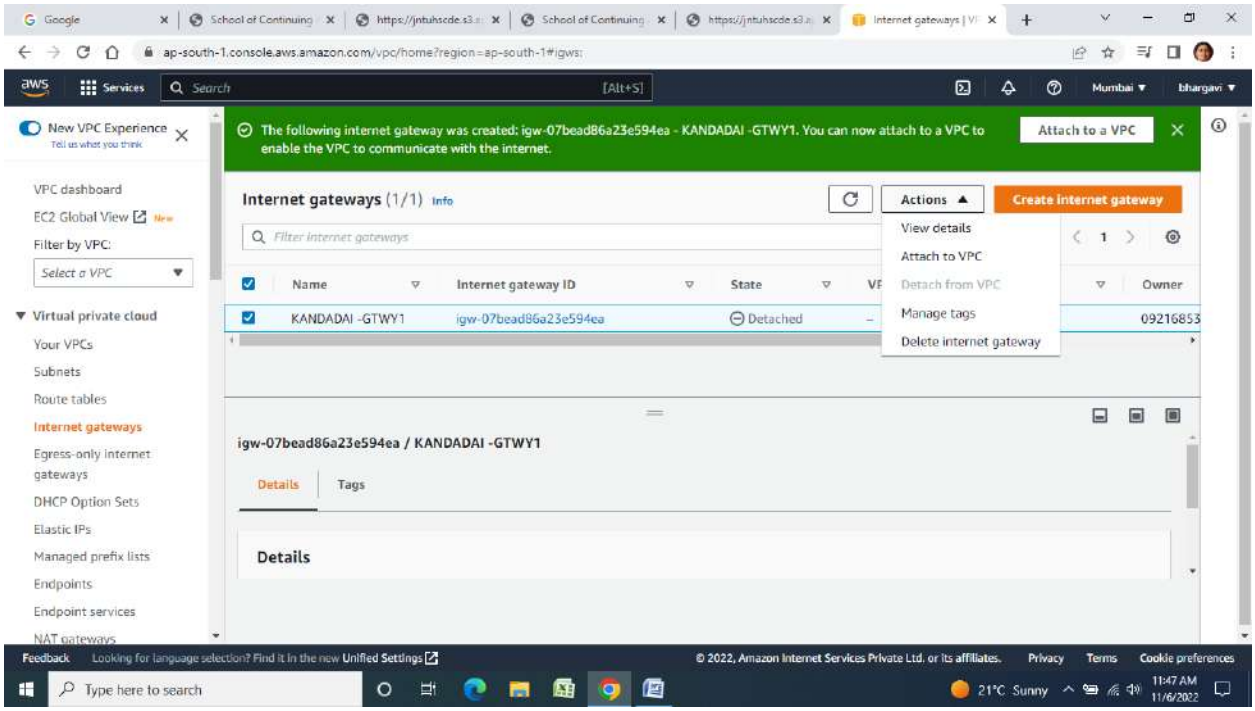
12.Just click on create gateway option and the following screen appears, give name to the gateway and click create gateway option



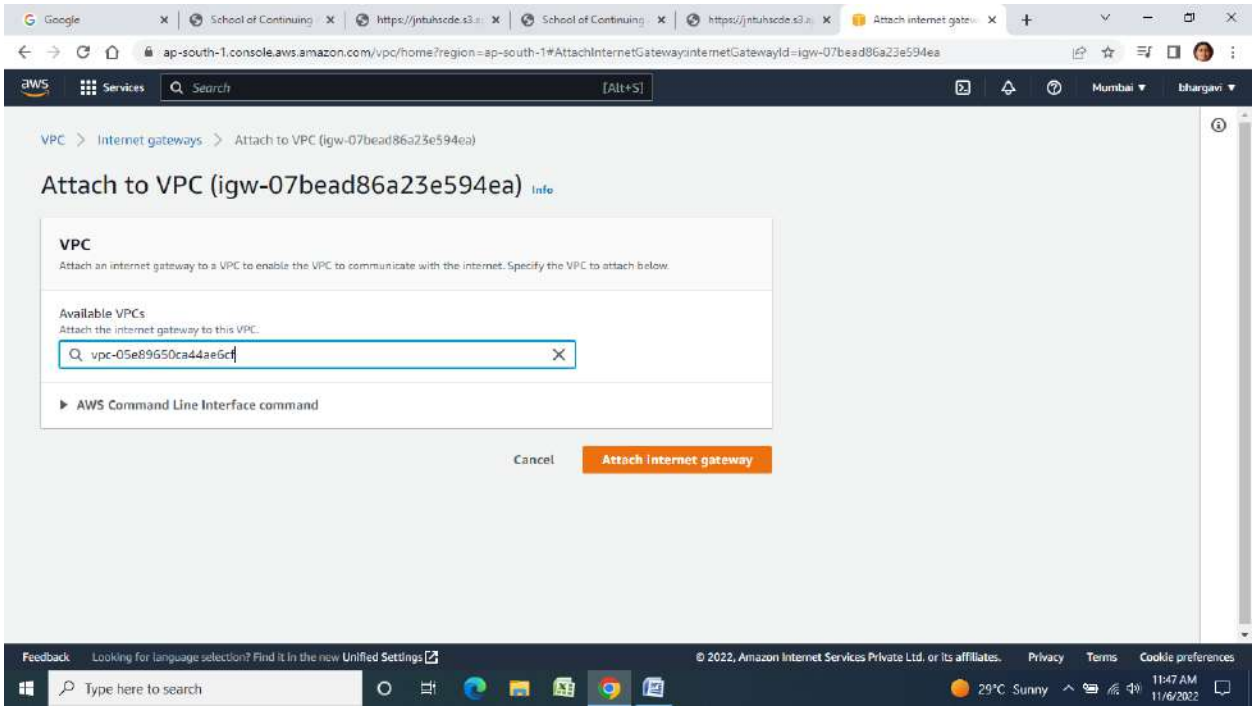
Gateway created



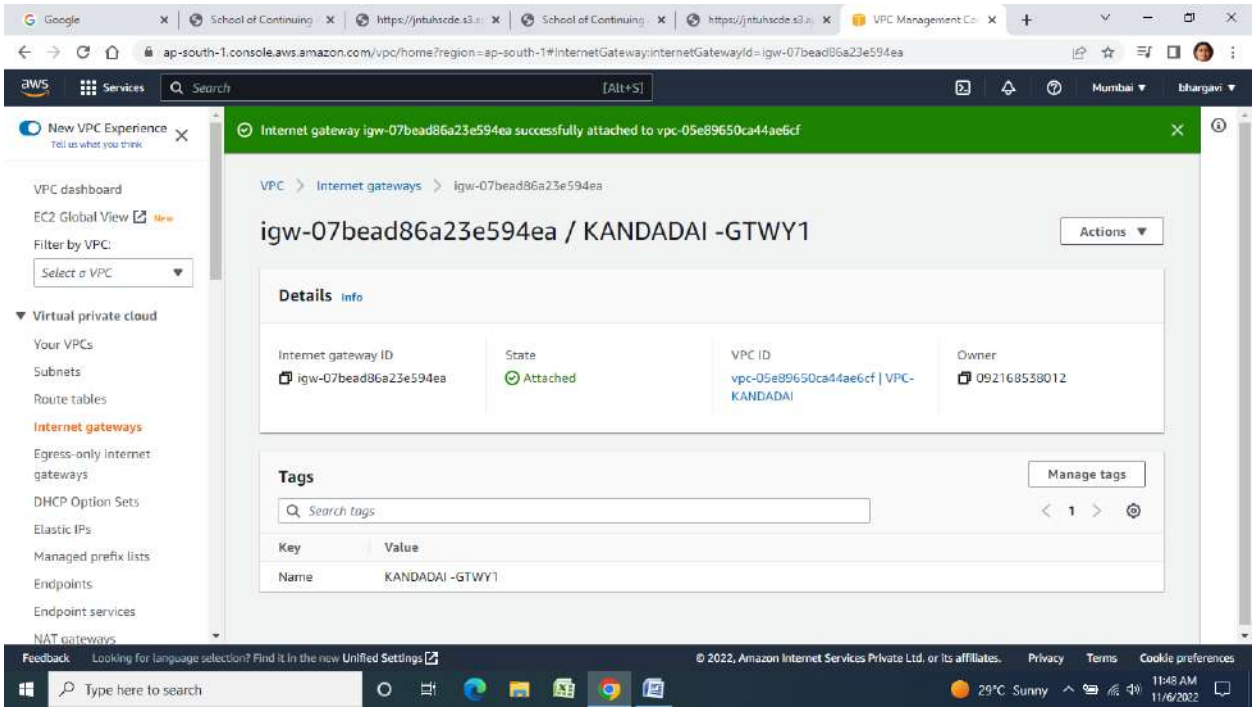
Now select internet gateway option on left window pane and attach it to the vpc, by clicking on actions button at right top of window



Select attach to vpc-and click on attach internet gateway

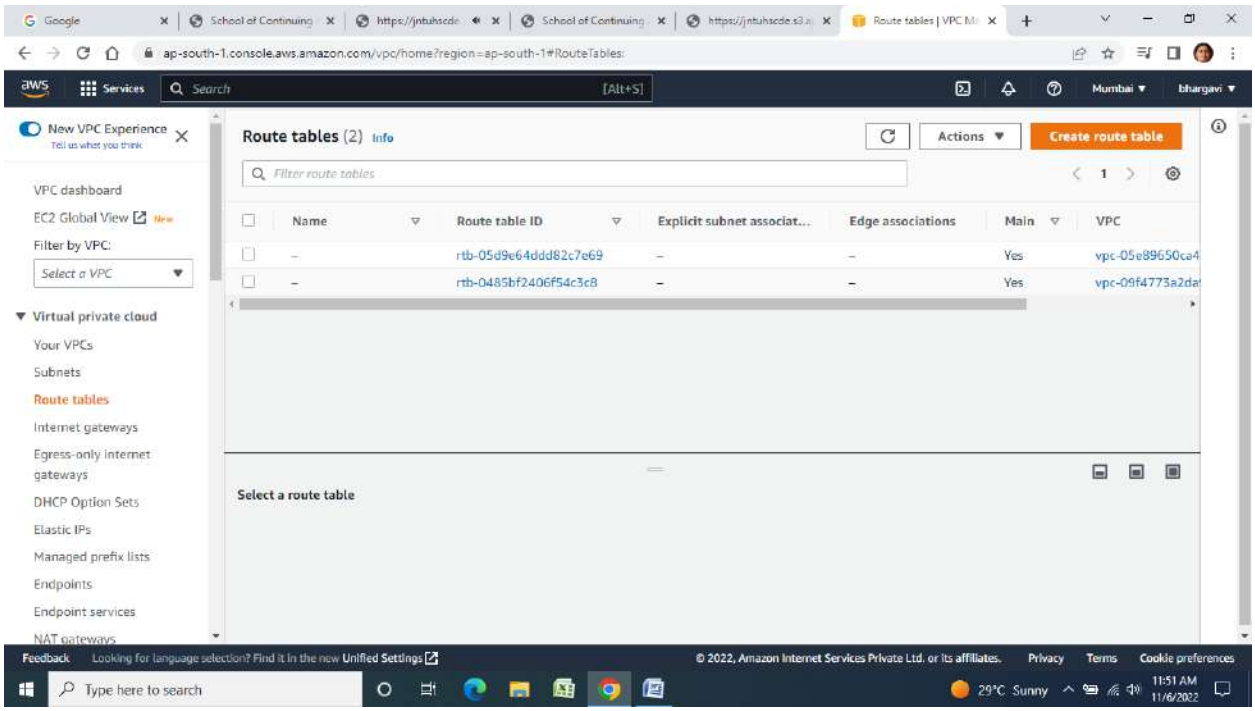


Gateway Attached option will come

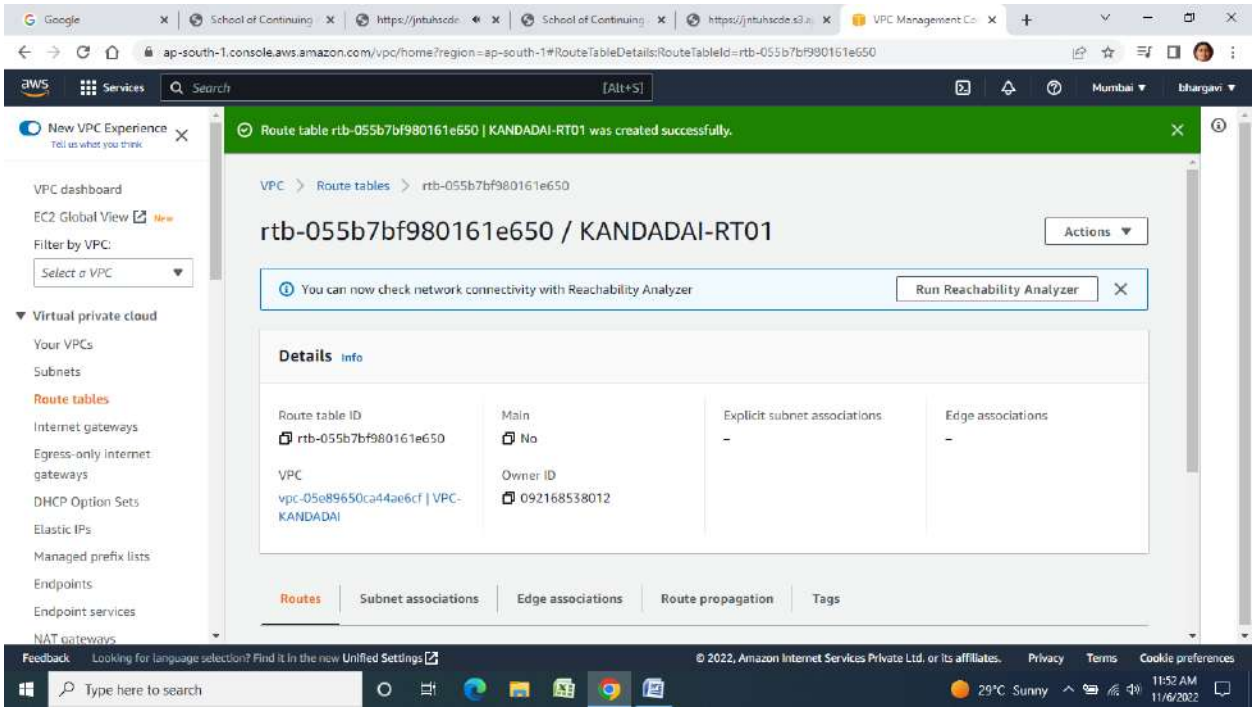


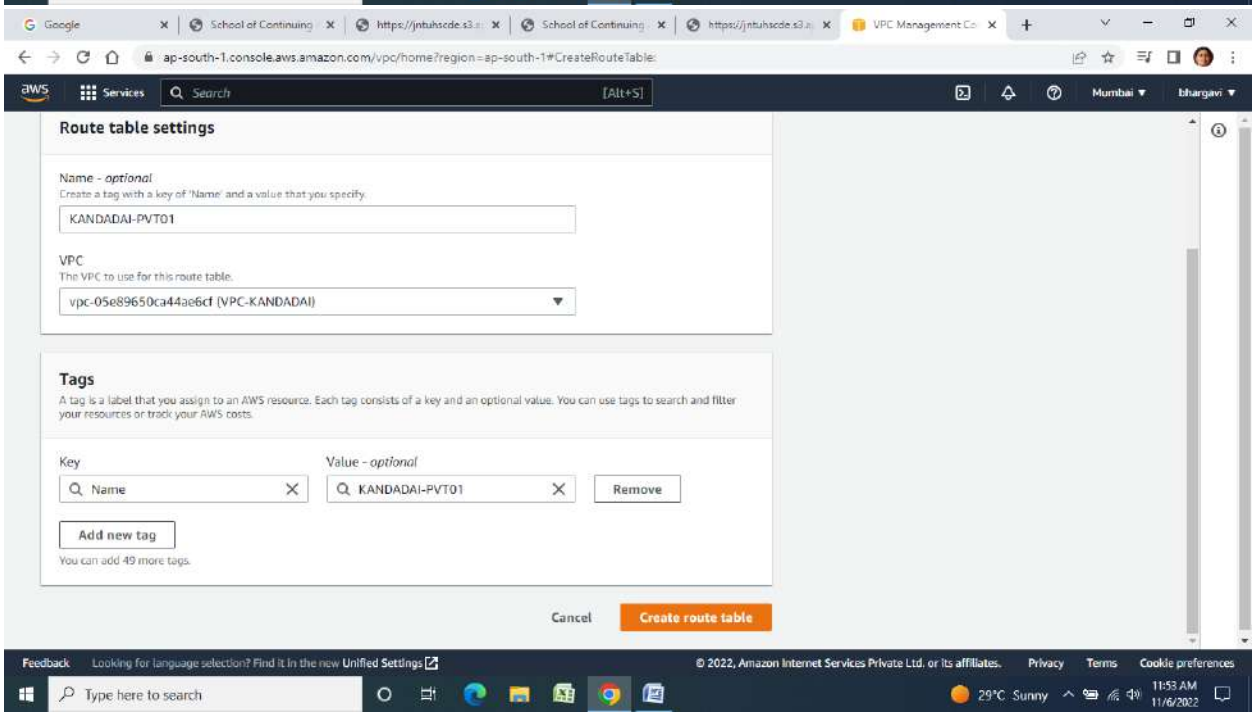
Now create route table –one for public subnet and one for private subnet

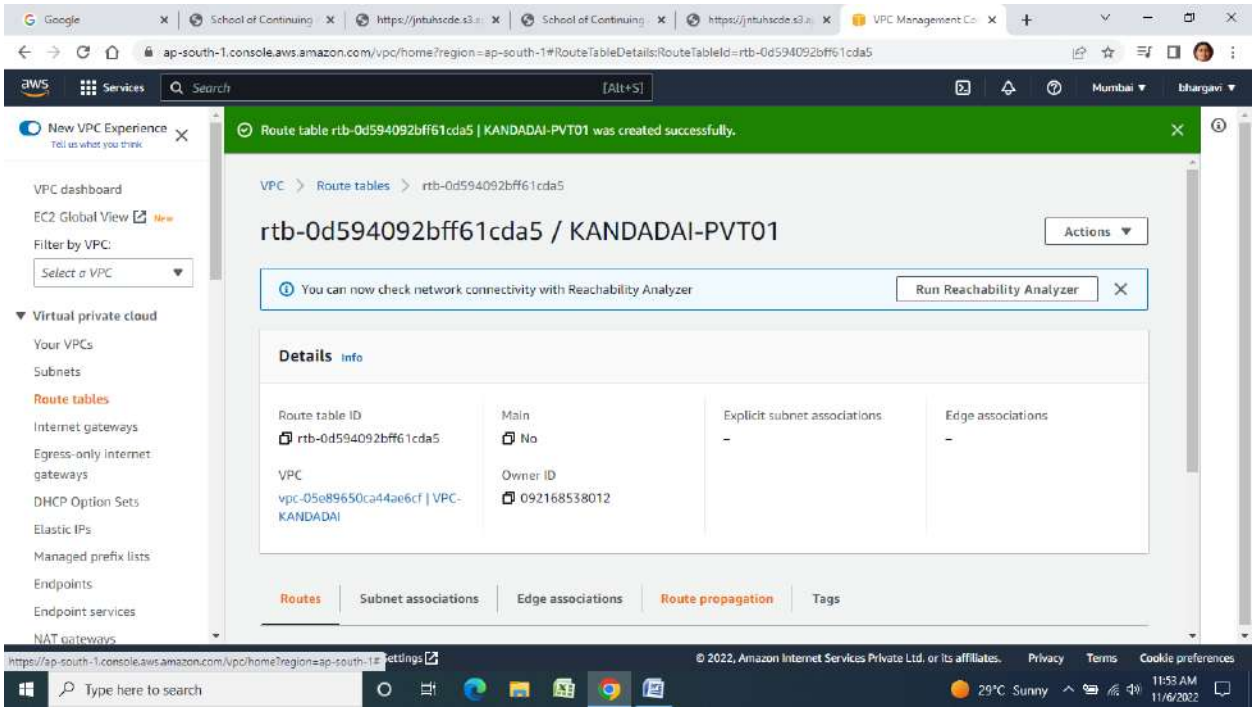
Click on route table option on left pane



Select Create route table option on right side of window

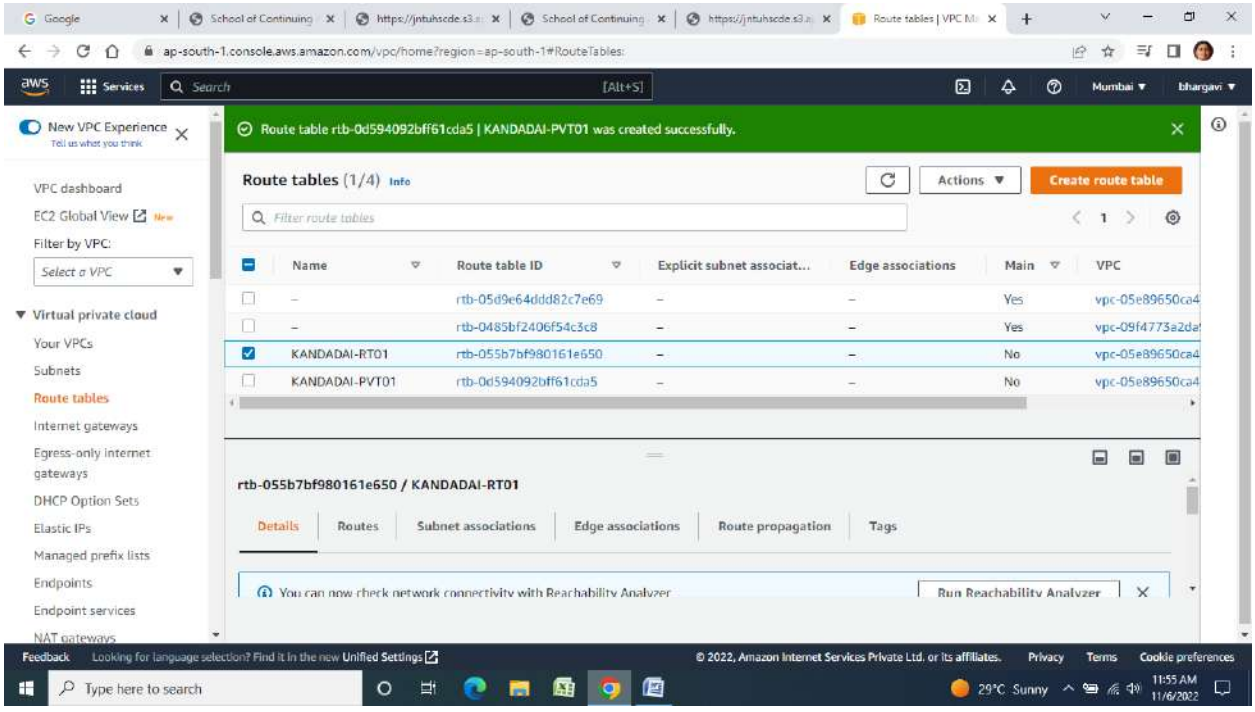

Route table rtb-055b7bf980161e650 | KANDADAI-RT01 was created successfully.
VPC > Route tables > rtb-055b7bf980161e650
rtb-055b7bf980161e650 / KANDADAI-RT01
Actions
You can now check network connectivity with Reachability Analyzer
Run Reachability Analyzer
Details Info
Route table ID
rtb-055b7bf980161e650
Main
No
Explicit subnet associations
-
Edge associations
-
VPC
vpc-05e89650ca44ae6cf | VPC-KANDADAI
Owner ID
092168538012
Routes
Subnet associations
Edge associations
Route propagation
Tags


Route table settings
Name - optional
Create a tag with a key of 'Name' and a value that you specify.
KANDADAI-PVT01
VPC
The VPC to use for this route table.
vpc-05e89650ca44ae6cf (VPC-KANDADAI)
Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.
Key
Value - optional
Name
KANDADAI-PVT01
Remove
Add new tag
You can add 49 more tags.
Cancel
Create route table

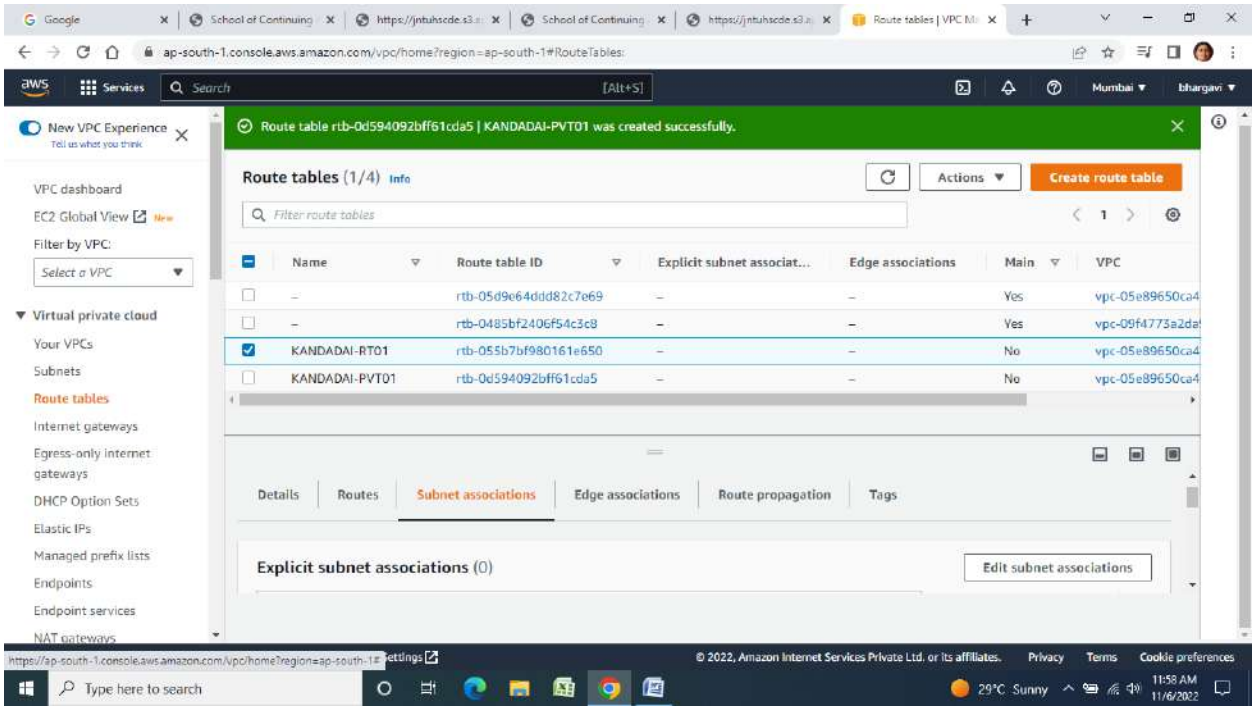


Now associate route table to subnets-Public route table to public subnet and private Route table to private subnets.

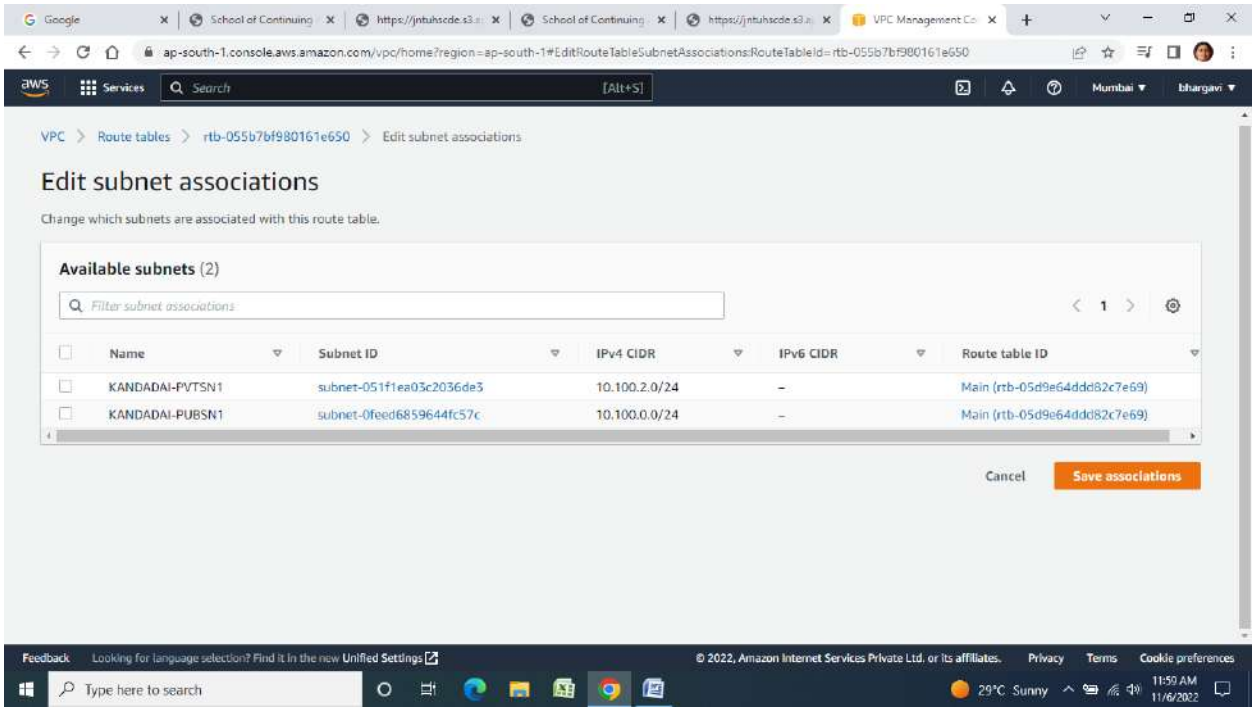
Now go to route table select public route table…



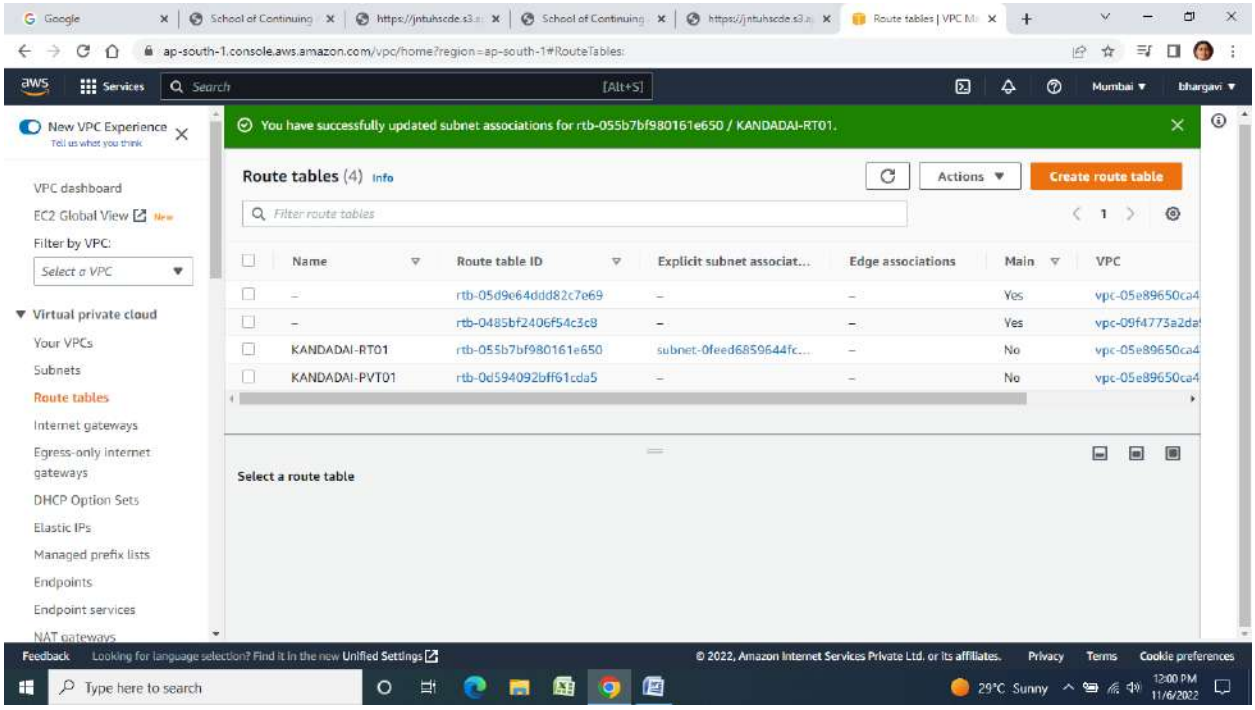
For subnet association-click on Subnet Association option below the route Table



Click on edit subnet association-will get window with all subnets created. Now select the subnets and click on save association

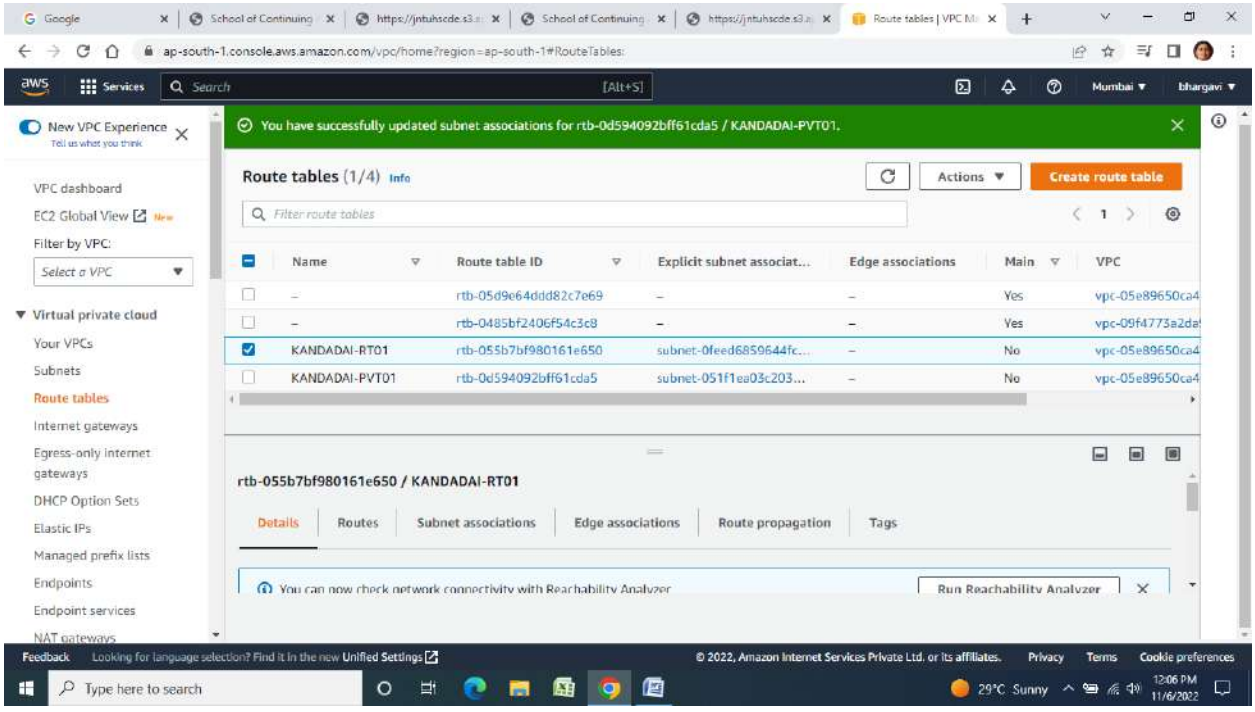


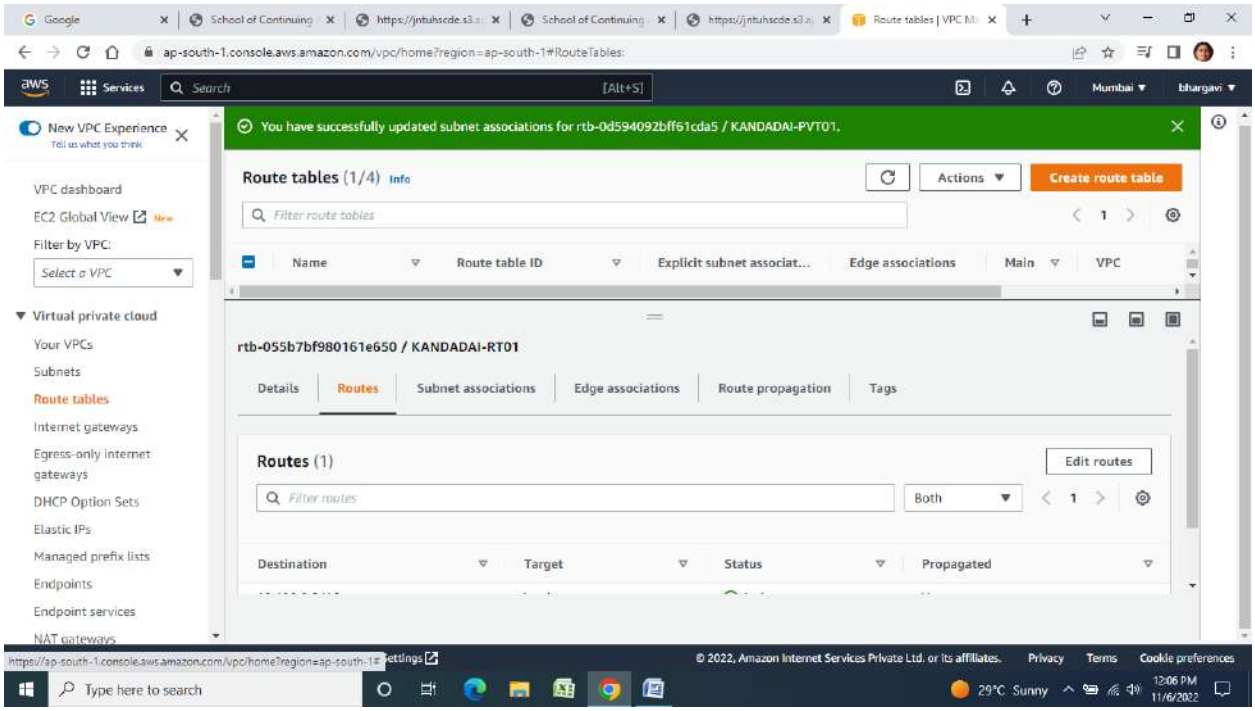
Will get window like below -attach both route tables with subnets.



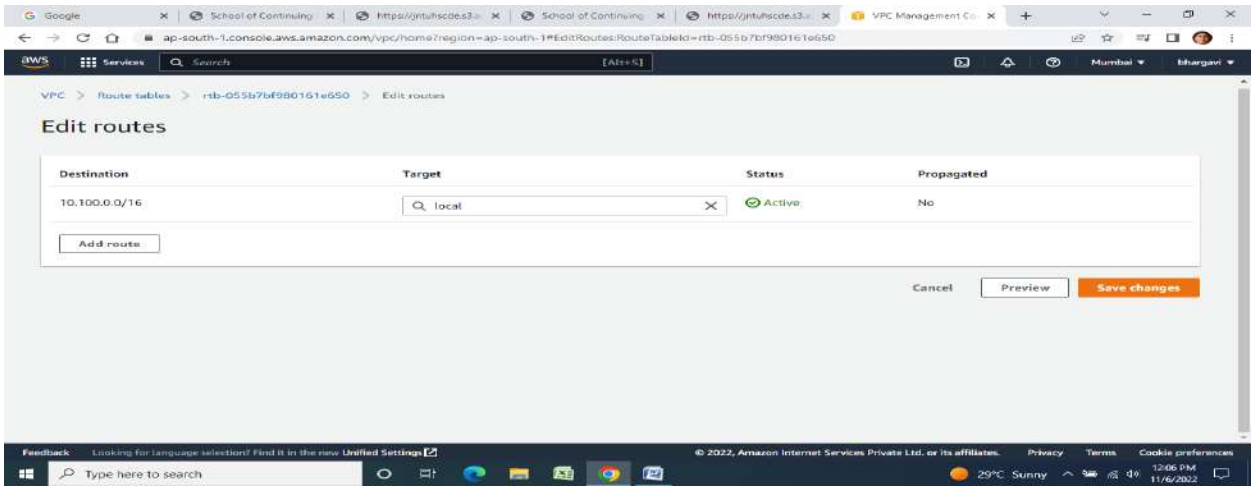
Now attach Public Route table to internet gateway

Select public route table and click on routes option

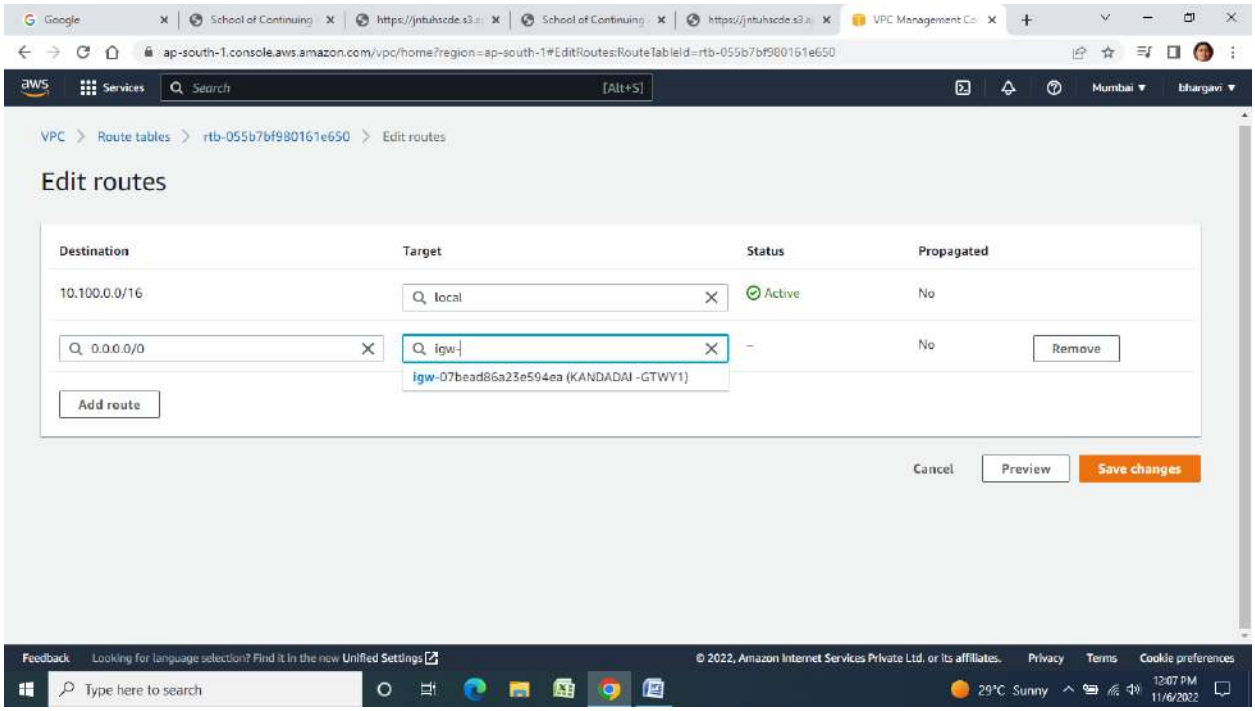


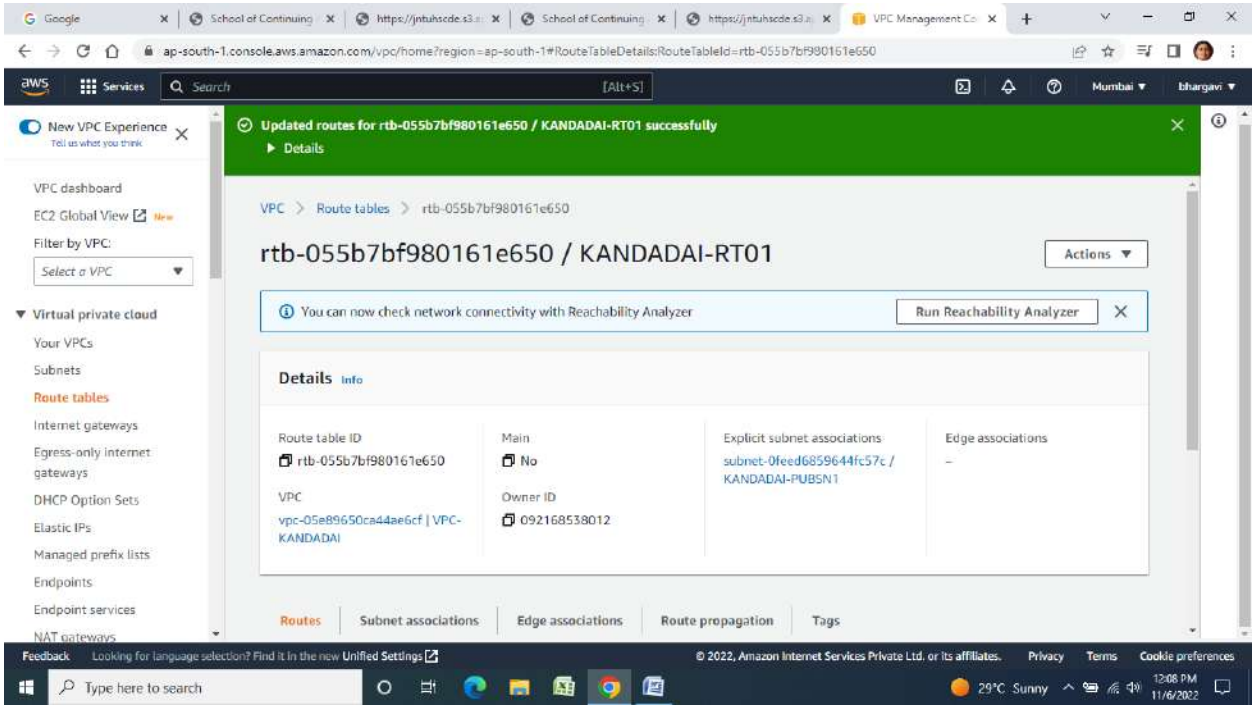


Go to Edit routes option

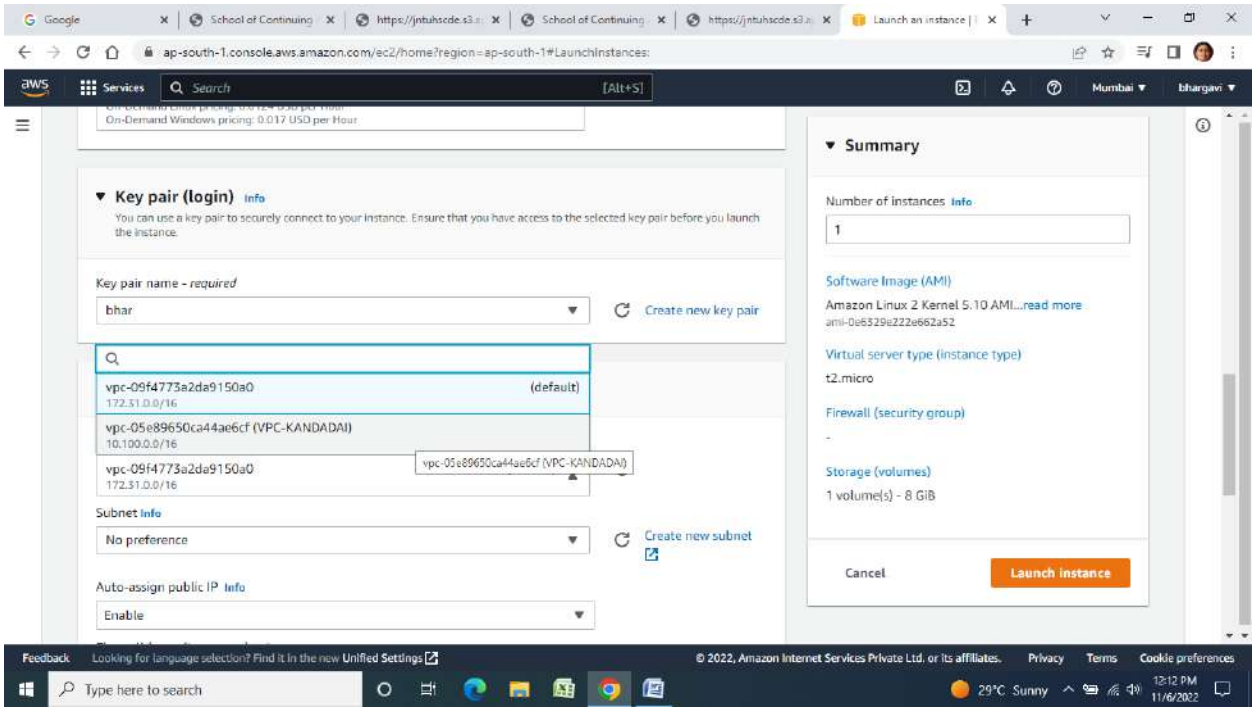


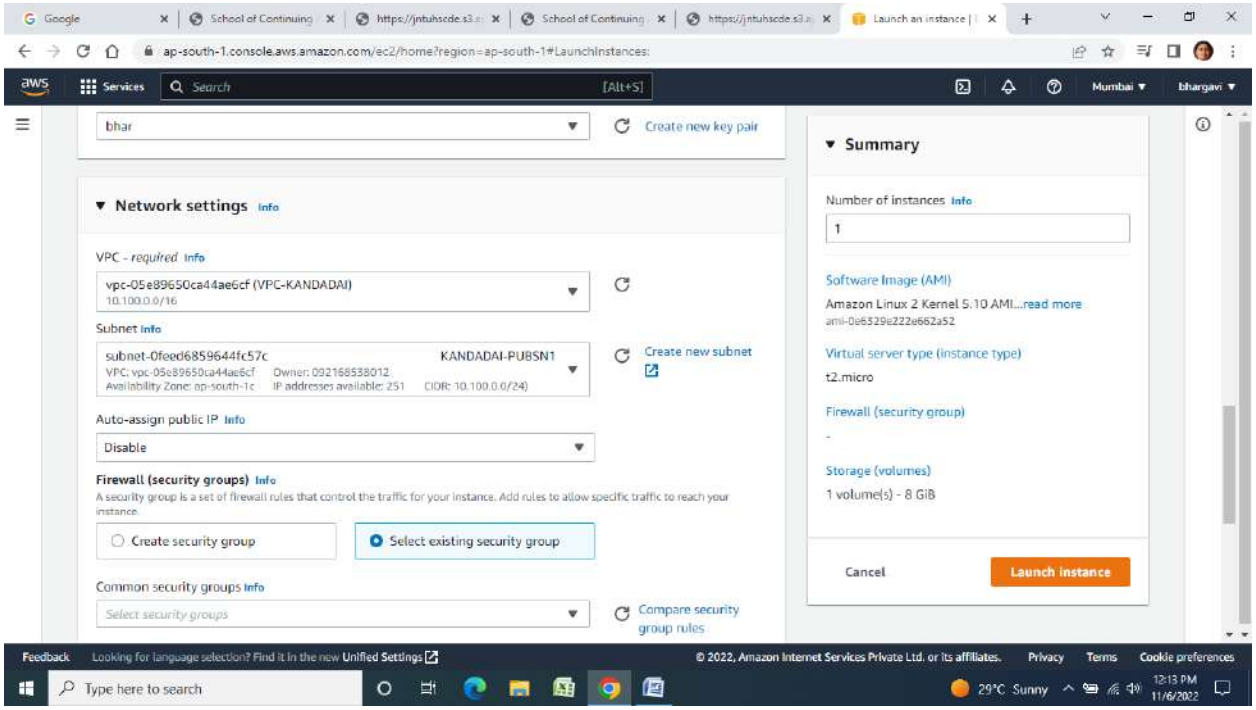
Fill in the details-click add route-0.0.0.0.0/0, add created internet gateway and click save changes



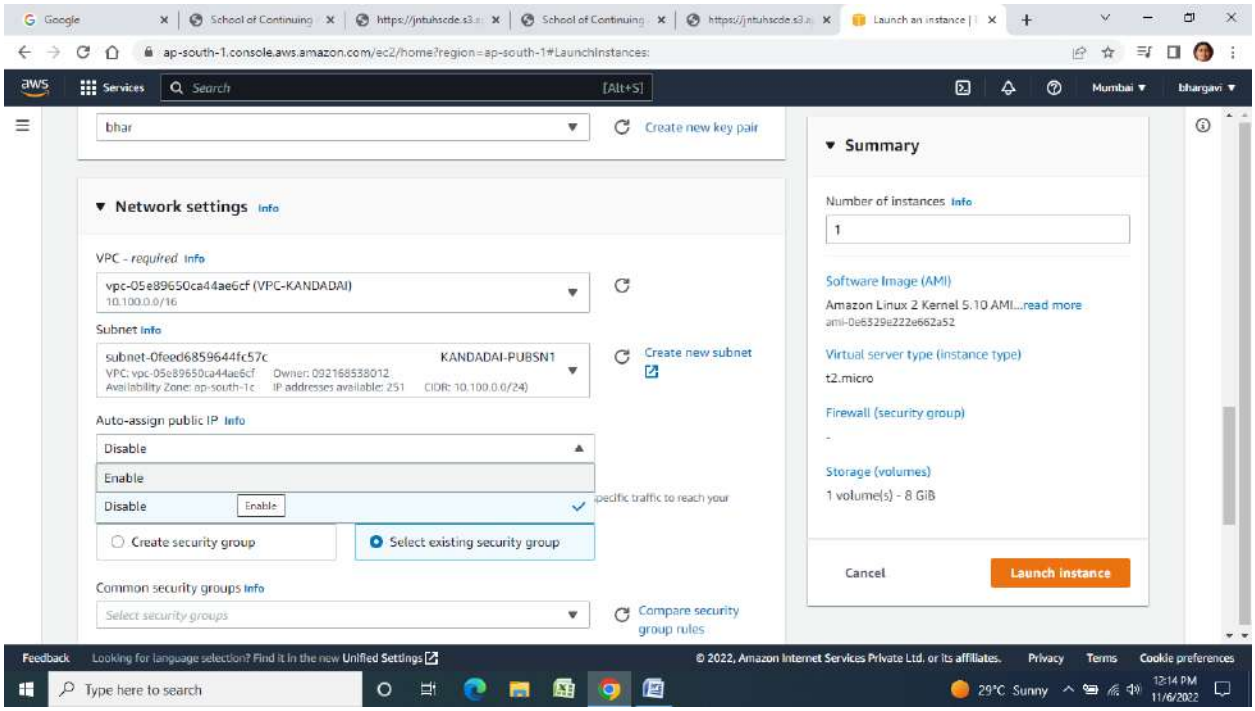


NEXT CREATE AN EC2 MACHINE USING SUBNET OPTION WITH VPC WHAT HAS BEEN CREATED

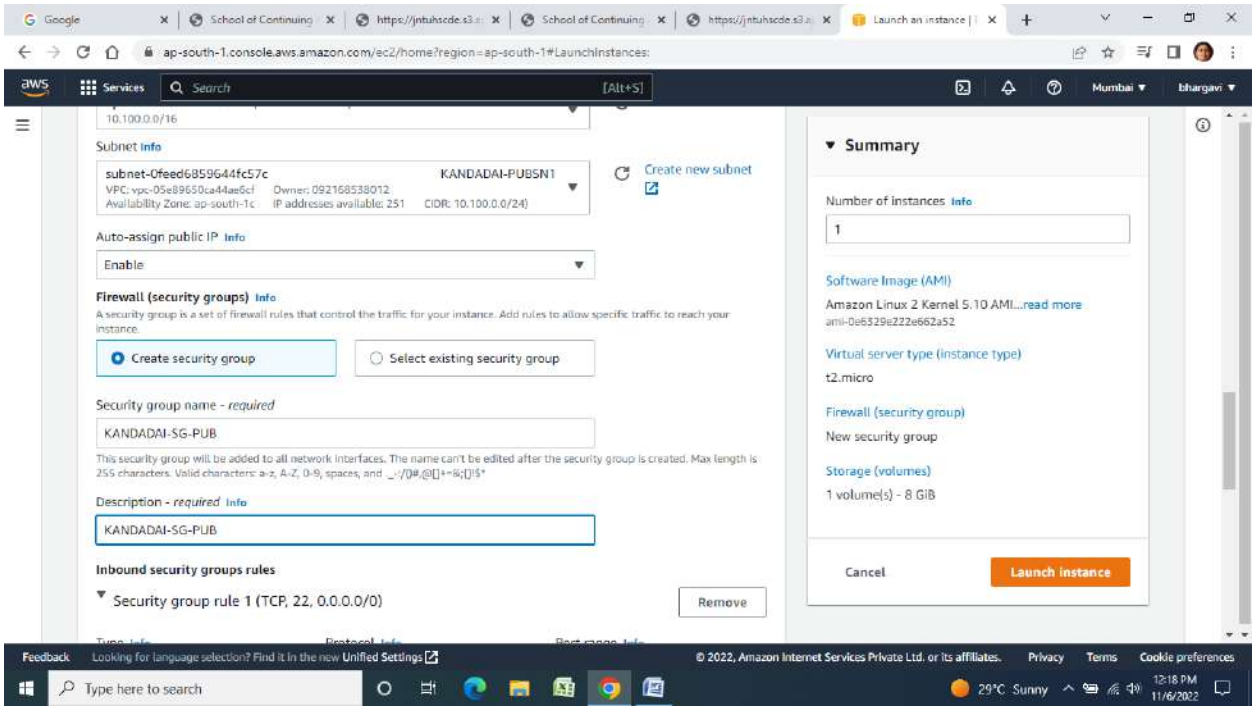




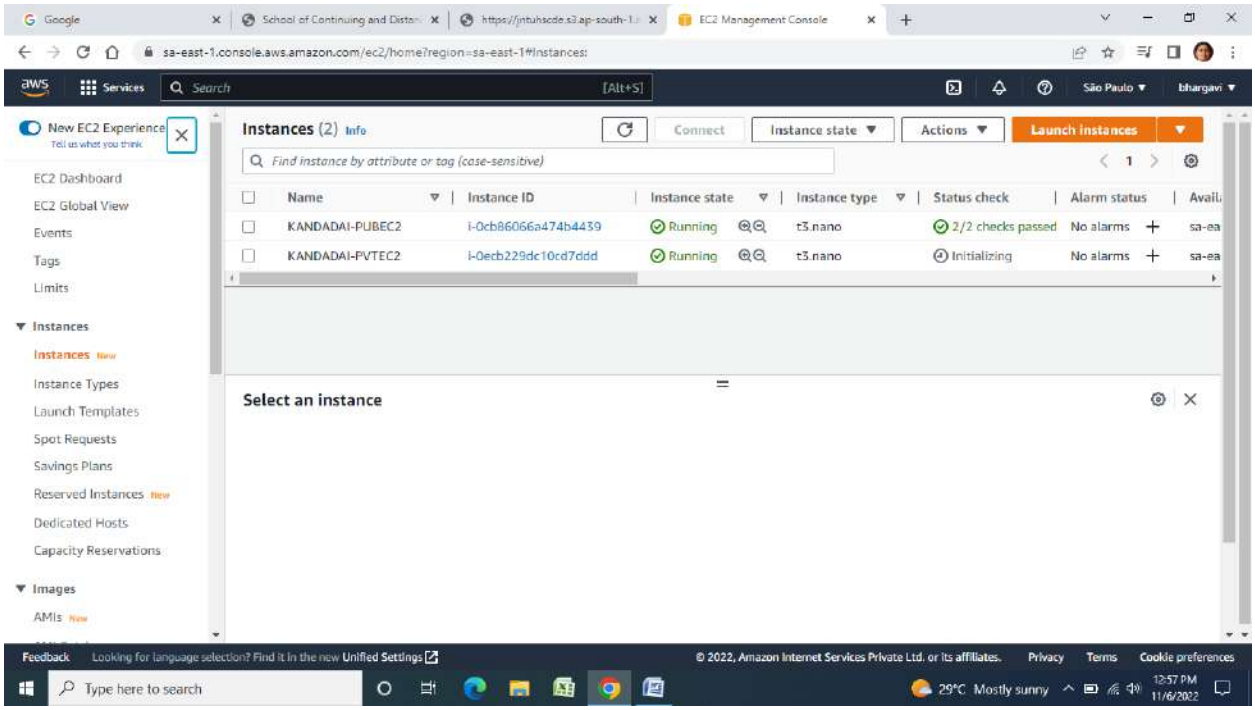
ENABLE PUBLIC IP



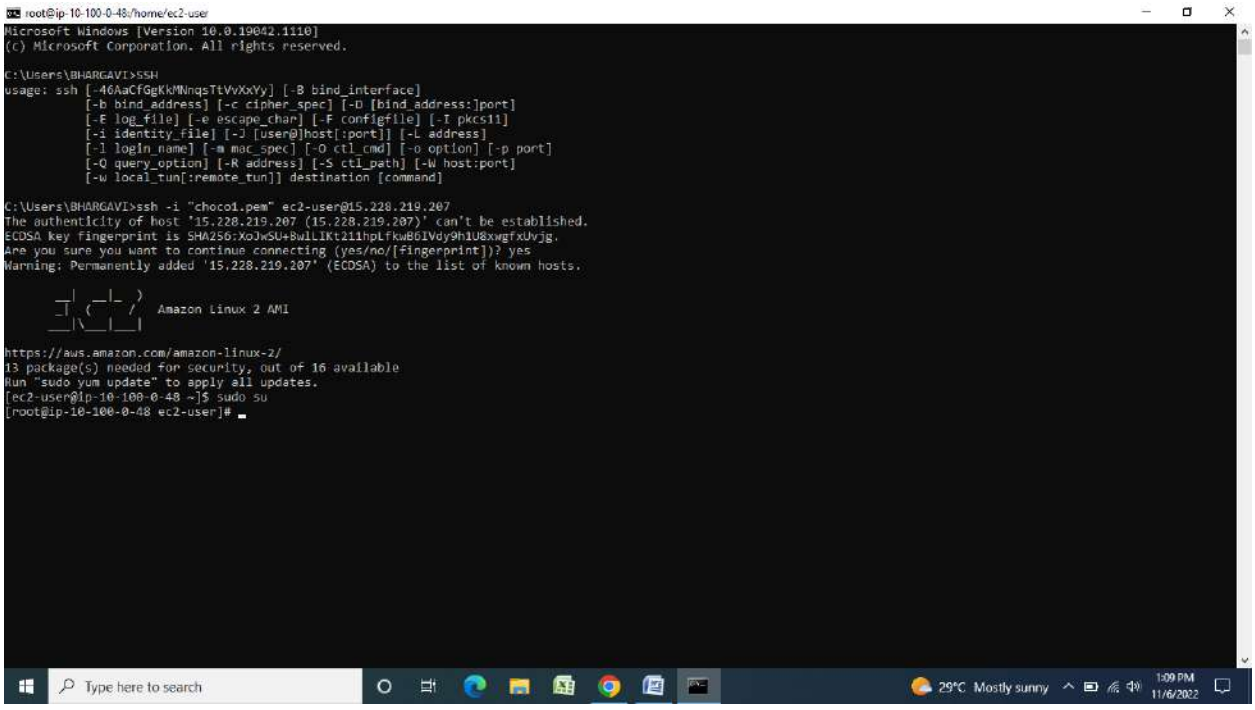
Create Security Group and add inbound rules



CREATE TWO INSTANCES FOR TWO SUBNETS

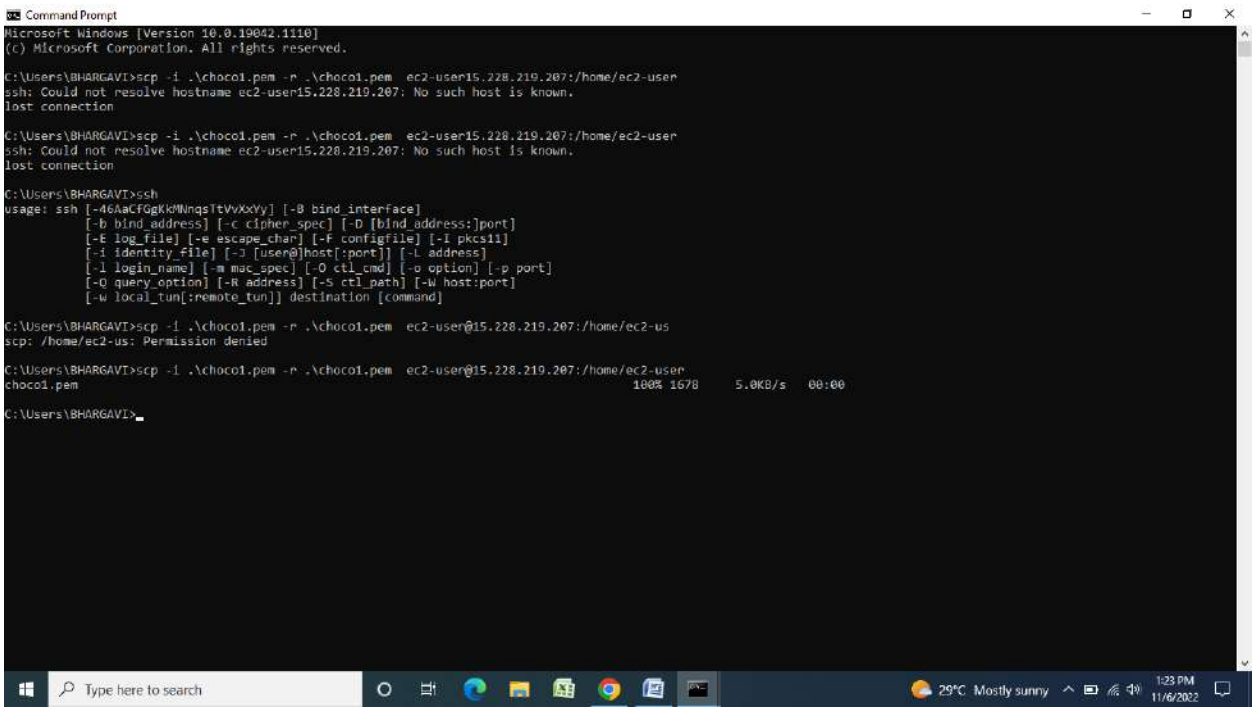


Connect publice EC2 machine

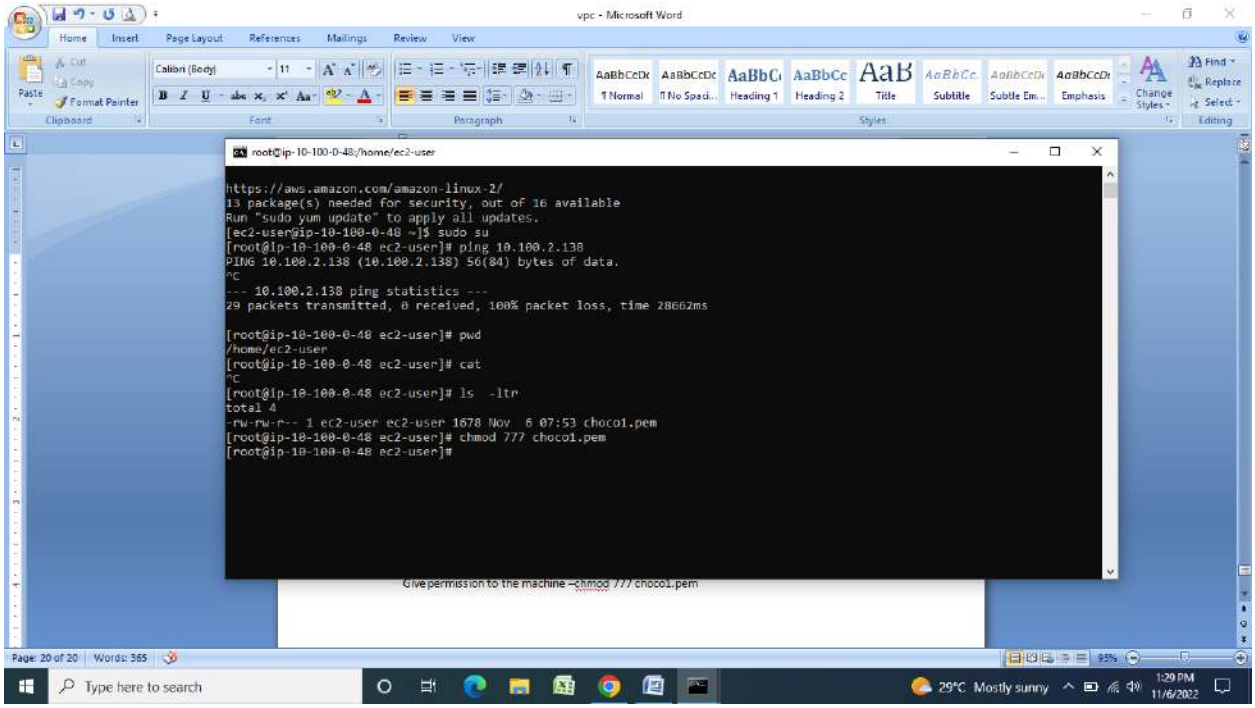


COPY KEY FROM LOCAL MACHINE TO EC2 MACHINE WITH EC2 PUBLIC IP ADDRESS

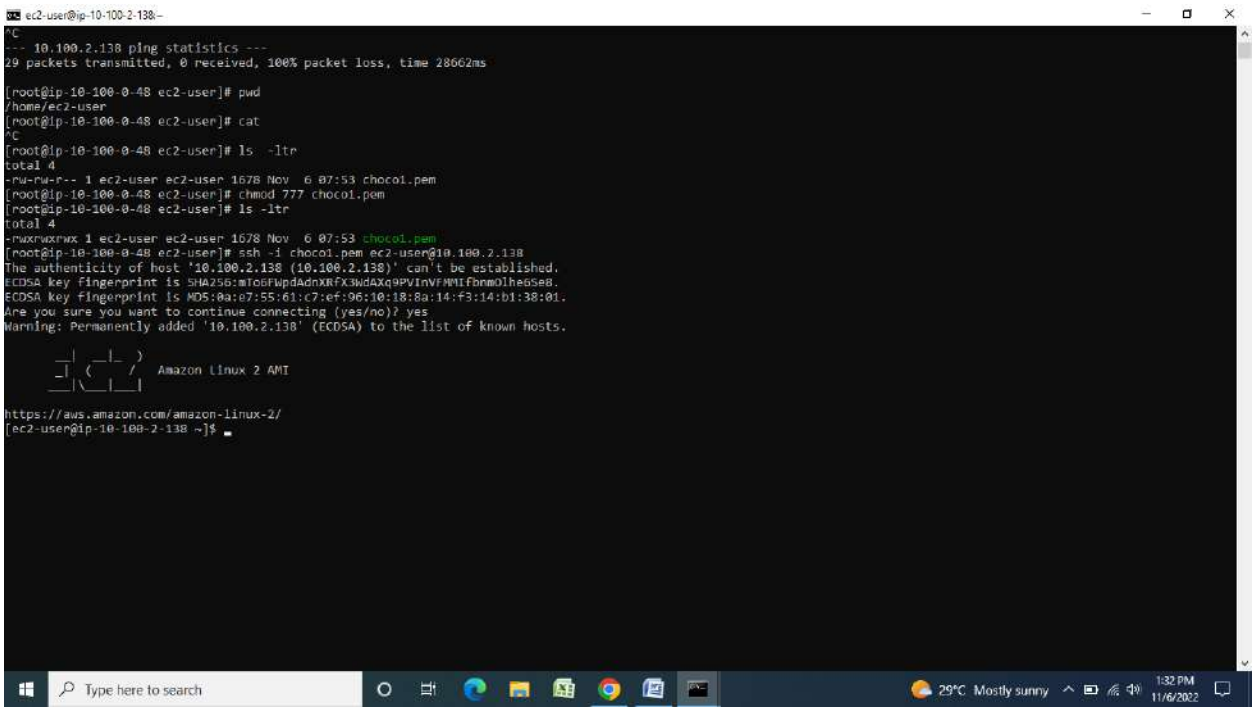
Scp –I .\choco1.pem -r .\choco1.pem ec2-user@15.228.219.207 :/home/ec2-user



Give permission to the machine –
chmod 777 choco1.pem



Now connect your private subnet machine with private ip address to the machine
Cmd is-ssh –I choco1.pem ec2-user@private ip address of private machine


ec2-user@ip-10-100-2-138:~
^C
--- 10.100.2.138 ping statistics ---
29 packets transmitted, 0 received, 100% packet loss, time 28662ms
[root@ip-10-100-0-48 ec2-user]# pwd
/home/ec2-user
[root@ip-10-100-0-48 ec2-user]# cat
^C
[root@ip-10-100-0-48 ec2-user]# ls -ltr
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1678 Nov 6 07:53 choco1.pem
[root@ip-10-100-0-48 ec2-user]# chmod 777 choco1.pem
[root@ip-10-100-0-48 ec2-user]# ls -ltr
total 4
-rwxrwxrwx 1 ec2-user ec2-user 1678 Nov 6 07:53 choco1.pem
[root@ip-10-100-0-48 ec2-user]# ssh -i choco1.pem ec2-user@10.100.2.138
The authenticity of host '10.100.2.138 (10.100.2.138)' can't be established.
ECDSA key fingerprint is SHA256:mTo6FWpdAdnXRfX3WdAXq9PVInVFMMIfbnmOlhe6SeB.
ECDSA key fingerprint is MD5:0a:e7:55:61:c7:ef:96:10:18:8a:14:f3:14:b1:38:01.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.100.2.138' (ECDSA) to the list of known hosts.
Amazon Linux 2 AMI
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-100-2-138 ~]$
Type here to search
29°C Mostly sunny
1:32 PM
11/6/2022