

Q1

```
In [5]: class Restaurentcheck:
def __init__(self,cheque, salestax, subtotal, tablenumber):
    self. Checknumber=cheque
    self.Salestaxpercent=salestax
    self.Subtotal=subtotal
    self.Tablenumber=tablenumber
    self.total=(salestax*subtotal*0.01+subtotal)
def cheque(self):
    return(self.Checknumber)
def salestax(self):
    return (self.Salestaxpercent)
def subtotal (self):
    return self.Subtotal

def tablenumber(self):
    return self.Tablenumber

def Total (self) :
    return (self.total)
def print_checque(self):
    print('the cheque number is',self.Checknumber)
    print('subtotal',self.Subtotal)
    print('total',self.total)
    print('server',"Sonic the Hedgehog")
    print('tablenumber',self.Tablenumber)
```

```
rk=Restaurentcheck(443,6,23.14,17)
r1=rk.cheque()
r2=rk.salestax()
r3=rk.subtotal()
r4=rk.Total()
r5=rk.tablenumber()
r6=rk.print_checque()
```

```
print(r1,r2,r3,r4,r5,r6)
```

```
the cheque number is 443
subtotal 23.14
total 24.5284
server Sonic the Hedgehog
tablenumber 17
443 6 23.14 24.5284 17 None
```

Q2

```
In [6]: import re
n=input('Enter Mobile number :')
r=re.fullmatch('[6-9][0-9]{9}',n)
if r!=None:
    print('Valid Number')
else:
    print('Not a valid number')
```

```
Enter Mobile number :7036830939
Valid Number
```

```
In [8]: import re
name=input('enter name')
if re.search("[A-Z]", name):
    print(name,'is name')
else:
    print(name,"not name")
```

```
enter nameMahesh babu
Mahesh babu is name
```

In []:

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In [10]: import re # Importing re module
n=input('Enter Mobile number :') # Reading input from the user
r=re.fullmatch('[6-9][0-9]{9}',n) # calling fullmatch function by passing pattern and n
if r!=None: # checking whether it is none or not
    print('Valid Number')
else:
    print('Not a valid number')
```

```
Enter Mobile number :99123456784
Not a valid number
```

In []:

```
In [16]: import re
email=input('enter email:')

regex = re.compile(r'([A-Za-z0-9]+[.-_])*[A-Za-z0-9]+@[A-Za-z0-9-]+(\.[A-Z|a-z]{2,})+')

if re.fullmatch(regex, email):
    print("Valid email")
else:
    print("Invalid email")
```

```
enter email:m3babu@gmail.com
Valid email
```

```
In [18]: import re
email=input('enter email:')

regex = re.compile(r'([A-Za-z0-9]+[.-_])*[A-Za-z0-9]+@[A-Za-z0-9-]+(\.[A-Z|a-z]{2,})+')

if re.fullmatch(regex, email):
    print("Valid email")
else:
    print("Invalid email")
```

```
enter email:mahe@g.c
Invalid email
```

In []:

```
In [4]: import re

# Validate date
date_pattern = "[0-9]{1,2}\[/0-9]{1,2}\[/0-9]{4}$"
re.match(date_pattern, '12/12/2022')

date_extract_pattern = "[0-9]{1,2}\[/0-9]{1,2}\[/0-9]{4}"
re.findall(date_extract_pattern, 'I\'m on vacation from 1/8/1999 till 29/05/2002')
```

```
Out[4]: ['1/8/1999', '29/05/2002']
```

In []:

In []:

In []: