**COMPUTER SCIENCE PROJECT**

**ONLINE TELEPHONE BILLING SYSTEM**

**CONTENTS**

1. Synopsis
2. Source Code
3. Output
4. Bibliography

**SYNOPSIS**

The purpose of this project is to help the customers to use the Computerization of Telephone Billing System. The project calculates the telephone bills automatically. It does almost every work which is related to automatic telephone billing connection system via new connection, customer record modification, viewing customer records and all works related to rate of bills, in addition to bill calculation and bill generation.

Telephone Billing System is developed as per seeing the increasing requirement to speed up the work and incorporate a new work culture. Thus a new program has been proposed to reduce manual work, improving work efficiency, saving time and to provide greater flexibility and user friendliness as the system previously followed was totally manual one lots of errors.

**SOURCE CODE**

import mysql.connector as mq

def menu():

print("\t\t\t ONLINE TELEPHONE BILLING SYSTEM")

print("\t\t\t ===============================\n")

print("\t\t\t\t MAIN MENU")

print("\t\t\t\t =========\n")

print("\t\t1. Register User \t 2. Search customer \n")

print("\t\t3. Update Customer \t 4. Generate Bill \n")

print("\t\t5. Delete Customer \t 6. Display records \n")

print("\t\t7. Help \t 8. Exit \n")

def register():

print("\n\t\t\tNew Customer Registration.....")

print("\t\t\t==============================\n")

print("Details of the customer are phone\_no, name, address, aadhar\_no respectively:")

ph=input("Enter your Phone number:")

n=input("Enter your Name:")

add=input("Enter your Address:")

adh=input("Enter your 12-digit Aadhar Card number:")

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="insert into customer(Phno,name,address,aadhar\_no,ftp)values({},'{}','{}','{}',{})".format(ph,n,add,adh,0)

cur.execute(query)

con.commit()

print("\nSuccessfully Registered the user.....")

con.close()

def search():

print("\n\t\t\tSearch Customer.....")

print("\t\t\t====================\n")

print("Details of the customer are phone\_no, name, address, aadhar\_no, bill,status(paid or unpaid), first time payer(yes:0/no:1) respectively:")

ph=input("\nEnter your phone number:")

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="select \* from customer where Phno={}".format(ph)

cur.execute(query)

res=cur.fetchall()

if res==[]:

print("Customer does not exist.....")

else:

print(res)

con.close()

def modify():

print("\n\t\t\tUpdate Customer Data.....")

print("\t\t\t=========================\n")

ph=input("\nEnter your phone number:")

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="select \* from customer where Phno={}".format(ph)

cur.execute(query)

res=cur.fetchall()

if res==[]:

print("Customer does not exist.....")

else:

print("1. Name\n2. Address\n3. Aadhar\_no")

ch=int(input("Enter choice to update:"))

if ch==1:

n=input("Enter new name:")

query="update customer set name='{}' where phno={}".format(n,ph)

cur.execute(query)

con.commit()

print("Successfully updated name.....")

elif ch==2:

add=input("Enter new address:")

query="update customer set address='{}' where phno={}".format(add,ph)

cur.execute(query)

con.commit()

print("Successfully updated address.....")

elif ch==3:

adr=input("Enter new aadhar\_no:")

query="update customer set aadhar\_no='{}' where phno={}".format(adr,ph)

cur.execute(query)

con.commit()

print("Successfully updated aadhar\_no.....")

else:

print("Please choose the correct choice.....")

con.close()

def billing():

print("\t\t\tBilling.....")

print("\t\t\t============\n")

ph=input("\nEnter your phone number:")

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="select \* from customer where phno={}".format(ph)

cur.execute(query)

res=cur.fetchall()

if res==[]:

print("Customer does not exist.....")

else:

calls=int(input("Enter number of calls:"))

bill=0

finalbill=0

ftime=0

next50to100\_=0

next100to150\_=0

over150\_=0

if res[0][6]==0:

ftime=0

if calls>150:

bill=bill+(calls-150)\*3 + 50\*2 + 50\*1

next50to100\_=50

next100to150\_=100

over150\_=(calls-150)\*3

elif 100<calls<=150:

bill=bill+(calls-100)\*2 + 50\*1

next100to150\_=(calls-100)\*2

next50to100\_=50

elif 50<calls<100:

bill=bill+(calls-50)\*1

next50to100\_=(calls-50)\*1

elif res[0][6]==1:

ftime=1

if calls>150:

bill=bill+(calls)\*3

over150\_=calls\*3

elif 100<calls<150:

bill=bill+(calls)\*2

next100to150\_=calls\*2

elif calls<100:

bill=bill+(calls)\*1

next50to100\_=calls\*1

print("\t\t\tBilling.....")

print("\t\t\t============\n")

old\_bill=res[0][4]

if res[0][5]!="Paid":

print("\n\t\tPending bill amount:",old\_bill)

if ftime==0:

print("\n\t\tFirst 50 free calls:",0)

print("\n\t\tNext 51-100 calls@1.0Rs/call:",next50to100\_)

print("\n\t\tNext 100-150 calls@2.0Rs/call:",next100to150\_)

print("\n\t\tNext over 150 calls@3.0Rs/call:",over150\_)

else:

print("\n\t\tTotal calls",calls)

if calls>150:

print("\n\t\tover 150 calls is Rs3.0/call =",over150\_)

elif 100<calls<150:

print("\n\t\tbetween 150-100 calls is Rs2.0/call =",next100to150\_)

else:

print("\n\t\tbelow 100 calls is Rs1.0/call =",next50to100\_)

print("\n\t\tNew bill amount: ",bill)

print("\n\t\t========================")

finalbill=old\_bill+bill

print("\t\tTotal amount to pay: ",finalbill)

else:

print("\n\t\tLast paid bill amount",old\_bill)

print("\n\t\tTotal calls",calls)

if calls>150:

print("\n\t\tover 150 calls is Rs3.0/call =",over150\_)

elif 100<calls<150:

print("\n\t\tbetween 150-100 calls is Rs2.0/call =",next100to150\_)

else:

print("\n\t\tbelow 100 calls is Rs1.0/call =",next50to100\_)

print("\n\t\tNew bill amount: ",bill)

print("\n\t\t========================")

finalbill=bill

print("\t\tTotal bill amount: ",finalbill)

print("\t\t========================")

ch=input("\nPress Y to pay the bill now or any other key to pay later:")

if ch in ['Y','y','yes','Yes']:

if ftime==0:

query="update customer set bill='{}',status='Paid',ftp=1 where phno={}".format(finalbill,ph)

else:

query="update customer set bill='{}',status='Paid' where phno={}".format(finalbill,ph)

cur.execute(query)

con.commit()

print("Successfully paid the bill.....")

else:

query="update customer set bill='{}',status='Unpaid',ftp=1 where phno={}".format(finalbill,ph)

cur.execute(query)

con.commit()

print("Please make payment as soon as possible.....")

con.close()

def remove():

ph=input("\nEnter your phone number:")

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="select \* from customer where phno={}".format(ph)

cur.execute(query)

res=cur.fetchall()

if res==[]:

print("Customer does not exist.....")

else:

ch=input("Are you sure to delete the customer.....Yes/No:")

if ch in ['Y', 'y','yes', 'Yes']:

query="delete from customer where Phno={}".format(ph)

cur.execute(query)

con.commit()

print("Successfully deleted from database.....")

else:

print("No changes made in the databse")

con.close()

def display():

con=mq.connect(host="localhost",user="root",password="Calvin@0203",database="telephone")

cur=con.cursor()

query="select \* from customer"

cur.execute(query)

res=cur.fetchall()

con.commit()

fh=open('tele\_file.txt','w+')

for eachrecord in res:

strformat=str(eachrecord)

fh.write(strformat)

fh.write('\n')

fh.flush()

fh.close

fh=open('tele\_file.txt',"r")

readr=fh.read()

print(readr)

fh.close()

con.close()

def helping():

print("\t\t\tHelp")

print("\t\t\t====")

print("First 50 calls are free")

print("51-100 calls are 1.0 Rs per call")

print("101-150 calls are 2.0 Rs per call")

print("Above 150 calls are 3.0 Rs per call")

while True:

menu()

ch=int(input("Enter your choice:"))

if ch==1:

register()

elif ch==2:

search()

elif ch==3:

modify()

elif ch==4:

billing()

elif ch==5:

remove()

elif ch==6:

display()

elif ch==7:

helping()

elif ch==8:

exit()

else:

print("Please choose the correct choice and try again")

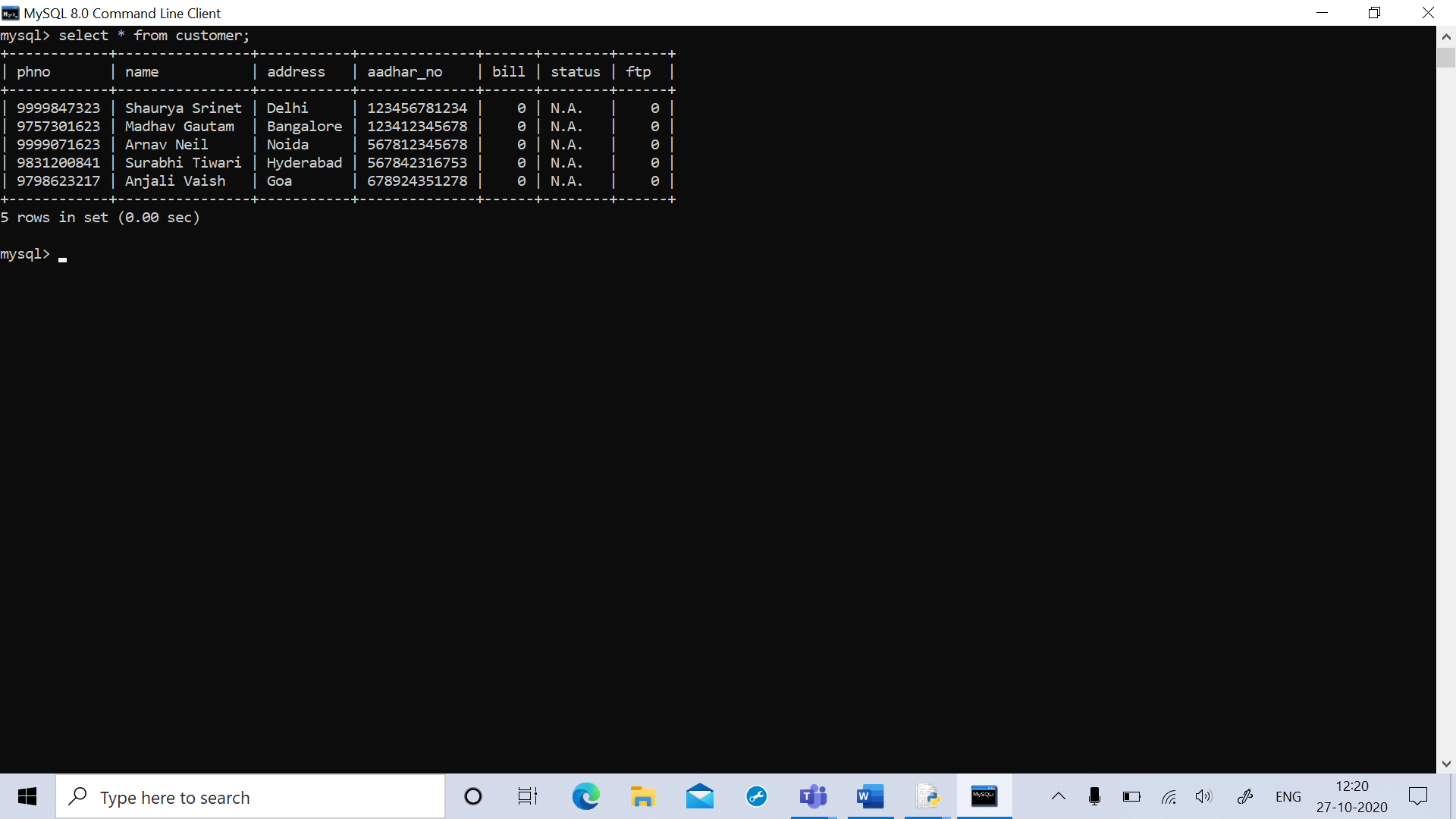
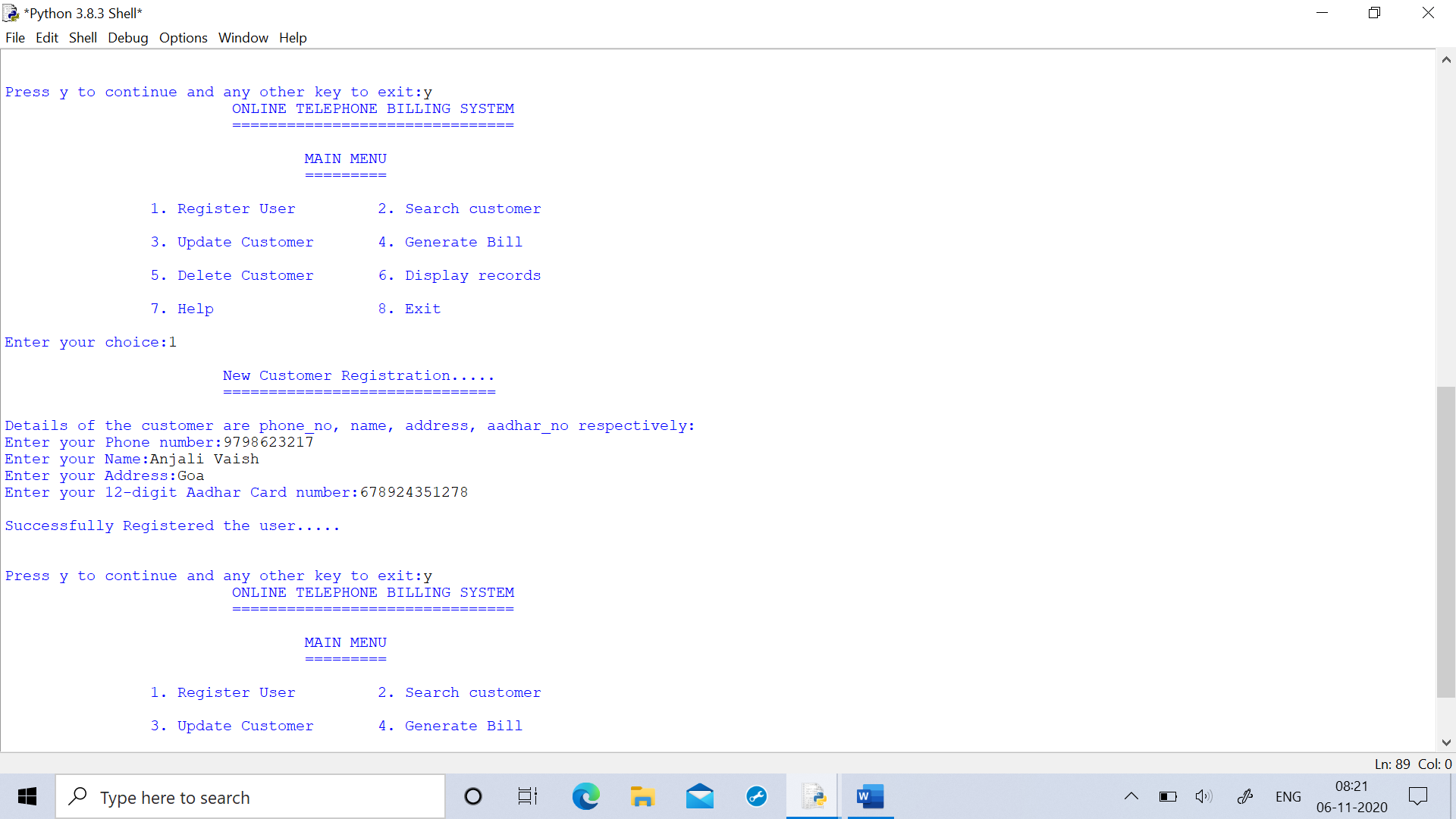
ch=input("\n\nPress y to continue and any other key to exit:")

if ch not in ["Y","y","yes","Yes"]:

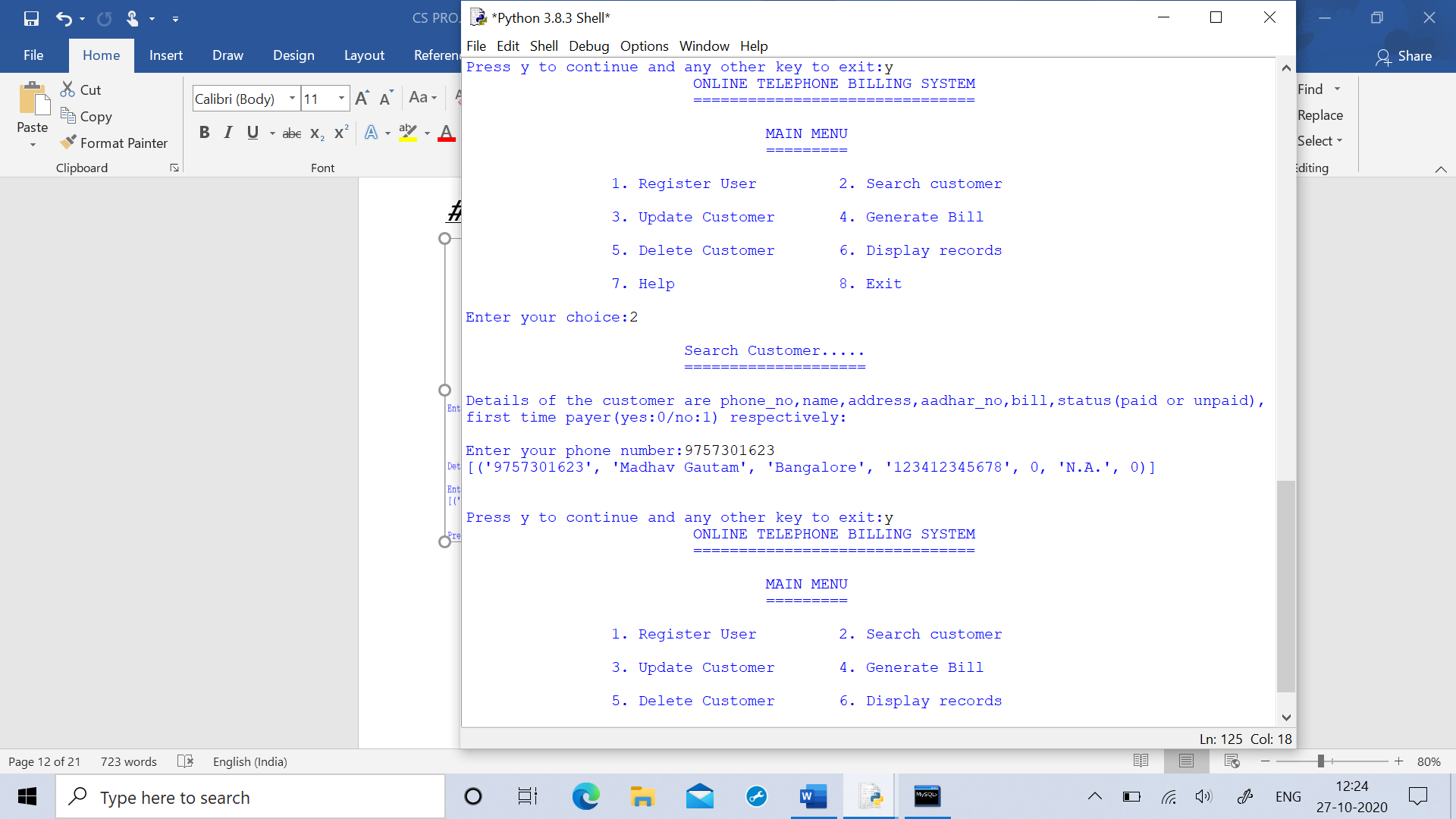
break

**OUTPUT**

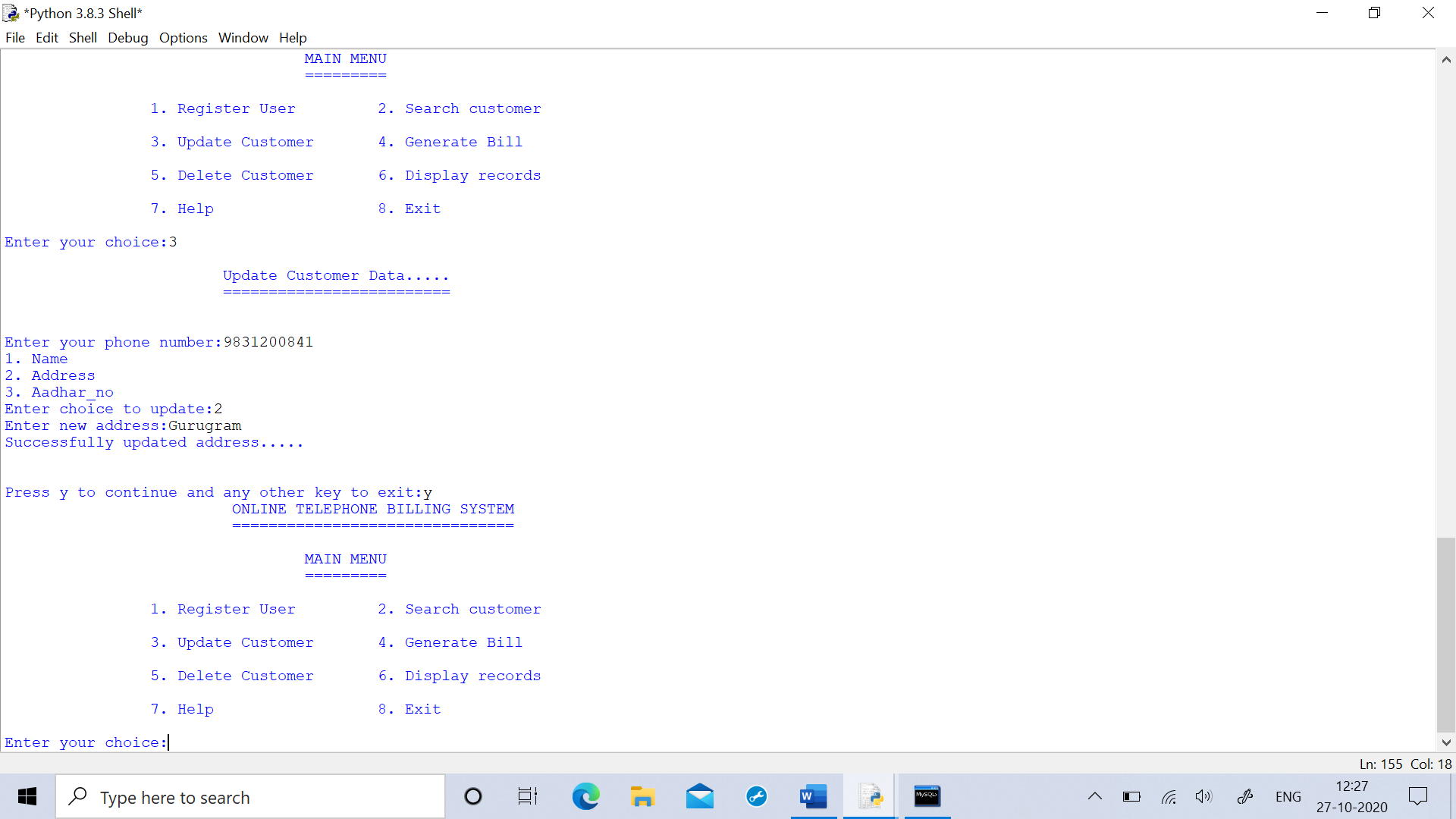
**#registering customer**

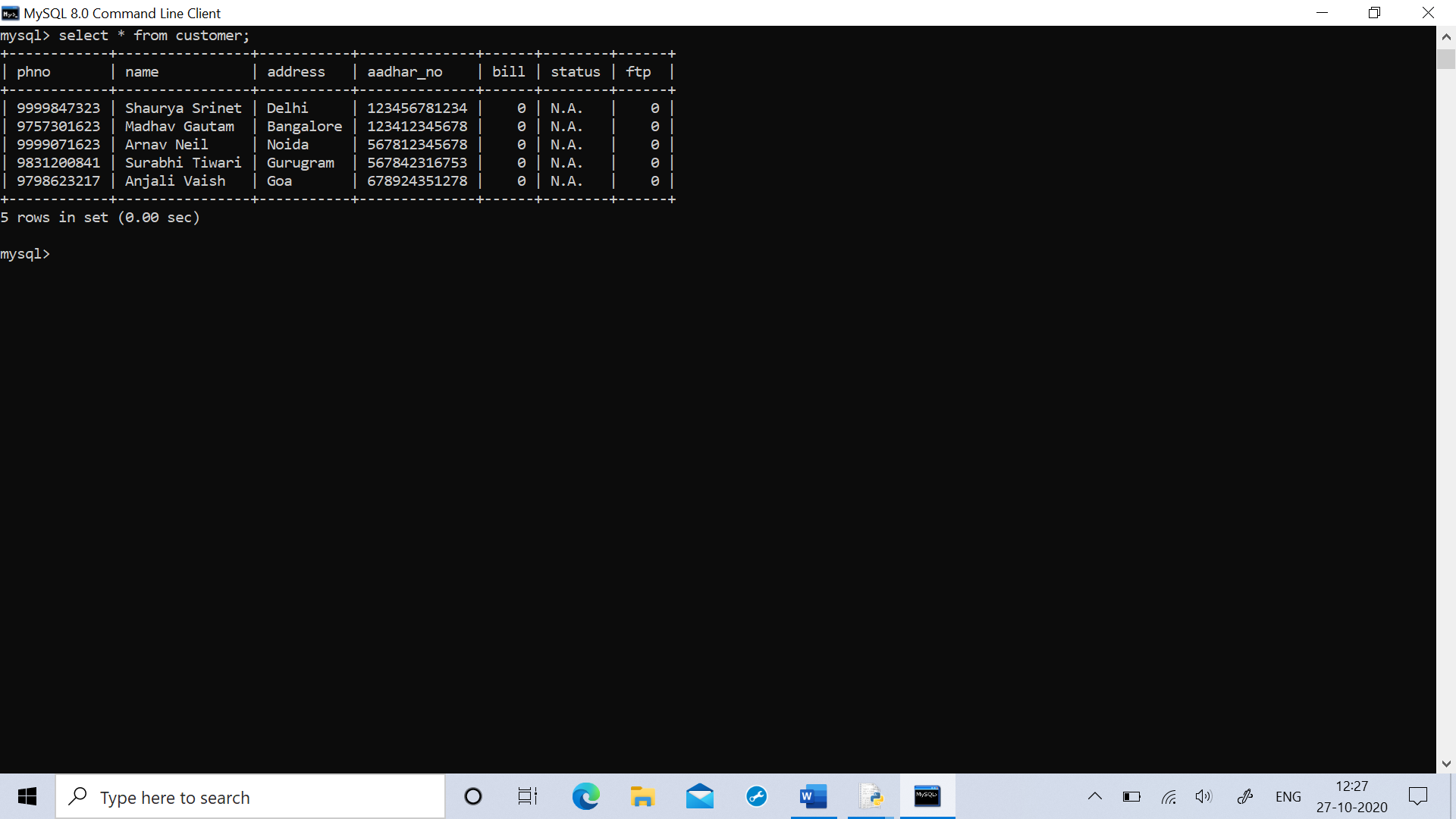


**#searching customer**

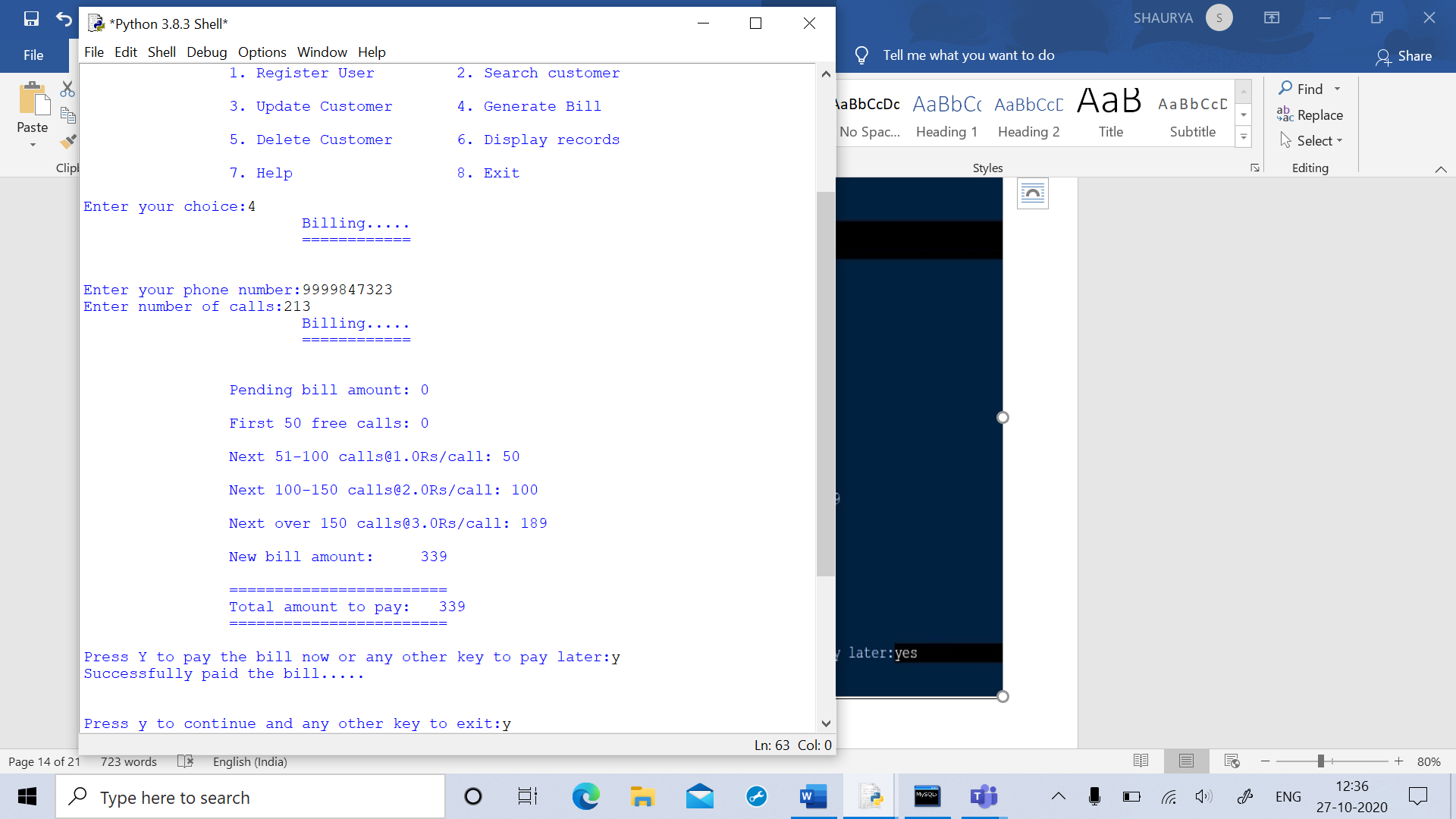


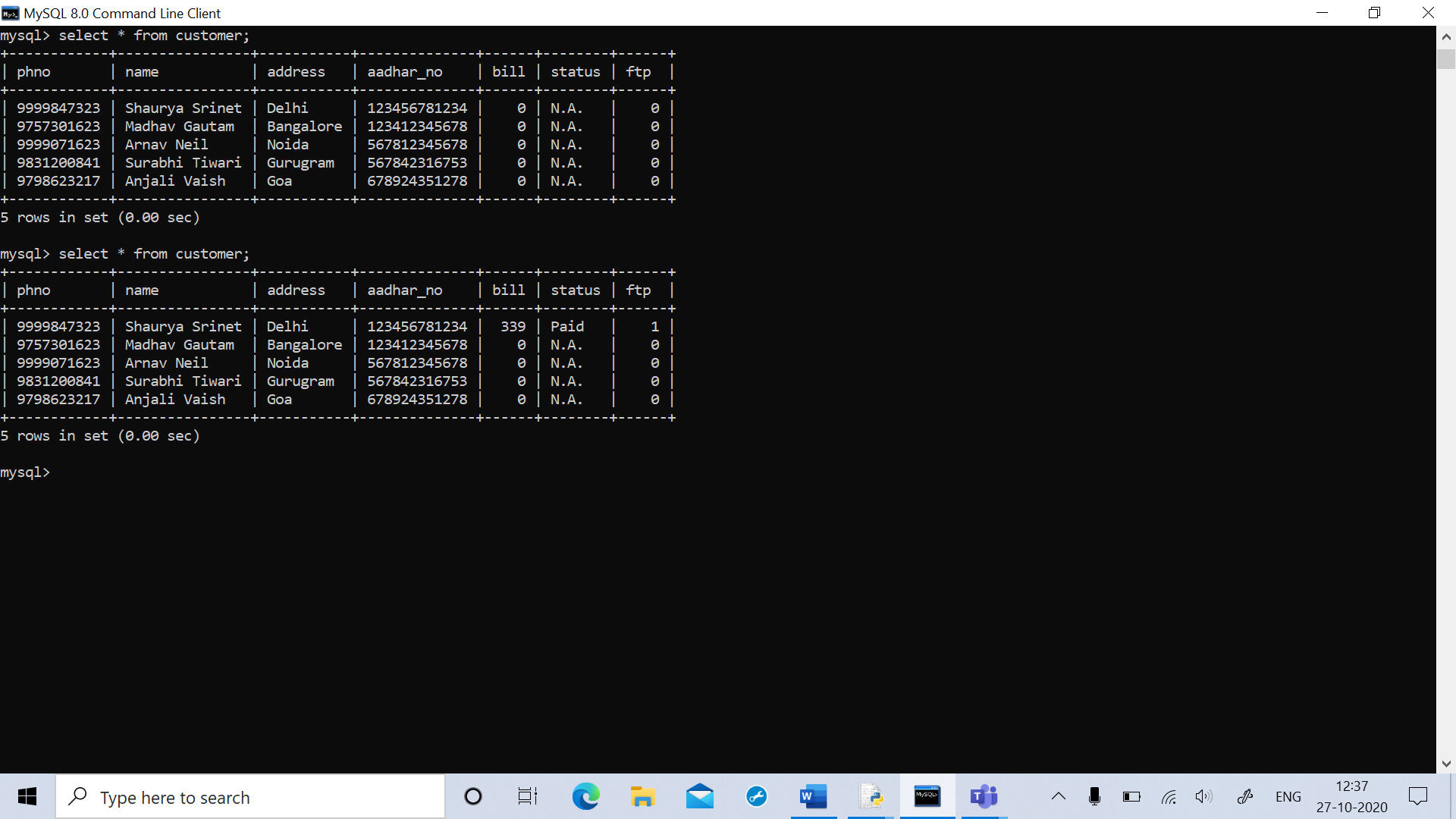
**#updating customer**



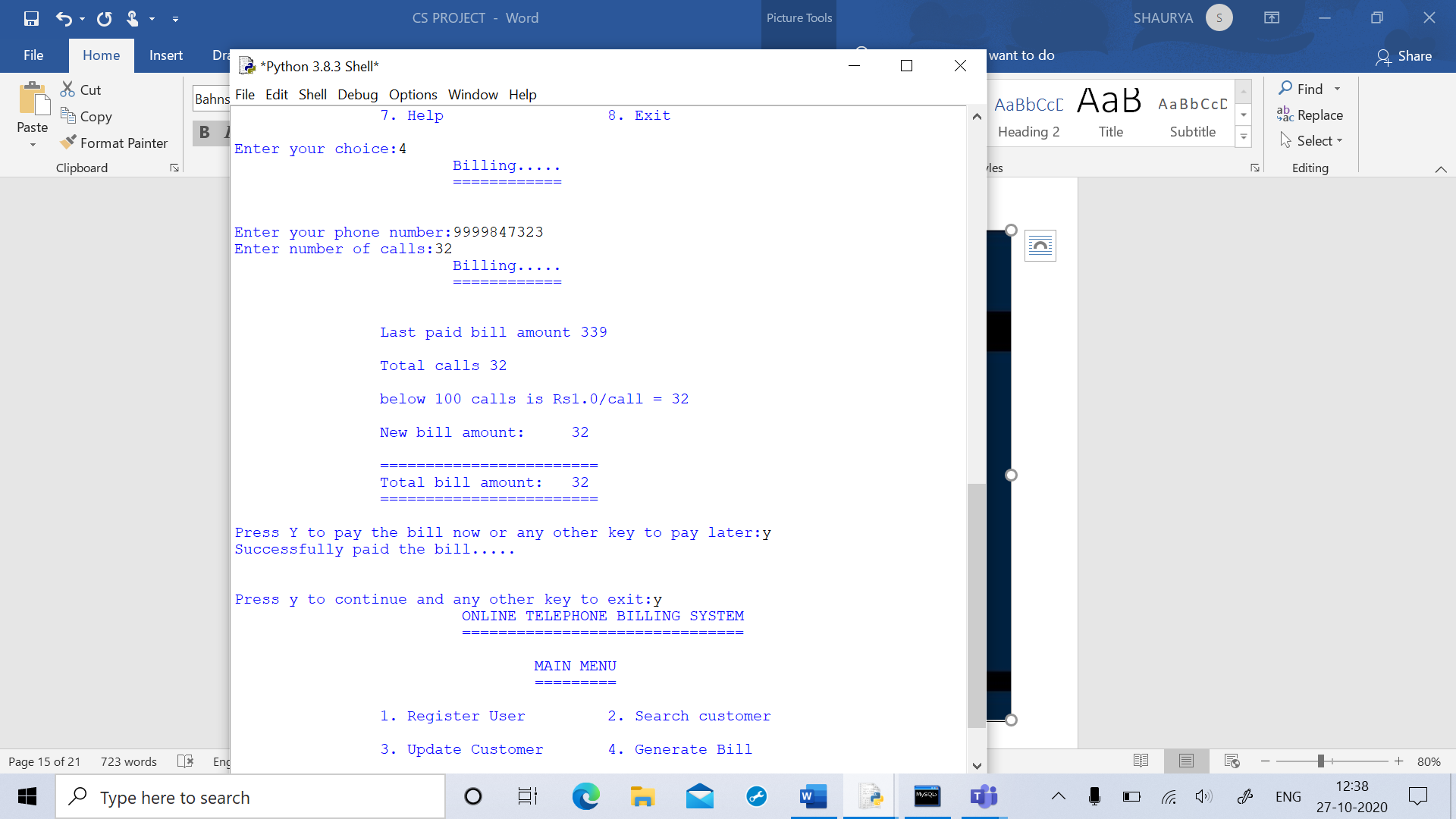


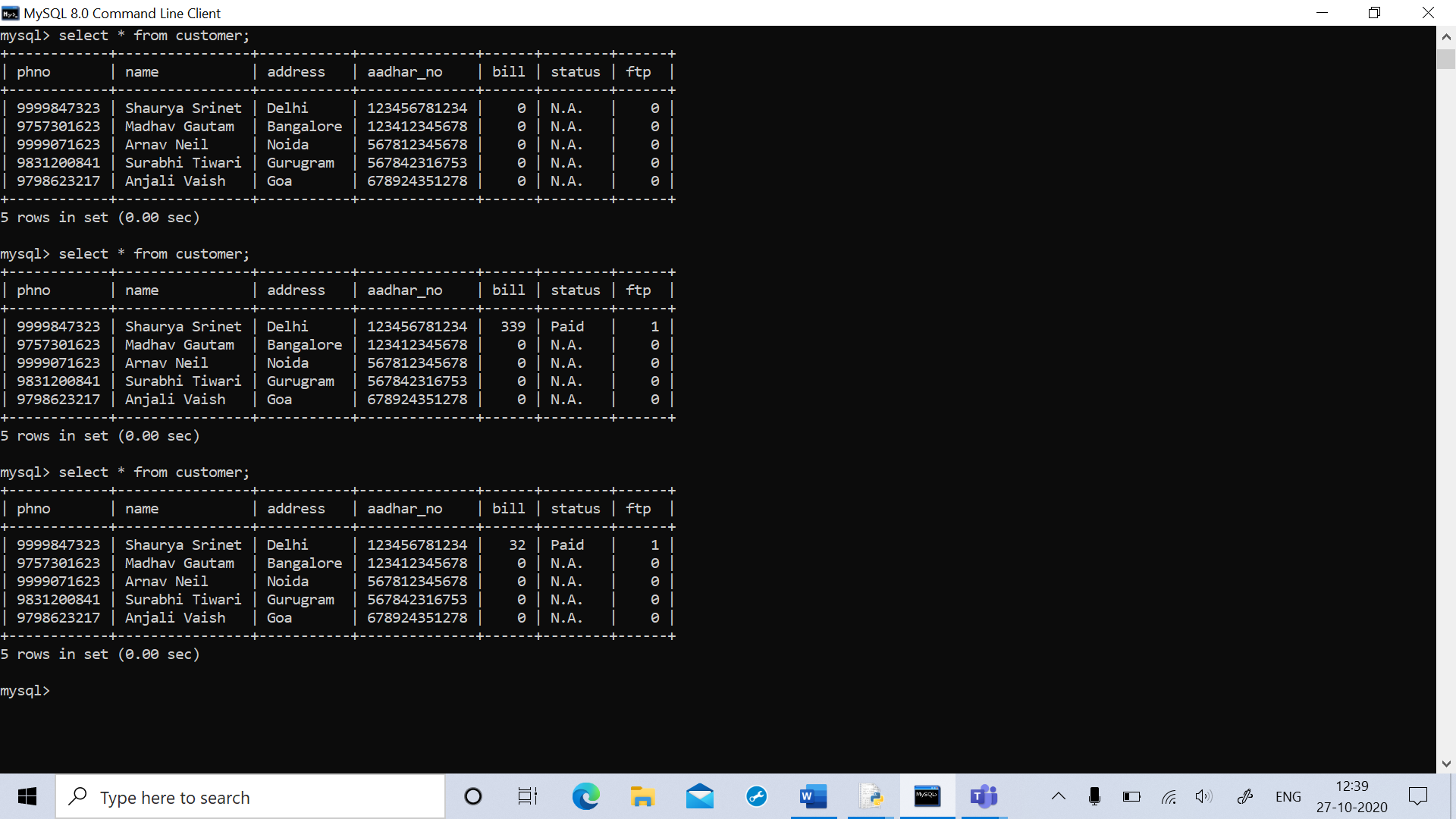
**#generating bill for a first time payer(1st 50 calls free offer applicable)**



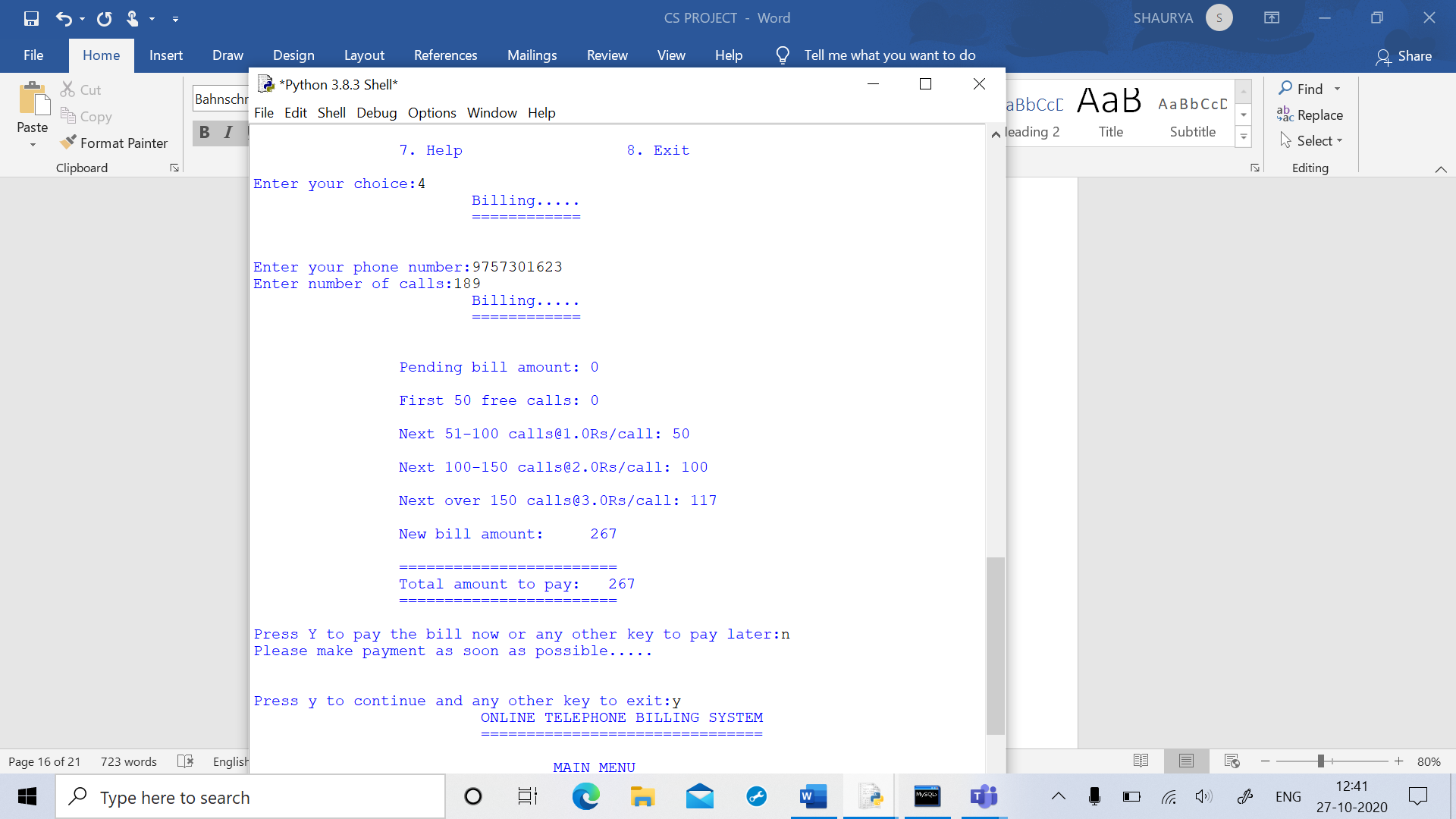


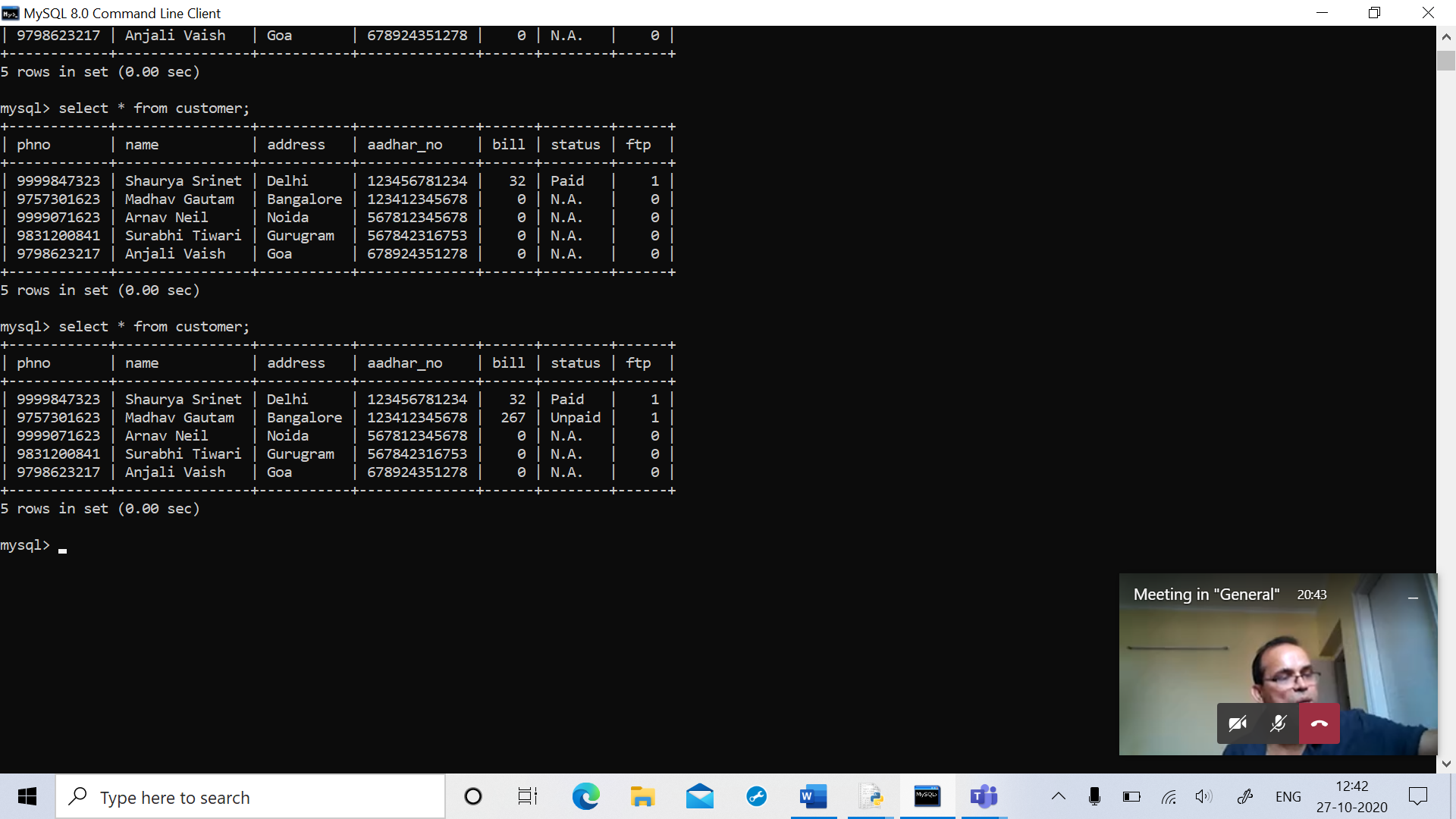
**#generating bill for same customer again(1st 50calls free offer NOT applicable)**



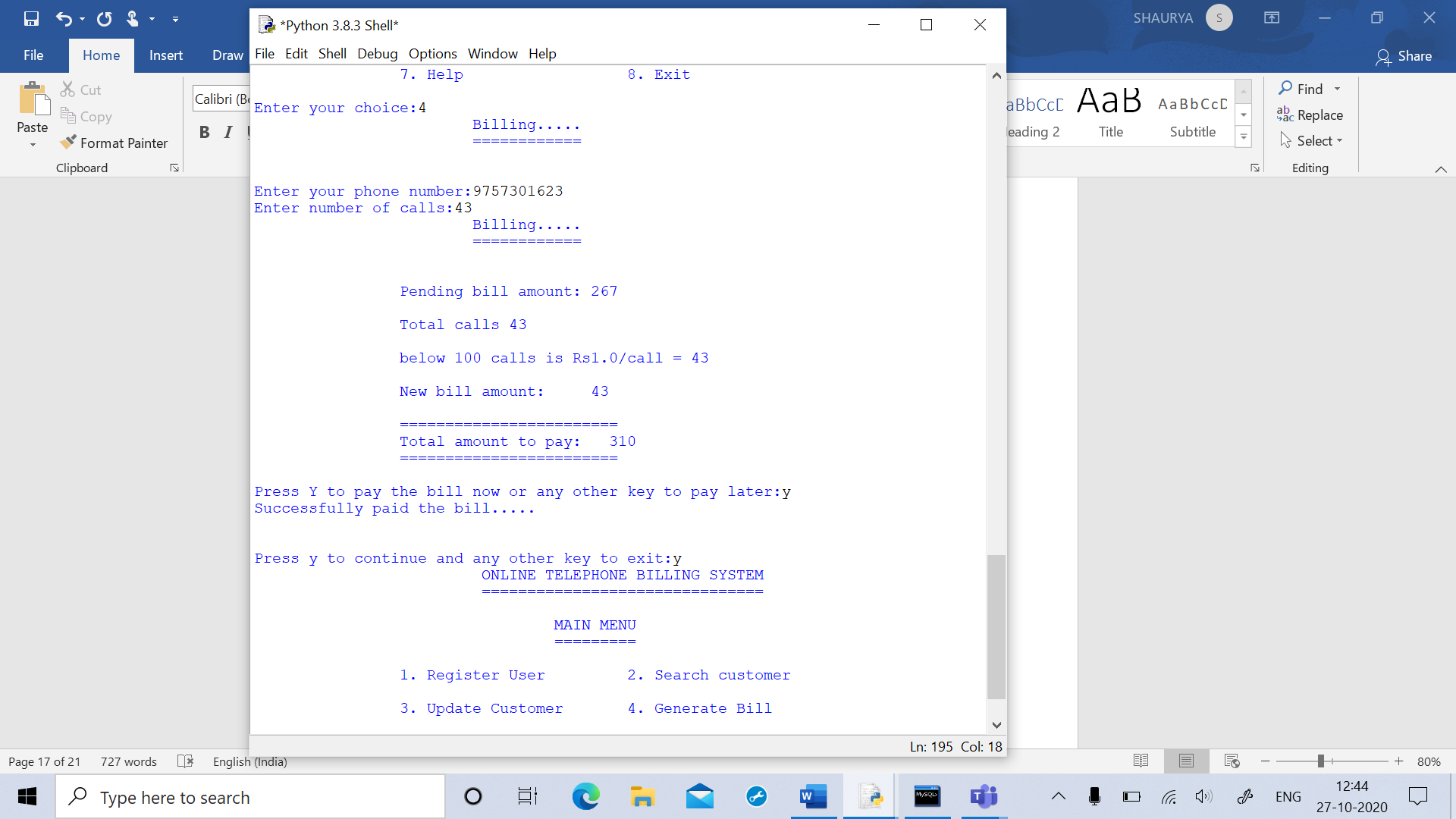


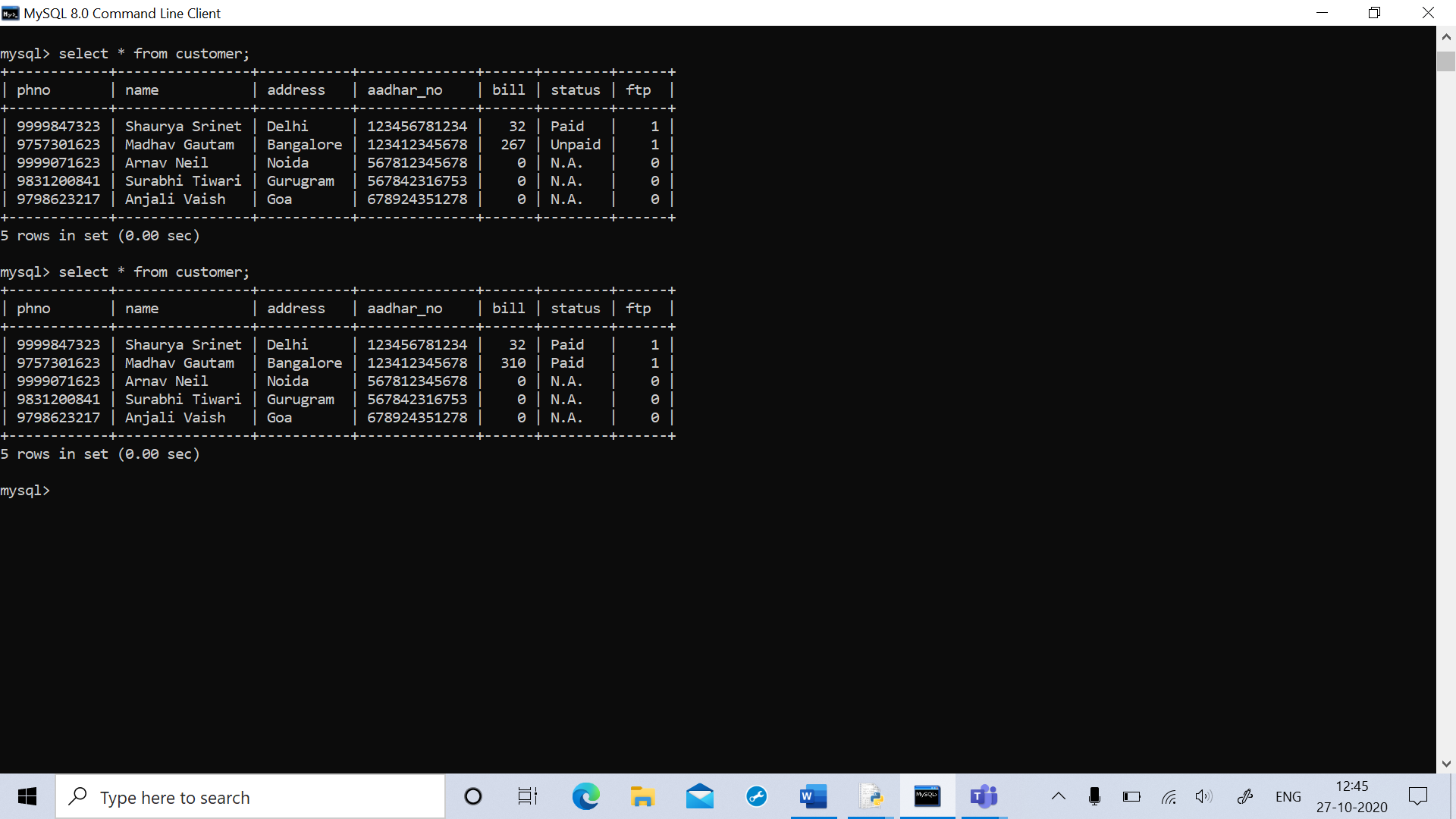
**#refusing to pay bill generated for first time payer**



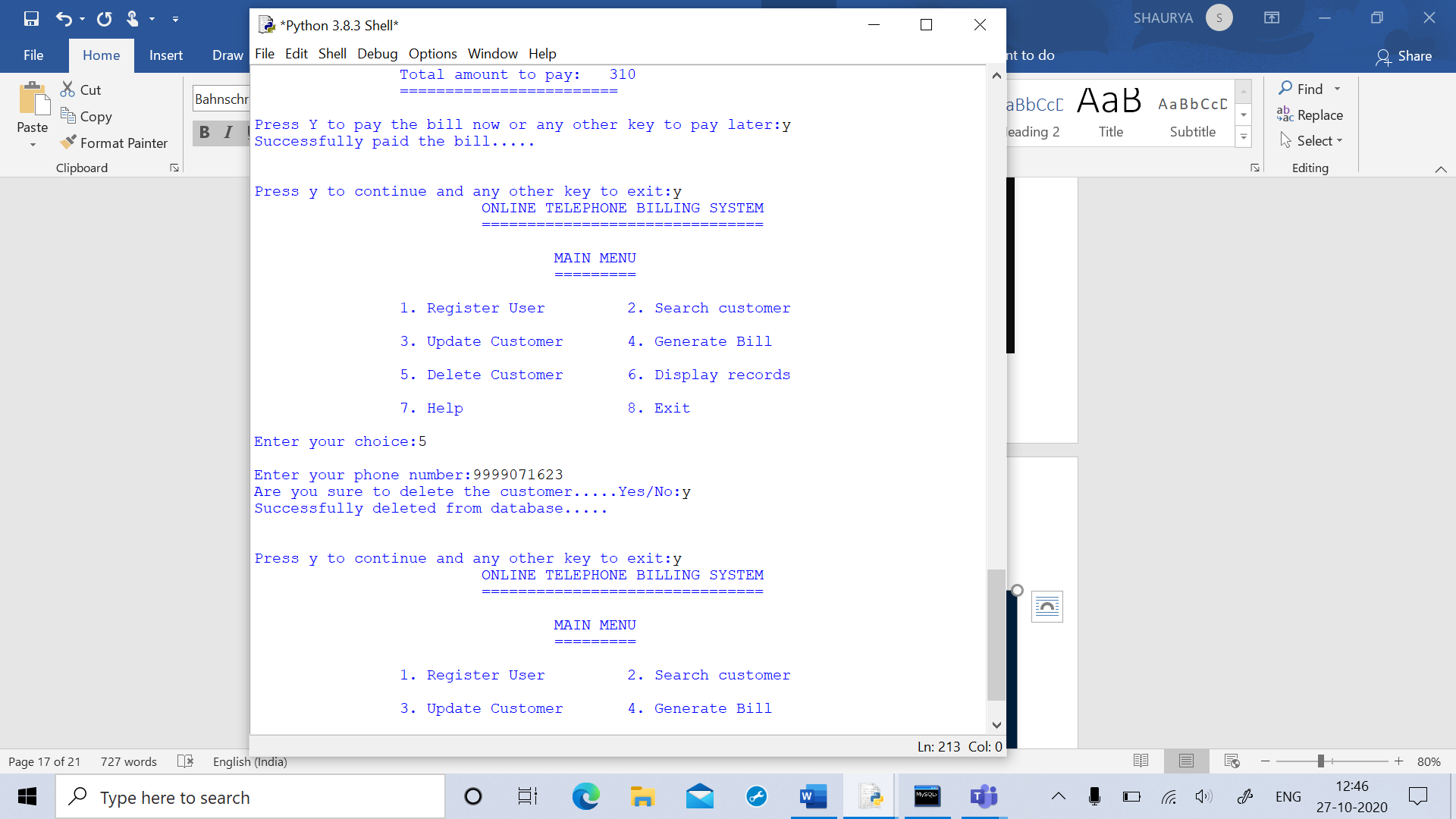


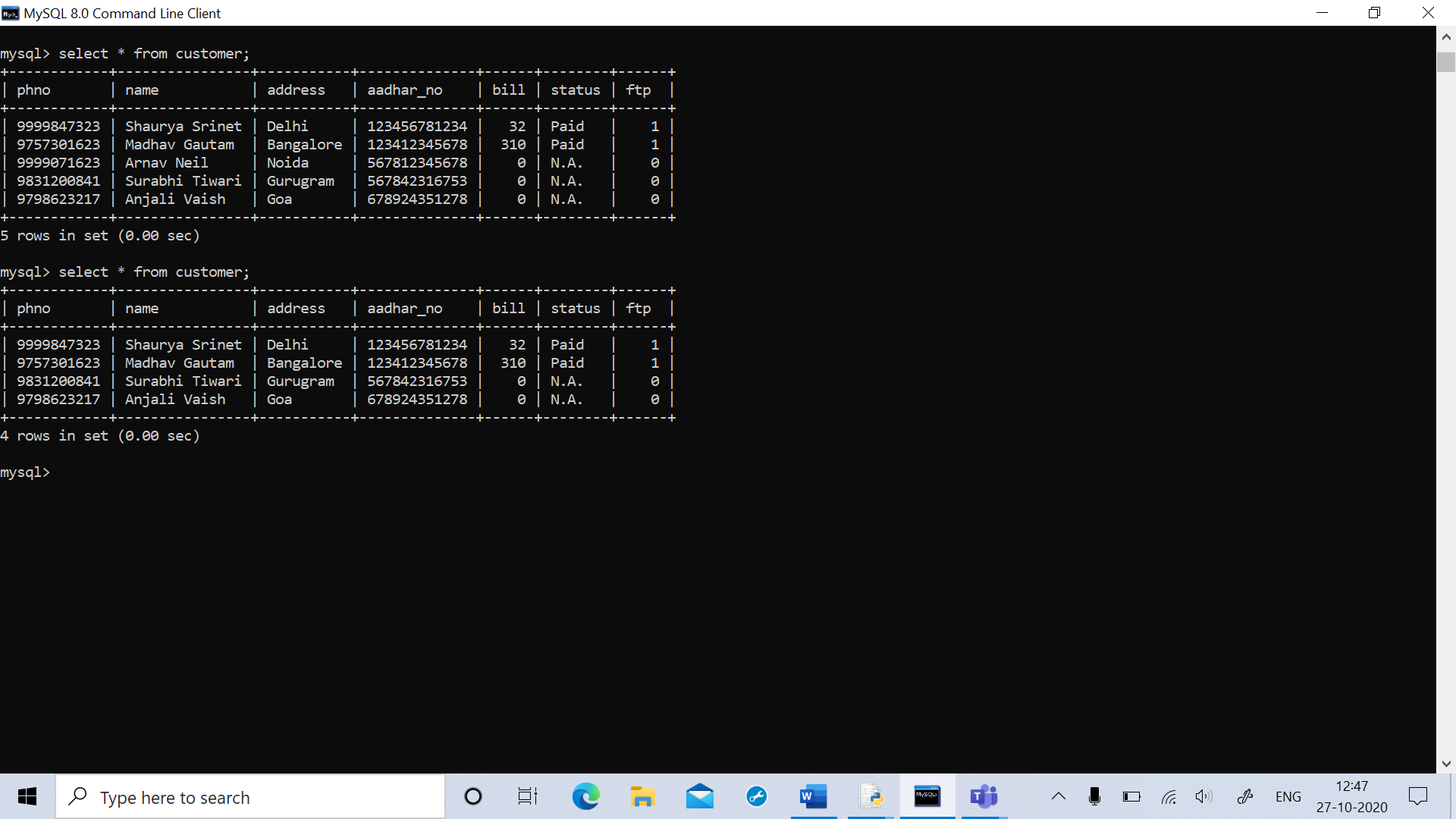
**#finally paying total bill for customer who refused to pay before**



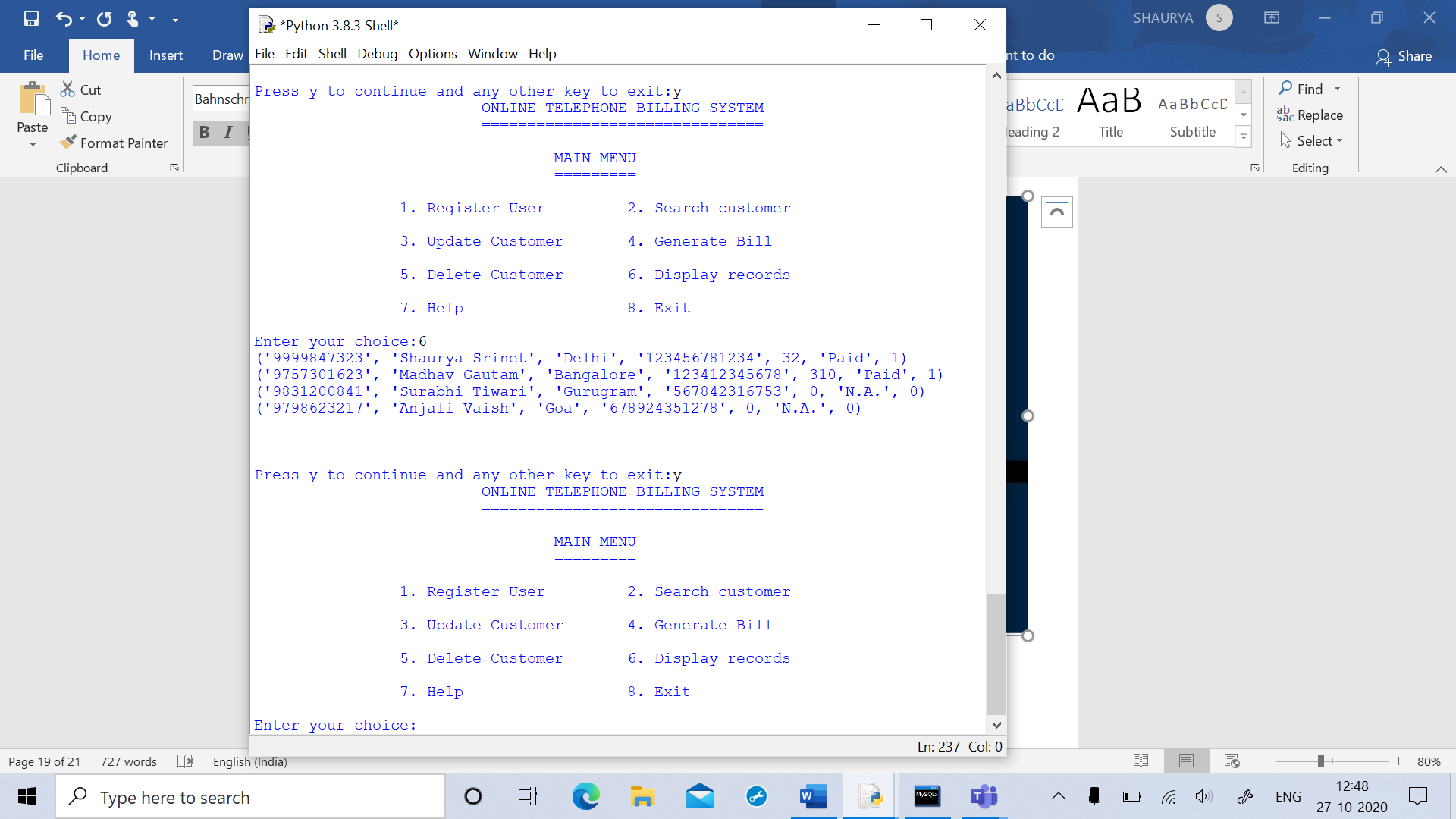


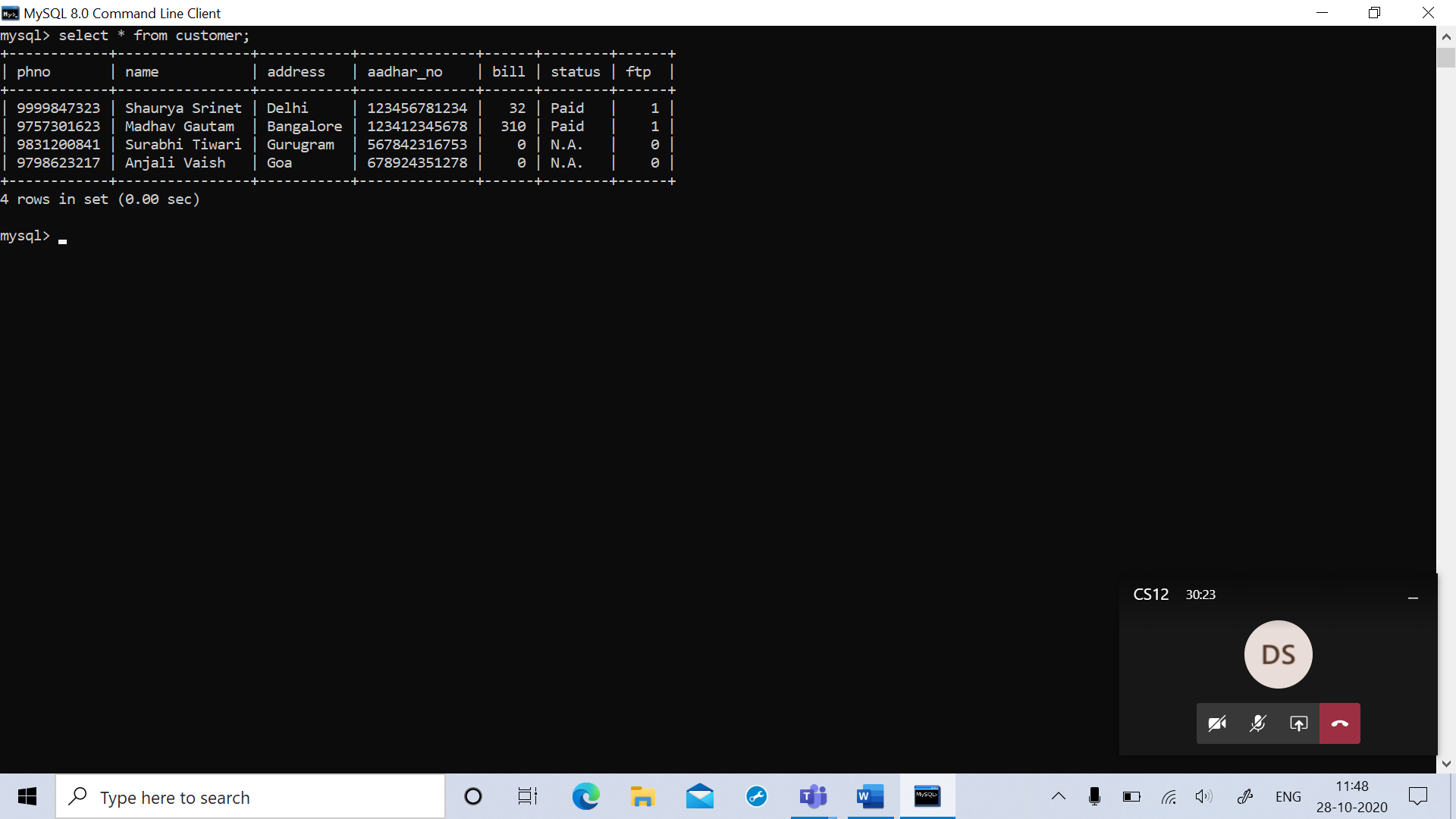
**#deleting customer**



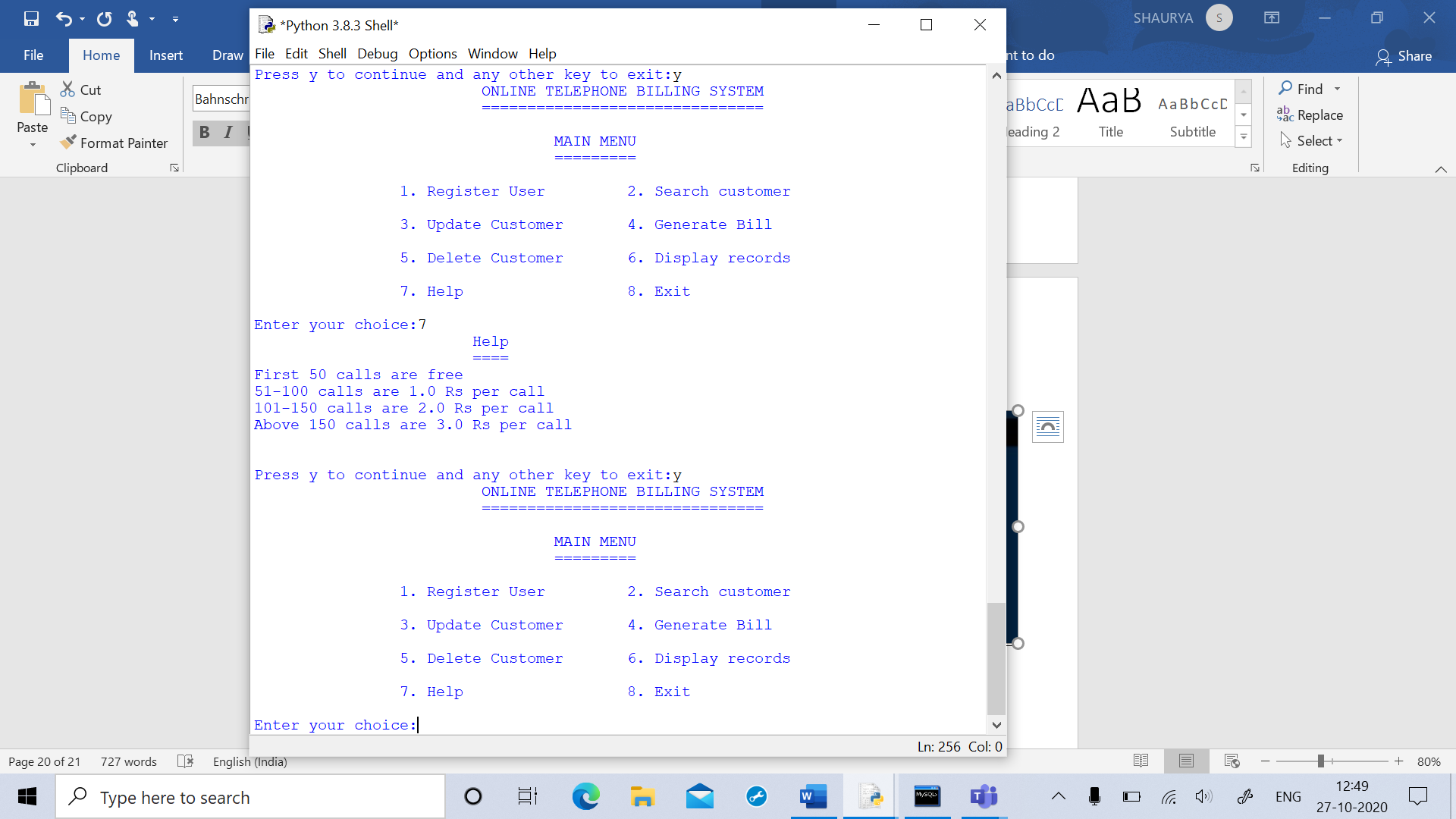


**#displaying records from file**





**#help**



**# exit**

