

Computer Science Project-

G.S.T. Invoice System



Team Members:

Archana Vellalath

Nitansha Uppal

Rithika Golwalkar

Serena Gomez

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# D. A. V. Public School



## CERTIFICATE

**202 \_\_\_\_ - 202 \_\_\_\_**

**This is to certify that I, \_\_\_\_\_,**  
**Board Roll No. \_\_\_\_\_, a student of Std. XII**  
**Sec. \_\_\_\_\_, have done this final term project at my school,**  
**The project entitled \_\_\_\_\_, embodies the**  
**original work done by me as a part of my std. XII curriculum.**

\_\_\_\_\_  
**Student's Signature**

\_\_\_\_\_  
**Teacher's Signature**

\_\_\_\_\_  
**External Examiner**

\_\_\_\_\_  
**School's Stamp**

### ACKNOWLEDGEMENTS:

Before we get into the thick of things, I would like to express a special thanks to our principal, Mr. Jose Kurian, for giving me this wonderful opportunity of working on this project.

The completion of 'G. S. T. Invoice System' would not have been possible without our teacher, Mrs. Sangita Arora, who guided my team along the way.

Adding a few words of appreciation towards the people behind this project, my team-mates, who have shown utmost patience with me for this project.

## OVERVIEW:

This project was made by using Python and it's connection with MySQL, text and binary files.

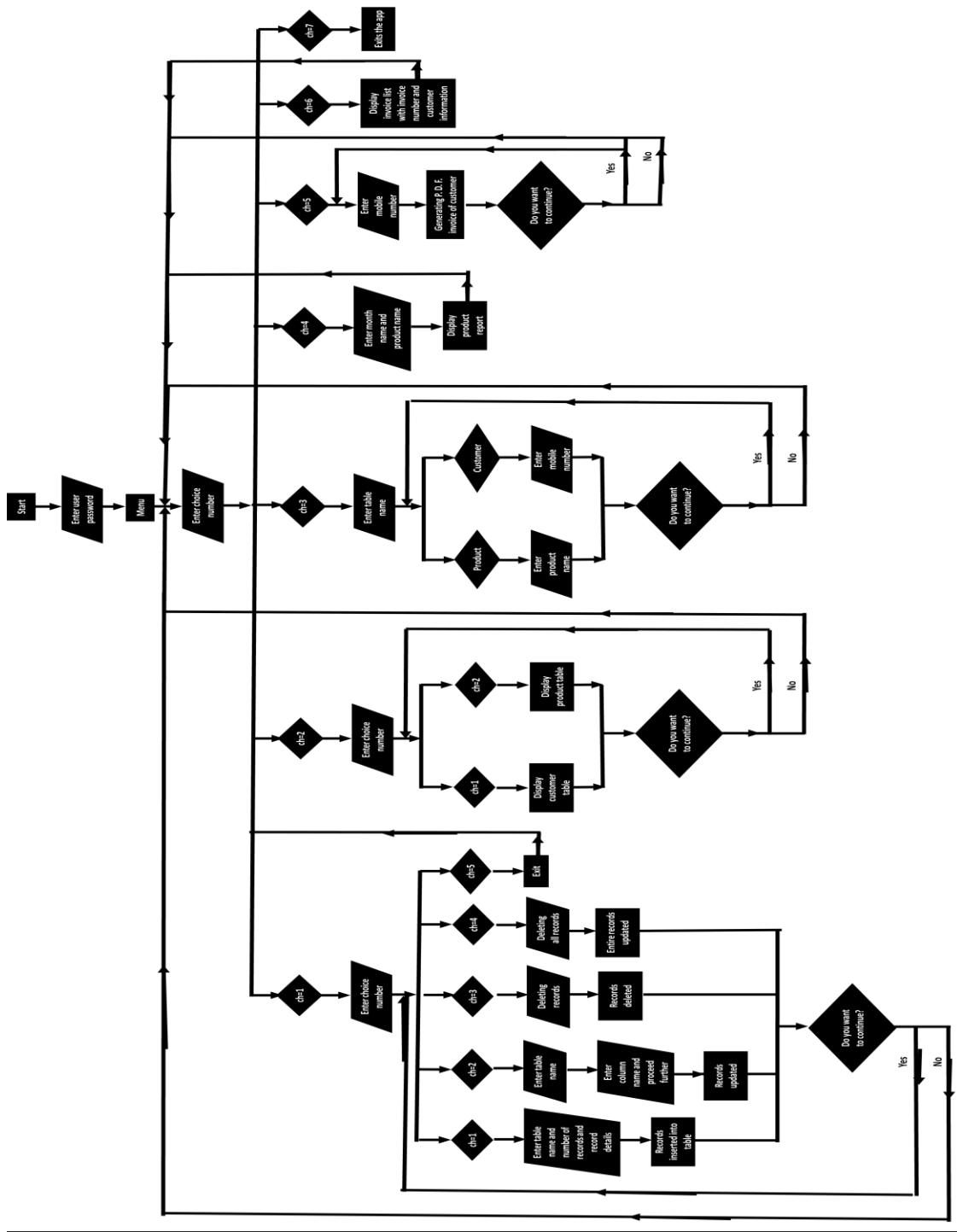
The G. S. T. Invoice App is customized, that is; developed in accordance with the requirements of a hypothetical company, ANR'S FURNITURE COMPANY. It is a company oriented app therefore can be used by employees of the company only.

The project is capable of the following:  
The program is protected by a password.

- 1) Operations and updation of the table: The system will accept a table entered by the user among 'CUSTOMER' and 'PRODUCT'. The former contains information about customers like name, contact number, products purchased, price, date of purchase, address, etc.  
Using this option, the employees can add records to any of the above mentioned tables, to update (manipulate) any particular record, delete a record or delete all records.
- 2) Display of customer and product table: It displays the customer and product table.
- 3) Display of records selectively: It allows the user to select and view the information of any product/ customer by accepting product name/ mobile number.
- 4) Stock information: It gives the company a monthly based report of a particular product based on the input of product and month name and the gst amount collected according to sales.
- 5) Invoice generation: It will generate an invoice for the customer in form of P.D.F., after accepting the customer's mobile number.

- 6) **Invoice list with customer information:** Generates summary list of invoice, containing customer details like invoice number, which is unique for all, name, contact number and displays them for permanent recordkeeping purpose.
- 7) The system autogenerated a non-consecutive unique invoice number for each customer .
- 8) After adding personal details of a customer, the system will display the total amount incurred by the customer. Details at the gst level will be displayed in the customer's invoice.

## PROCESS CHART:



### SOURCE CODE:

```
import mysql.connector  
import datetime  
date=datetime.date.today()  
mydb=mysql.connector.connect(user='root',password='aarathy8546',host='localhost',databa  
se='world')  
mycursor=mydb.cursor(buffered=True)  
import tableop #user-defined module  
import gstcalc#user defined module  
import pickle  
  
#operations on table(ch==1)  
def record(k,gst):  
    import random  
    f=open("invoicr.bin","ab")  
    lst=[]  
    fl=0  
    while fl==0:  
        a=random.randint(1,1000000)  
        r,cn=k,gst  
        lst.append(a)  
        lst.append(r)  
        lst.append(cn)  
    res=[("INVOICE NO:",lst[0]),("NAME:",lst[1]),("CONTACT NO:",lst[2])]
```



```

print("\t\t\t\t2.UPDATION OF RECORD DATA\t\t")
print("\t\t\t\t3.DELETION OF RECORDS\t\t")
print("\t\t\t\t4.DELETION OF ALL RECORDS\t\t")
print("\t\t\t\t5.EXIT\t\t")

ch=int(input('enter your choice:'))

if ch==1:
    k=input('enter the name of the table in which you want to insert records:')
    n=int(input('how many records do you want to enter?:'))

    if k.upper()=='PRODUCT':
        for j in range(n):
            try:
                p=input('enter product id:')
                k=input('enter product: ')
                hsn=input('enter hsn code of the product: ')
                gst=input('enter gst rate of the product:')
                bs=input('enter basic cost : ')
                pq=input('enter product quantity available:')

                print('\n')
                tu=(p,k,hsn,gst,bs,pq)
                query="""insert into
                PRODUCT(PRODUCT_ID,PRODUCT_D,HSN_CODE,GST_RATE,BASIC_
                COST,STOCK)values(%s,%s,%s,%s,%s,%s)"""
                mycursor.execute(query,tu)
                mydb.commit()
            except:
                print("Record inserted successfully")

```

```

print('record successfully inserted\n')

except mysql.connector.Error as error:

    print('failed due to error {}'.format(error))

elif k.upper()=='CUSTOMER':

    for j in range(n):

        try:

            fl=1

            gst=input('enter mobileno:')# checking for duplicate entry

            rem='select * from CUSTOMER where MOBILENO=%s'

            mycursor.execute(rem,(gst,))

            if mycursor.rowcount!=0:

                for lo in mycursor:

                    k=lo[1]

                    hsn=lo[2]

                    print('this person already exists,entering personal info on the basis of previous data.....')

            else:

                k=input('enter customer name:')

                hsn=input('enter address:')

                while fl==1:

                    bs=input('enter product as product(qty<10):')

                    lent=len(bs)

                    hg=bs[0:lent-3]

                    qs='select * from PRODUCT WHERE PRODUCT_D=%s'

```

```

mycursor.execute(qs,(hg,))
if mycursor.rowcount==0:
    print('this product does not exist')
    fl=1
else:
    fl=0
for i in mycursor:
    sto=i[5]
    p=i[0]
    tt=int(i[3])
    bst=int(i[4])
    for srk in str(bs):
        if srk.isdigit():
            fg=srk
            break
    while int(sto)-int(fg)<=0:#for checking stock availability
        print(hg+' currently not available,pl update the corresponding stock value')
        q12='update PRODUCT set STOCK=%s where PRODUCT_D=%s'
        stock=int(input('enter the stock value>'+str(fg)+' for updation'))
        mycursor.execute(q12,(stock+int(sto),hg))
        lmn=stock+int(sto)
        print('updation successful... ')
        sto=lmn

```

```

        ert='update PRODUCT set STOCK=%s where PRODUCT_D=%s'#  

deducting stock no  

mycursor.execute(ert,(int(sto)-int(fg),hg))  

ds=gstcalc.gstcl(tt,bst,int(fg))  

pq=str(date)  

gt=str(ds[2])  

print('\n')  

print(k,'HAS INCURRED AN AMOUNT OF Rs',gt,'/-')  

print('\n')  

tu=(p,k,hsn,gst,bs,pq,gt)  

query="""insert into  

customer(PRODUCT_ID,NAME,ADDRESS,MOBILENO,PRODUCT,DOP,A  

MOUNT)values(%s,%s,%s,%s,%s,%s,%s,%s)"""  

mycursor.execute(query,tu)  

mydb.commit()  

print('record successfully inserted\n')  

pl=2  

except mysql.connector.Error as error:  

print('failed due to error {}'.format(error))  

pl=1  

ert='update PRODUCT set STOCK=%s where PRODUCT_D=%s'  

mycursor.execute(ert,(int(sto),hg))  

if pl!=1:  

record(k,gst)  

ans=input('do you want to continue inserting records in any other  

table?yes/no:')
```

```

if ans.upper() !='YES':
    break

else:
    print('table not found,pl try again.')
    break

if ch==2:
    lst=[]
    di=dict()
    aj='YES'
    try:
        t=input('enter the table name for updation')
        if t.upper() in ['CUSTOMER','PRODUCT']:
            while aj=='YES':
                mycursor.execute('select * from '+t)
                print(tableop.table(mycursor))
                fo=1
                while fo==1:
                    h=input('enter column parameter of the product to be updated')
                    for i in mycursor.column_names:
                        if i==h.upper():
                            fo=0
                            break
                else:
                    break
    
```

```

fo=1

p=input('enter value of the column '+i+' to search with')

n=int(input('how many columns do you want to update?'))

for k in range(n):

    fl=1

    while fl==1:

        c=input('enter column name')

        if c in mycursor.column_names:

            fl=0

        else:

            print('error,column not found, pl try again..')

            fl=1

    lst.append(c)

    val=input('enter new value for the column')

    di[lst[k]]=val

    I=list(di.keys())


for j in I:

    query="update "+t+" set "+j+"=%s where "+h+"=%s;"

    mycursor.execute(query,(di[j],p))

    mydb.commit()

    print('updation successful...')


```

```

aj=input("do you want to continue updating records in this table?yes/no:")
if aj.upper() !='YES':
    break
except mysql.connector.Error as error:
    print('failed due to error {}'.format(error))

if ch==3:
    try:
        fl=1
        po='NO'
        print("3..DELETE A SINGLE RECORD FROM THE TABLE")
        t=input("Enter Table Name ")
        mycursor.execute('select * from '+t)
        if t.upper() in ['CUSTOMER','PRODUCT']:
            while ans.upper()=='YES':
                while po.upper()=='NO':
                    while fl==1:
                        c=input('enter column name to search with')
                        if c in mycursor.column_names:
                            fl=0
                else:
                    print('error,column not found, pl try again..')
                    fl=1
                    v=input('enter value of '+c+' to search with')

```

```

so="select * from "+t+ " where "+c+"=%s;"

sql_delete_query ="Delete from "+t+ " where "+c+"=%s;"

print("displaying record before deleting ")

mycursor.execute(so,(v,))

print(tableop.table(mycursor))

po=input('do you want to delete the above record/s?yes/no:')

if po.upper()=='YES':


    mycursor.execute(sql_delete_query,(v,))

    mydb.commit()

    print("\nRecord Deleted successfully\n")

    ans=input('do u want to continue deleting from this table?yes/no:')

except mysql.connector.Error as error:

    print("Failed to Delete all records from database table: {}".format(error))

elif ch==4:

    print("4..TO DELETE ALL THE RECORDS FROM THE TABLE")

    k=input('are you sure you want to delete all records?yes/no')

    if k.upper()=='YES':


        t=input("Enter Table Name")

        try:


            Delete_all_rows = """truncate table """+t

```



```

elif ch==2:
    mycursor.execute('select * from product')
    print("\t\t\tPRODUCT TABLE\t\t\n")
    print(tableop.table(mycursor))
    ans=input('do you want the display of any other table??..yes/no:')
    print('\n')

def d3():
    ans='yes'
    t=input('enter the table name for display')
    while ans.upper()=='YES':
        if t.upper()=='PRODUCT':
            ide=input('enter product name:')
            query="select * from PRODUCT where PRODUCT_D=%s"
            mycursor.execute(query,(ide,))
            print(tableop.table(mycursor))
            if mycursor.rowcount==0:
                print('no matching records exist')
            ans=input('do you want to continue displaying?yes/no:')

        elif t.upper()=='CUSTOMER':
            mb=int(input('enter mobile no:'))
            query="select * from CUSTOMER where MOBILENO=%s"
            mycursor.execute(query,(mb,))


```

```

print(tableop.table(mycursor))

if mycursor.rowcount==0:
    print('no matching records exist')
    ans=input('do you want to continue displaying?yes/no:')
else :
    print('this table does not exist')
    break

def d5():
    import os
    an='yes'
    while an.upper()=='YES':
        fl=1
        lst=[]
        n=[]
        q=[]
        o=int(input('ENTER MOBILENO OF THE CUSTOMER TO GENERATE TAX INVOICE'))
        mycursor.execute('select * from customer where MOBILENO='+str(o))

        print(tableop.table(mycursor))
        if mycursor.rowcount==0:
            print('no such record exist')
            fl==0
        if fl==1:

```

```

query='select * from customer where MOBILENO=%s'
quer='select * from product where PRODUCT_D=%s'
mycursor.execute(query,(o,))
m=""
for i in mycursor:
    for j in i:
        lst.append(j)
    quer='select * from product where PRODUCT_D=%s'
    t=lst[4]
    datee=lst[5]
    k=list(t)

for f in range(3):#extracting quantity
    po=k.pop()
    q.append(po)
for j in k:
    m+=j
    mycursor.execute(quer,(m,))
for j in mycursor:
    for y in j:
        n.append(y)
#calculating gst
k=gstcalc.gstcl(int(n[3]),int(n[4]),int(q[1]))
jf=open('rec2.bin','r')
dta=jf.readlines()

```

```

for lop in dta:
    giuo=lop.split()
    for kop in giuo:
        if kop==str(o):
            invno=giuo[0]
            invo=1
            break

from reportlab.pdfgen import canvas#creating invoice
c = canvas.Canvas("invoice.pdf",pagesize=(200,250),bottomup=0)
c.translate(10,40)
c.translate(-10,-40)
c.setFont("Helvetica-Bold",10)
c.drawCentredString(110,20,"ANR'S FURNITURE COMPANY")
c.line(38,22,180,22)
c.setFont("Helvetica-Bold",5)
c.drawCentredString(30,30,' CUSTOMER ADDRESS:')
c.drawCentredString(35,40,'COMPANY ADDRESS:ABC')
c.drawCentredString(135,80,lst[2])
c.setFont("Helvetica-Bold",6)
c.drawCentredString(120,42,"GSTIN :"+'MH5345395435')
c.line(5,45,195,45)
c.drawCentredString(100,55,"TAX-INVOICE")
c.setFont("Helvetica-Bold",5)

```

```
c.drawRightString(70,70,"INVOICE No. :")
c.drawRightString(70,80,"DATE :")
c.drawRightString(70,90,"CUSTOMER NAME :")
c.drawRightString(70,100,"MOBILE No. :")
c.line(15,120,185,120)
c.drawCentredString(25,118,"HSN")
c.drawCentredString(75,118,"PRODUCT")
c.drawCentredString(125,118,"RATE")
c.drawCentredString(148,118,"QTY")
c.drawCentredString(173,118,"AMOUNT")
if invo!=1:
    c.drawCentredString(90,70,'1')
else:
    c.drawCentredString(90,70,invno)
    c.drawCentredString(90,80,str(datee))
    c.drawCentredString(90,90,lst[1])
    c.drawCentredString(90,100,str(lst[3]))
    c.drawCentredString(25,130,n[2])
    c.drawCentredString(75,130,n[1])
    c.drawCentredString(125,130,n[3])
    c.drawCentredString(148,130,q[1])
    c.drawCentredString(173,130,str(n[4]))
    c.line(35,108,35,220)
    c.line(115,108,115,220)
    c.line(135,108,135,220)
```

```

c.line(160,108,160,220)
c.line(15,220,185,220)
c.line(100,220,100,238)
c.drawString(20,235,"This is system generated invoice")
c.drawString(101,230,'total amount(excluding gst):')
c.drawString(101,235,'gst amount:')
c.drawString(101,240,'total amount(including gst):')
c.drawString(170,230,str(k[0]))
c.drawString(170,235,str(k[1]))
c.drawString(170,240,str(k[2]))
c.showPage()
c.save()

print('pl wait for a moment,the invoice is being generated.....')
os.startfile('invoice.pdf') #open adobe pdf reader
an=input('do you want to continue?yes/no:')

```

```

def d4():
    #product availability report
    lst=[]
    k=[]
    nj=[]

```

```

d={'jan':'01','feb':'02','mar':'03','apr':'04','may':'05','jun':'06','jul':'07','aug':'08','sep':'09','oct':'10','nov':'11','dec':'12'}

```

```

mycursor.execute('select PRODUCT_D from product')

```

```

for i in mycursor:
    lst.append(i)
for j in i:
    k.append(j)
fl=1
while fl==1:
    month=input('ENTER THE NAME OF THE MONTH WHOSE REPORT
YOU WANT TO GENERATE:')
    if month[0:3].lower() in d.keys():
        o=d[month[0:3].lower()]
        fl=0
    else:
        print('error in month entry,pl try again...')
        fl=1
    fl=2
while fl==2:
    pd=input("ENTER NAME OF THE PRODUCT WHOSE REPORT YOU
WANT TO ACCESS:")
    if pd in k:
        fl=3
    else:
        print("THIS PRODUCT DOES NOT EXIST,PL TRY AGAIN")
        fl=2

```

```
if month[0:3].lower() in ['jan','mar','may','jul','aug','oct','dec']:# to check for varying days in months
```

```
    moli='31'
```

```
elif month[0:3].lower()=='feb':
```

```
    if int(date.year)%400==0 and int(date.year)%100==0 :# checking leap year
```

```
        moli='29'
```

```
    else:
```

```
        moli='28'
```

```
else:
```

```
    moli='30'
```

```
ho="\\"+str(date.year)+\\"-o+\\"-01 '+'\\"+and '+'\\"+str(date.year)+\\"-o+\\"-moli+\\"#using escape characters to print string in date format
```

```
query=""select  
PRODUCT_ID,PRODUCT_D,HSN_CODE,GST_RATE,BASIC_COST from  
PRODUCT where PRODUCT_D=%s""
```

```
mycursor.execute(query,(pd,))
```

```
for mp in mycursor:
```

```
    rate=mp[3]
```

```
    basic=mp[4]
```

```
    print('\t\t\tPRODUCT DETAILS\t\t\t')
```

```
    mycursor.execute(query,(pd,))
```

```
    print(tableop.table(mycursor))
```

```
    mycursor.execute(query,(pd,))
```

```
    for i in mycursor:
```

```
        for gh in i:
```

```

nj.append(gh)

q1="select STOCK from product where PRODUCT_D=%s"
mycursor.execute(q1,(pd,))

for i in mycursor:
    m=i[0]
    print(str(m))

    ast="\\"+pd+'%'+'\\"'

    q2='select PRODUCT,AMOUNT from CUSTOMER where PRODUCT like' +
    ast + ' and DOP between '+ho

    mycursor.execute(q2)

    no=0

    money=0

    tax=0

    for jk in mycursor:
        lm=jk[0]
        money+=int(jk[1])

        for tk in lm:
            if tk.isdigit():
                kk=int(tk)
                ko=gstcalc.gstcl(int(rate),int(basic),int(kk))
                tax+=int(ko[1])

            no+=kk

    print("\t\t\t—PRODUCT REPORT————\t\t\t")

```

```

print("\t\t\tNAME OF THE PRODUCT--:"+pd)
print("\t\t|-----| ")
print("\t\t| CURRENT STOCK AVAILIBILITY| SOLD |")
print("\t\t|-----| ")
print("\t\t| "+str(m)+" | "+str(no))
print("\t\t|-----| ")
print("\n")
print('CUSTOMERS WHO HAVE PURCHASED THE PRODUCT: '+pd.upper())
q3="select NAME,MOBILENO,address,DOP from CUSTOMER where PRODUCT_ID=%s and DOP between" +ho
mycursor.execute(q3,(nj[0],))
print(tableop.table(mycursor))
print("\t\t\tYOU EARNED AN AMOUNT OF Rs "+str(money)+"/- BY SELLING "+pd)
print("\n")
print("\t\t\tYOU COLLECTED GST AMOUNTING TO Rs "+str(tax)+"/- BY SELLING "+pd)
print("\n")
if int(money)>60000:
    print("\t\t\tWOW, YOUR "+pd+" SALES ARE BOOMING!")
elif int(money)==0:
    print("\t\t\tPOOR SALES! YOU HAVE INCURRED A HUGE LOSS, YOU NEED TO INCREASE YOUR "+pd+" SALES")
elif int(money)<=60000:
    print("\t\t\tNOT SUFFICIENT ENOUGH, YOU NEED TO INCREASE YOUR SALES")

```

```

print('\n')
print("\t\t\tNOTE: THIS DATA IS FOR THE MONTH OF "+month.upper())

def d6():
    f=open("invoicr.bin","rb")
    print('\n')
    try:
        for l in range(1000):
            k=pickle.load(f)
            print(k)
    except:
        print('end of records')

def gst():
    while True:
        print('-----MENU-----\n')
        print('1.OPERATIONS AND UPDATIONS OF YOUR TABLE')
        print('2.DISPLAY OF CUSTOMER AND PRODUCT TABLE')
        print('3.DISPLAY OF RECORDS SELECTIVELY')
        print('4 STOCK INFORMATION')
        print('5 INVOICE GENERATION')
        print('6 INVOICE LIST WITH CUSTOMER INFO')
        print('7 EXIT')

    try:

```

```

ch=int(input('enter your choice no:'))

if ch==1:
    d1()
elif ch==2:
    d2()
elif ch==3:
    d3()
elif ch==5:
    d5()
elif ch==4:
    d4()
elif ch==6:
    d6()
elif ch==7:
    print('\n')
    print('-----' + '😊😊SEE YOU SOON---.😊😊-' + '-----')
    exit()
else :
    print('no such choice exists,pl refer menu and enter properly')

except:
    print('error in data entry..pl try again')

```

```
#password
str1='123456'
for i in range(3):
    pwd=input('enter user password:')

    if pwd!=str1:
        if i in [0,1]:
            print('incorrect password! please try again...\n')
            print('\n')
        else:
            print('\t\t\tWELCOME XYZ!!\t\t\t\n')
            print('\t\t\tWELCOME TO GST INVOICE SYSTEM\t\t\t\n')
            gst()

    if i==2:
        print('you have entered wrong password too many times,please login again...')
```

### **Modules:**

```
f=open("verb.bin", 'a')
```

```
f.write('hello\n')
```

```
# module name: gstcalc.py
```

```
def gstcl(GST_RATE,AMOUNT,qty):
```

```
    k=AMOUNT*qty
```

```
    gst=((AMOUNT*qty)*GST_RATE)/100
```

```
    tc=(AMOUNT*qty)+gst
```

```
    return k,gst,tc
```

```
# module name: tableop.py
```

```
from prettytable import PrettyTable
```

```
def table(mycursor):
```

```
    s=mycursor.column_names
```

```
    x=PrettyTable()
```

```
    x.field_names=s
```

```
    for l in mycursor:
```

```
        x.add_row(l)
```

```
    if x.rowcount==0:
```

```
        print('no records matching query exists..')
```

```
    return x
```

## OUTPUT:

### MySQL:

```
C:\ Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.18363.1316]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\SERENA>cd "C:\Users\SERENA\connector\New folder\bin"

C:\Users\SERENA\connector\New folder\bin>mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 1
Server version: 5.6.50-log MySQL Community Server (GPL)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases
      -> show databases;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'show databases' at line 2
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| bpositive |
| mysql |
| performance_schema |
| test |
+-----+
5 rows in set (0.47 sec)

mysql> use bpositive;
Database changed
mysql> describe customer;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| PRODUCT_ID | int(11) | NO  |   | NULL    |       |
| NAME        | varchar(20) | YES |   | NULL    |       |
| ADDRESS     | varchar(100) | YES |   | NULL    |       |
| MOBILE_NO   | int(11) | NO  | PRI | NULL    |       |
| PRODUCT     | varchar(50) | YES |   | NULL    |       |
| DOP         | date    | YES |   | NULL    |       |
| AMOUNT      | int(11) | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
7 rows in set (0.81 sec)

mysql> describe student;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| ID    | int(5) | NO  | PRI | NULL    |       |
| NAME  | varchar(15) | YES |   | NULL    |       |
| CLASS | varchar(15) | YES |   | NULL    |       |
| MARKS | int(5) | YES |   | NULL    |       |
| SEX   | varchar(15) | YES |   | NULL    |       |
| sec   | varchar(5) | YES |   | A       |       |
+-----+-----+-----+-----+-----+
6 rows in set (0.19 sec)
```

## **Displaying the records:**

enter user password:123456

WELCOME XYZ!!

WELCOME TO GST INVOICE SYSTEM

MENU.....

- 1.OPERATIONS AND UPDATIONS OF YOUR TABLE
- 2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
- 3.DISPLAY OF RECORDS SELECTIVELY
- 4 STOCK INFORMATION
- 5 INVOICE GENERATION
- 6 INVOICE LIST WITH CUSTOMER INFO
- 7 EXIT

enter your choice no:2

MENU.....

- 1.DISPLAY OF CUSTOMER TABLE
- 2.DISPLAY OF PRODUCT TABLE

enter your choice no:1

CUSTOMER TABLE

PRODUCT_ID	NAME	ADDRESS	MOBILE_NO	PRODUCT	DOP	AMOUNT
5908	Safiya Hafeez	Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai	748957348	Mini Stool(5)	2021-01-10	5775
6907	Alfio Fdo	Al/12, Dinah Appartments, Sector-36, Nerul, Navi Mumbai	789473330	Teapoy(4)	2021-01-10	4480
5908	Akbar Al Azad	H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai	889034834	Mini Stool(5)	2021-01-10	5775
7899	Umesh Maganty	NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai	890854930	Window(2)	2021-01-10	88000
5056	Ajinder Mann	Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai	894085944	Sectional Sofa(4)	2021-01-10	45995
6570	Ylves Larock	Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai	948350498	Table(8)	2021-01-10	23976
6570	Wiseroy Amerkar	Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai	957324580	Table(8)	2021-01-10	23976
9832	Ishpreet Arora	B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai	983273687	Cupboard(7)	2021-01-10	79100
6907	Terence D'souza	N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai	990894493	Teapoy(4)	2021-01-10	4480
8392	Unnikrishnan Nair	K/4, Baljeet Apartments, Sector- 20, Vashi, Navi Mumbai	995789454	Bench(9)	2021-01-10	49940

do you want the display of any other table??..yes/no:yes

MENU.....

- 1.DISPLAY OF CUSTOMER TABLE
- 2.DISPLAY OF PRODUCT TABLE

enter your choice no:2

PRODUCT TABLE

```

*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help

1.DISPLAY OF CUSTOMER TABLE
2.DISPLAY OF PRODUCT TABLE
enter your choice no:2
PRODUCT TABLE

+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |
+-----+-----+-----+-----+-----+-----+
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |
| 3024 | Accent Chest | CST376 | 13 | 6999 | 500 |
| 3048 | Rocking Chair | RCH489 | 12 | 20000 | 200 |
| 4781 | Chair | CHR208 | 10 | 500 | 45 |
| 4857 | Sofa | SFA784 | 14 | 7999 | 300 |
| 5056 | Sectional Sofa | SSF281 | 15 | 9999 | 996 |
| 5908 | Mini Stool | MST847 | 10 | 1050 | 195 |
| 6570 | Table | TBL287 | 11 | 2700 | 39 |
| 6907 | Teapoy | TPY849 | 12 | 1000 | 84 |
| 7899 | Window | WDW199 | 10 | 40000 | 4 |
| 8392 | Bench | BNC280 | 11 | 4999 | 332 |
| 8596 | Ladder | LDR490 | 15 | 1200 | 100 |
| 9504 | Long Stool | LST452 | 12 | 2000 | 500 |
| 9721 | Side Table | STB298 | 14 | 1590 | 10 |
| 9832 | Cupboard | CPD789 | 13 | 10000 | 93 |
+-----+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:no

-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5 INVOICE GENERATION
6 INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
-----MENU-----

1.INSERTION OF RECORDS
2.UPDATION OF RECORD DATA
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT

enter your choice:1
enter the name of the table in which you want to insert records:product

```

## MySQL:

```
mysql> select * from customer;
```

PRODUCT_ID	NAME	ADDRESS	MOBILE_NO	PRODUCT	DOP	AMOUNT
5908	Safiya Hafeez	Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai	748957348	Mini Stool(5)	2021-01-10	5775
6907	Alfio Fdo	A1/12, Dinah Appartments, Sector- 2, Nerul, Navi Mumbai	789473330	Teapoy(4)	2021-01-10	4480
5908	Akbar Al Azad	H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai	889034834	Mini Stool(5)	2021-01-10	5775
7899	Umesh Maganty	NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai	890854930	Window(2)	2021-01-10	88000
5056	Ajinder Mann	Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai	894085944	Sectional Sofa(4)	2021-01-10	45995
6570	Ylves Larock	Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai	948350498	Table(8)	2021-01-10	23976
6570	Wiseroy Amerkar	Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai	957324580	Table(8)	2021-01-10	23976
9832	Ishpreet Arora	B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai	983273687	Cupboard(7)	2021-01-10	79100
6907	Terence D'souza	N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai	990894493	Teapoy(4)	2021-01-10	4480
8392	Unnikrishnan Nair	K/4, Baljeet Apartments, Sector- 20, Vashi, Navi Mumbai	995789454	Bench(9)	2021-01-10	49940

```
10 rows in set (0.00 sec)
```

```
mysql> select * from product;
```

PRODUCT_ID	PRODUCT_D	HSN_CODE	GST_RATE	BASIC_COST	STOCK
1001	Bed	FUB840	12	12000	3
3024	Accent Chest	CST376	13	6999	500
3048	Rocking Chair	RCH489	12	20000	200
4781	Chair	CHR208	10	500	45
4857	Sofa	SFA784	14	7999	300
5056	Sectional Sofa	SSF281	15	9999	996
5908	Mini Stool	MST847	10	1050	200
6570	Table	TBL287	11	2700	39
6907	Teapoy	TPY849	12	1000	84
7899	Window	WDW199	10	40000	4
8392	Bench	BNC280	11	4999	332
8596	Ladder	LDR490	15	1200	100
9504	Long Stool	LST452	12	2000	500
9721	Side Table	STB298	14	1590	10
9832	Cupboard	CPD789	13	10000	93

```
15 rows in set (0.00 sec)
```

```
mysql>
```

## Adding new products:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
-----MENU-----
1.INSERTION OF RECORDS
2.UPDATION OF RECORD DATA
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT
enter your choice:1
enter the name of the table in which you want to insert records:product
how many records do you want to enter?:2
enter product id:9508
enter product: Mini Sofa
enter hsn code of the product: MSF444
enter gst rate of the product:16
enter basic cost : 7000
enter product quantity available:20

record successfully inserted

enter product id:3481
enter product: Mini Bed
enter hsn code of the product: MBD378
enter gst rate of the product:17
enter basic cost : 3000
enter product quantity available:10

record successfully inserted

do you want to continue inserting records in any other table?yes/no:no
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
-----MENU-----
```

## Adding new customers:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
enter your choice no:1
-----MENU-----
1.INSERTION OF RECORDS
2.UPDATION OF RECORD DATA
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT

enter your choice:1
enter the name of the table in which you want to insert records:customer
how many records do you want to enter?:3
enter MOBILE_NO:787078808
enter customer name:Yumi Zulu
enter address:N-5/901, Sheeja Towers, Sector- 12, Sanpada, Navi Mumbai
invoice no is: 833688
record added successfully to record book
enter product as product(qty<10) :Long Stool(2)

Yumi Zulu HAS INCURRED AN AMOUNT OF Rs 4480.0 /-

record successfully inserted

enter MOBILE_NO:
===== RES
enter user password:123456
          WELCOME XYZ !!

          WELCOME TO GST INVOICE SYSTEM

-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
-----MENU-----
1.INSERTION OF RECORDS
2.UPDATION OF RECORD DATA
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT

enter your choice:1
enter the name of the table in which you want to insert records:customer
how many records do you want to enter?:2
enter MOBILE_NO:786957954
enter customer name:Gigi Hadid
enter address:Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai
```

Displaying message asking the employee to update the quantity of a particular product which is less in no

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
enter address:Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai
invoice no is: 8429
record added successfully to record book
enter product as product(qty<10):Window(5)
Window currently not available,pl update the corresponding stock value
enter the stock value>5 for updationWindow(4)
error in data entry...
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
-----MENU-----
1.INSERTION OF RECORDS
2.UPDATION OF RECORD DATA
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT

enter your choice:1
enter the name of the table in which you want to insert records:customer
how many records do you want to enter?:2
enter MOBILE_NO:786957954
enter customer name:Gigi Hadid
enter address:Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai
invoice no is: 876721
record added successfully to record book
enter product as product(qty<10):Window(5)
Window currently not available,pl update the corresponding stock value
enter the stock value>5 for updation4
updation successful...

Gigi Hadid HAS INCURRED AN AMOUNT OF Rs 220000.0 /-

record successfully inserted

enter MOBILE_NO:869783749
enter customer name:Katherine Hudson
enter address:Plot No. 1, Katy Perry's Home, Sector- 1, Juhi Nagar, Navi Mumbai
invoice no is: 395734
record added successfully to record book

Katherine Hudson HAS INCURRED AN AMOUNT OF Rs 220000.0 /-

record successfully inserted
```

## Adding existing customer for purchasing more products:

```

enter your choice no:1
MENU
1. INSERTION OF RECORDS
2. UPDATION OF RECORD DATA
3. DELETION OF RECORDS
4. DELETION OF ALL RECORDS
5. EXIT

enter your choice:1
enter the name of the table in which you want to insert records:customer
how many records do you want to enter?:1
enter mobileno:5995
this person already exists, entering personal info on the basis of previous data.....
invoice no is: 852849
record added successfully to record book
enter product as product (qty<10):TV_SET
this product does not exist
enter product as product (qty<10):TV_SET(2)

MURTHY K HAS INCURRED AN AMOUNT OF Rs 118000.0 /-

record successfully inserted
do you want to continue inserting records in any other table?yes/no:no
-MENU-
1. OPERATIONS AND UPDATIONS OF YOUR TABLE
2. DISPLAY OF CUSTOMER AND PRODUCT TABLE
3. DISPLAY OF RECORDS SELECTIVELY
4. STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO

```

PRODUCT_ID	NAME	ADDRESS	MOBILENO	PRODUCT	DOP	AMOUNT
182	susa	nandini apt sec-23 deru link road vasai maharashtra	1234564444	TABLE (2)	2020-05-02	33000
182	MALLU	WREER	1234567878	TABLE (6)	2020-05-16	106200
182	HELEN	SDF	1111111111	TABLE (2)	2020-03-11	35400
122	shardha	OIP	121	SOFA (2)	2020-03-15	141600
122	AMIT TRIVEDI	MOL	1234565656	SOFA (2)	2020-12-16	141600
122	susa	nandini apt sec-23 deru link road vasai maharashtra	1234564444	SOFA (2)	2020-12-26	141600
665	RITIKA	-	42316	AC (1)	2020-12-27	79100
665	SARAA	-	1	AC (1)	2021-01-01	79100
665	KAILASH	-	3	AC (1)	2021-01-01	79100
665	QWE	-	2	AC (1)	2021-01-01	79100
665	ALOK	-	5	AC (1)	2021-01-01	79100
665	TERE	-	6	AC (1)	2021-01-01	79100
665	VARDHA	-	8	AC (1)	2021-01-02	79100
182	SHLOKA	-	9345	TABLE (2)	2021-01-02	35400
122	MTHILA	-	954675	SOFA (2)	2021-01-03	141600
544	JAYACHANDRAN	-	64758	CUPBOARD (2)	2021-01-03	108000
544	MURTHY K	-	5995	cupboard(1)	2021-01-05	54000
665		-	354676	AC (1)	2021-01-09	79100
182	SERENA	-	34256	TABLE (1)	2021-01-10	17700
665	ERTIGA	-	45346	AC (1)	2021-01-10	79100
665	aser	-	1111	AC (9)	2021-01-10	711900
182	neerja	-	765735678	TABLE (1)	2021-01-11	16950
333	sunita s	-	4635472	TV_SET (1)	2021-01-11	59000
333	MURTHY K	-	5995	TV_SET (2)	2021-01-13	118000

## Displaying products and customers after adding them:

```
Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
record successfully inserted

do you want to continue inserting records in any other table?yes/no:no
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:2
MENU.....
1.DISPLAY OF CUSTOMER TABLE
2.DISPLAY OF PRODUCT TABLE
enter your choice no:1
CUSTOMER TABLE
+-----+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+-----+-----+-----+-----+-----+-----+
| 5908 | Safiya Hafeez | Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai | 748957348 | Mini Stool(5) | 2021-01-10 | 5775 |
| 7899 | Gigi Hadid | Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai | 786957954 | Window(5) | 2021-01-10 | 220000 |
| 9504 | Yumi Zulu | N-5/901, Sheeja Towers, Sector- 12, Sanpada, Navi Mumbai | 787078808 | Long Stool(2) | 2021-01-10 | 4480 |
| 6907 | Alfio Fdo | A1/12, Dinah Appartments, Sector-36, Nerul, Navi Mumbai | 789473330 | Teapoy(4) | 2021-01-10 | 4480 |
| 7899 | Katherine Hudson | Plot No. 1, Katy Perry's Home, Sector- 1, Juhi Nagar, Navi Mumbai | 869783749 | Window(5) | 2021-01-10 | 220000 |
| 5908 | Akbar Al Azad | H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai | 889034834 | Mini Stool(5) | 2021-01-10 | 5775 |
| 7899 | Umesh Maganty | NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai | 890854930 | Window(2) | 2021-01-10 | 88000 |
| 5056 | Ajinder Mann | Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai | 894085944 | Sectional Sofa(4) | 2021-01-10 | 45995 |
| 6570 | Ylves Larock | Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai | 948350498 | Table(8) | 2021-01-10 | 23976 |
| 6570 | Wiseroy Amerkar | Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai | 957324580 | Table(8) | 2021-01-10 | 23976 |
| 9832 | Ishpreet Arora | B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai | 983273687 | Cupboard(7) | 2021-01-10 | 79100 |
| 6907 | Terence D'souza | N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai | 990894493 | Teapoy(4) | 2021-01-10 | 4480 |
| 8392 | Unnikrishnan Nair | K/4, Baljeet Appartments, Sector- 20, Vashi, Navi Mumbai | 995789454 | Bench(9) | 2021-01-10 | 49940 |
+-----+-----+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:yes

-----MENU-----
1.DISPLAY OF CUSTOMER TABLE
2.DISPLAY OF PRODUCT TABLE
enter your choice no:2
PRODUCT TABLE
```

```
do you want the display of any other table??..yes/no:yes
```

MENU.....

1.DISPLAY OF CUSTOMER TABLE  
2.DISPLAY OF PRODUCT TABLE

enter your choice no:2

PRODUCT TABLE

PRODUCT_ID	PRODUCT_D	HSN_CODE	GST_RATE	BASIC_COST	STOCK
1001	Bed	FUB840	12	12000	3
3024	Accent Chest	CST376	13	6999	500
3048	Rocking Chair	RCH489	12	20000	200
3481	Mini Bed	MBD378	17	3000	10
4781	Chair	CHR208	10	500	45
4857	Sofa	SFA784	14	7999	300
5056	Sectional Sofa	SSF281	15	9999	996
5908	Mini Stool	MST847	10	1050	195
6570	Table	TBL287	11	2700	39
6907	Teapoy	TPY849	12	1000	84
7899	Window	WDW199	10	40000	3
8392	Bench	BNC280	11	4999	332
8596	Ladder	LDR490	15	1200	100
9504	Long Stool	LST452	12	2000	498
9508	Mini Sofa	MSF444	16	7000	20
9721	Side Table	STB298	14	1590	10
9832	Cupboard	CPD789	13	10000	93

```
do you want the display of any other table??..yes/no:no
```

## MySQL:

```
mysql> select * from customer;
```

PRODUCT_ID	NAME	ADDRESS	MOBILE_NO	PRODUCT	DOP	AMOUNT
5908	Safiya Hafeez	Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai	748957348	Mini Stool(5)	2021-01-10	5775
7899	Gigi Hadid	Plot No. 19, Malik's Home, Sector- 30, Juhu Nagar, Navi Mumbai	786957954	Window(5)	2021-01-10	220000
9504	Yumi Zulu	N-5/901, Sheeba Towers, Sector- 12, Sanpada, Navi Mumbai	787078808	Long Stool(2)	2021-01-10	4480
6907	Alfio Fdo	A1/12, Dinah Apartments, Sector- 2, Nerul, Navi Mumbai	789473330	Teapoy(4)	2021-01-10	4480
7899	Katherine Hudson	Plot No. 1, Katy Perry's Home, Sector- 1, Juhu Nagar, Navi Mumbai	869783749	Window(5)	2021-01-10	220000
5908	Akbar Al Azad	HS/209, Kaanthu Society, Sector-22, Belapur, Navi Mumbai	889034834	Mini Stool(5)	2021-01-10	5775
7899	Umesh Maganty	NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai	890854030	Window(2)	2021-01-10	88000
5056	Ajinder Mann	Plot No. 17, Dharmander Haveli, Sector- 50, Seawoods, Navi Mumbai	894085944	Sectional Sofa(4)	2021-01-10	45995
6570	Ylves Larock	Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai	948350498	Table(8)	2021-01-10	23976
6570	Wiseroy Amerkar	Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai	957324580	Table(8)	2021-01-10	23976
9832	Ishpreet Arora	B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai	983273687	Cupboard(7)	2021-01-10	79100
6907	Terence D'souza	N-14/304, Juhu Towers, Sector-44, Panvel, Navi Mumbai	990894493	Teapoy(4)	2021-01-10	4480
8392	Unnikrishnan Nair	K/4, Baljeet Apartments, Sector- 20, Vashi, Navi Mumbai	995789454	Bench(9)	2021-01-10	49940

```
13 rows in set (0.00 sec)
```

```
mysql> select * from product;
```

PRODUCT_ID	PRODUCT_D	HSN_CODE	GST_RATE	BASIC_COST	STOCK
1001	Bed	FUB840	12	12000	3
3024	Accent Chest	CST376	13	6999	500
3048	Rocking Chair	RCH489	12	20000	200
3481	Mini Bed	MBD378	17	3000	10
4781	Chair	CHR208	10	500	45
4857	Sofa	SFA784	14	7999	300
5056	Sectional Sofa	SSF281	15	9999	996
5908	Mini Stool	MST847	10	1050	200
6570	Table	TBL287	11	2700	39
6907	Teapoy	TPY849	12	1000	84
7899	Window	WDW199	10	40000	3
8392	Bench	BNC280	11	4999	332
8596	Ladder	LDR490	15	1200	100
9504	Long Stool	LST452	12	2000	498
9508	Mini Sofa	MSF444	16	7000	20
9721	Side Table	STB298	14	1590	10
9832	Cupboard	CPD789	13	10000	93

```
17 rows in set (0.00 sec)
```

```
mysql>
```

## Deleting a customer:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
enter column name to search withNAME
enter value of NAME to search withGigi Hadid
displaying record before deleting
+-----+-----+-----+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+-----+-----+-----+
| 7899 | Gigi Hadid | Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai | 786957954 | Window(5) | 2021-01-10 | 220000 |
+-----+-----+-----+-----+
do you want to delete the above record/s?yes/no:yes

Record Deleted successfully
```

## Updating a product:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5 INVOICE GENERATION
6 INVOICE LIST WITH CUSTOMER INFO
7 EXIT
enter your choice no:1
-----MENU-----
1 . INSERTION OF RECORDS
2 . UPDATION OF RECORD DATA
3 . DELETION OF RECORDS
4 . DELETION OF ALL RECORDS
5 . EXIT

enter your choice:2
enter the table name for updatonproduct
+-----+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |
+-----+-----+-----+-----+-----+-----+
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |
| 3024 | Accent Chest | CST376 | 13 | 6999 | 500 |
| 3048 | Rocking Chair | RCH489 | 12 | 20000 | 200 |
| 3481 | Mini Bed | MBD378 | 17 | 3000 | 10 |
| 4781 | Chair | CHR208 | 10 | 500 | 45 |
| 4857 | Sofa | SFA784 | 14 | 7999 | 300 |
| 5056 | Sectional Sofa | SSF281 | 15 | 9999 | 996 |
| 5908 | Mini Stool | MST847 | 10 | 1050 | 195 |
| 6570 | Table | TBL287 | 11 | 2700 | 39 |
| 6907 | Teapoy | TPY849 | 12 | 1000 | 84 |
| 7899 | Window | WDW199 | 10 | 40000 | 3 |
| 8392 | Bench | BNC280 | 11 | 4999 | 332 |
| 8596 | Ladder | LDR490 | 15 | 1200 | 100 |
| 9504 | Long Stool | LST452 | 12 | 2000 | 498 |
| 9508 | Mini Sofa | MSF444 | 16 | 7000 | 20 |
| 9721 | Side Table | STB298 | 14 | 1590 | 10 |
| 9832 | Cupboard | CPD789 | 13 | 10000 | 93 |
+-----+-----+-----+-----+-----+-----+
enter column parameter of the product to be updatedPRODUCT_D
enter value of the column PRODUCT_D to search withWindow
how many columns do you want to update?1
enter column namePRODUCT_D
enter new value for the columnsofa cum Bed
updation successful...
do you want to continue updating records in this table?yes/no:no
-----MENU-----
1 . INSERTION OF RECORDS
2 . UPDATION OF RECORD DATA
3 . DELETION OF RECORDS
4 . DELETION OF ALL RECORDS
5 . EXIT
```

## Displaying the records after deleting and updating them:

```
"Python 3.8.5 Shell"
File Edit Shell Debug Options Window Help
3.DELETION OF RECORDS
4.DELETION OF ALL RECORDS
5.EXIT
enter your choice:1
enter the name of the table in which you want to insert records:customer
how many records do you want to enter?:
=====
RESTART: C:\Users\SERENA\Desktop\1.py =====
enter user password:123456
WELCOME XYZ!!

WELCOME TO GST INVOICE SYSTEM

-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:2
MENU.....
1.DISPLAY OF CUSTOMER TABLE
2.DISPLAY OF PRODUCT TABLE
enter your choice no:1
CUSTOMER TABLE
+---+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+---+
| 5908 | Safiya Hafeez | Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai | 748957348 | Mini Stool(5) | 2021-01-10 | 5775 |
| 9504 | Yumi Zulu | N-5/901, Sheeja Towers, Sector- 12, Sanpada, Navi Mumbai | 787078808 | Long Stool(2) | 2021-01-10 | 4480 |
| 6907 | Alfio Fdo | A1/12, Dinah Appartments, Sector-36, Nerul, Navi Mumbai | 789473330 | Teapoy(4) | 2021-01-10 | 4480 |
| 7899 | Katherine Hudson | Plot No. 1, Katy Perry's Home, Sector- 1, Juhu Nagar, Navi Mumbai | 869783749 | Window(5) | 2021-01-10 | 220000 |
| 5908 | Akbar Al Azad | H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai | 889034834 | Mini Stool(5) | 2021-01-10 | 5775 |
| 7899 | Umesh Maganty | NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai | 890854930 | Window(2) | 2021-01-10 | 88000 |
| 5056 | Ajinder Mann | Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai | 894085944 | Sectional Sofa(4) | 2021-01-10 | 45995 |
| 6570 | Ylves Larock | Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai | 948350498 | Table(8) | 2021-01-10 | 23976 |
| 6570 | Wiseroy Amerkar | Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai | 957324580 | Table(8) | 2021-01-10 | 23976 |
| 9832 | Ishpreet Arora | B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai | 983273687 | Cupboard(7) | 2021-01-10 | 79100 |
| 6907 | Terence D'souza | N-14/304, Juhu Towers, Sector-44, Panvel, Navi Mumbai | 990894493 | Teapoy(4) | 2021-01-10 | 4480 |
| 8392 | Unnikrishnan Nair | K/4, Baljeet Appartments, Sector- 20, Vashi, Navi Mumbai | 995789454 | Bench(9) | 2021-01-10 | 49940 |
+---+
do you want the display of any other table??..yes/no:yes

-----MENU-----
1.DISPLAY OF CUSTOMER TABLE
2.DISPLAY OF PRODUCT TABLE
enter your choice no:2
PRODUCT TABLE
```

```

* Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help

+-----+-----+-----+-----+-----+-----+
| 7899 | Katherine Hudson | Plot No. 1, Katy Perry's Home, Sector- 1, Juhi Nagar, Navi Mumbai | 869783749 | Window(5) | 2021-01-10 | 220000 |
| 5908 | Akbar Al Azad | H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai | 889034834 | Mini Stool(5) | 2021-01-10 | 5775 |
| 7899 | Umesh Maganty | NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai | 890854930 | Window(2) | 2021-01-10 | 88000 |
| 5056 | Ajinder Mann | Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai | 894085944 | Sectional Sofa(4) | 2021-01-10 | 45995 |
| 6570 | Ylves Larock | Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai | 948350498 | Table(8) | 2021-01-10 | 23976 |
| 6570 | Wiseroy Amerkar | Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai | 957324580 | Table(8) | 2021-01-10 | 23976 |
| 9832 | Ishpreet Arora | B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai | 983273687 | Cupboard(7) | 2021-01-10 | 79100 |
| 6907 | Terence D'souza | N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai | 990894493 | Teapoy(4) | 2021-01-10 | 4480 |
| 8392 | Unnikrishnan Nair | K/4, Baljeet Appartments, Sector- 20, Vashi, Navi Mumbai | 995789454 | Bench(9) | 2021-01-10 | 49940 |
+-----+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:yes

MENU.....  

1.DISPLAY OF CUSTOMER TABLE  

2.DISPLAY OF PRODUCT TABLE  

enter your choice no:2  

PRODUCT TABLE  

+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |
+-----+-----+-----+-----+-----+-----+
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |
| 3024 | Accent Chest | CST376 | 13 | 6999 | 500 |
| 3048 | Rocking Chair | RCH489 | 12 | 20000 | 200 |
| 3481 | Mini Bed | MBD378 | 17 | 3000 | 10 |
| 4781 | Chair | CHR208 | 10 | 500 | 45 |
| 4857 | Sofa | SFA784 | 14 | 7999 | 300 |
| 5056 | Sectional Sofa | SSF281 | 15 | 9999 | 996 |
| 5908 | Mini Stool | MST847 | 10 | 1050 | 195 |
| 6570 | Table | TBL287 | 11 | 2700 | 39 |
| 6907 | Teapoy | TPY849 | 12 | 1000 | 84 |
| 7899 | Sofa cum Bed | WDW199 | 10 | 40000 | 3 |
| 8392 | Bench | BNC280 | 11 | 4999 | 332 |
| 8596 | Ladder | LDR490 | 15 | 1200 | 100 |
| 9504 | Long Stool | LST452 | 12 | 2000 | 498 |
| 9508 | Mini Sofa | MSF444 | 16 | 7000 | 20 |
| 9721 | Side Table | STB298 | 14 | 1590 | 10 |
| 9832 | Cupboard | CPD789 | 13 | 10000 | 93 |
+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:no

-----MENU-----  

1.OPERATIONS AND UPDATIONS OF YOUR TABLE  

2.DISPLAY OF CUSTOMER AND PRODUCT TABLE  

3.DISPLAY OF RECORDS SELECTIVELY  

4 STOCK INFORMATION  

5 INVOICE GENERATION  

6 INVOICE LIST WITH CUSTOMER INFO  

7 EXIT  

enter your choice no:

```

## MySQL:

```
mysql> select * from product;
```

PRODUCT_ID	PRODUCT_D	HSN_CODE	GST_RATE	BASIC_COST	STOCK
1001	Bed	FUB840	12	12000	3
3024	Accent Chest	CST376	13	6999	500
3048	Rocking Chair	RCH489	12	20000	200
3481	Mini Bed	MBD378	17	3000	10
4781	Chair	CHR208	10	500	45
4857	Sofa	SFA784	14	7999	300
5056	Sectional Sofa	SSF281	15	9999	996
5908	Mini Stool	MST847	10	1050	200
6570	Table	TBL287	11	2700	39
6907	Teapoy	TPY849	12	1000	84
7899	Sofa cum Bed	WDW199	10	40000	3
8392	Bench	BNC280	11	4999	332
8596	Ladder	LDR490	15	1200	100
9504	Long Stool	LST452	12	2000	498
9508	Mini Sofa	MSF444	16	7000	20
9721	Side Table	STB298	14	1590	10
9832	Cupboard	CPD789	13	10000	93

```
17 rows in set (0.00 sec)
```

```
mysql> select * from customer;
```

PRODUCT_ID	NAME	ADDRESS	MOBILE_NO	PRODUCT	DOP	AMOUNT
5908	Safiya Hafeez	Plot No. 15, Ali Mannat, Sector- 2, Nerul, Navi Mumbai	748957348	Mini Stool(5)	2021-01-10	5775
9504	Yumi Zulu	N-5/901, Sheeja Towers, Sector- 12, Sanpada, Navi Mumbai	787078808	Long Stool(2)	2021-01-10	4480
6907	Alfio Fdo	A1/12, Dinah Appartments, Sector- 2, Nerul, Navi Mumbai	789473330	Teapoy(4)	2021-01-10	4480
7899	Katherine Hudson	Plot No. 1, Katy Perry's Home, Sector- 1, Juhu Nagar, Navi Mumbai	869783749	Window(5)	2021-01-10	220000
5908	Akbar Al Azad	H5/209, Kaantha Society, Sector-22, Belapur, Navi Mumbai	889034834	Mini Stool(5)	2021-01-10	5775
7899	Umesh Maganty	NL- 6/14, Indraprastha Housing Society, Sector-10, Panvel, Navi Mumbai	890854930	Window(2)	2021-01-10	88000
5056	Ajinder Mann	Plot No. 17, Dharminder Haveli, Sector- 50, Seawoods, Navi Mumbai	894085944	Sectional Sofa(4)	2021-01-10	45995
6570	Ylves Larock	Plot No.24, Larock's Mansion, Sector-28, Belapur, Navi Mumbai	948350498	Table(8)	2021-01-10	23976
6570	Wiseroy Amerkar	Plot No. 2, Amerkar and Sons Home, Sector- 38, Seawoods, Navi Mumbai	957324580	Table(8)	2021-01-10	23976
9832	Ishpreet Arora	B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai	983273687	Cupboard(7)	2021-01-10	79100
6907	Terence D'souza	N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai	990894493	Teapoy(4)	2021-01-10	4480
8392	Unnikrishnan Nair	K/4, Baljeet Apartments, Sector- 20, Vashi, Navi Mumbai	995789454	Bench(9)	2021-01-10	49940

```
12 rows in set (0.00 sec)
```

```
mysql>
```

## **Deleting all records:**

```
-----MENU-----  
1.OPERATIONS AND UPDATIONS OF YOUR TABLE  
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE  
3.DISPLAY OF RECORDS SELECTIVELY  
4 STOCK INFORMATION  
5 INVOICE GENERATION  
6 INVOICE LIST WITH CUSTOMER INFO  
7.EXIT  
enter your choice no:1  
  
-----MENU-----  
1.INSERTION OF RECORDS  
2.UPDATION OF RECORD DATA  
3.DELETION OF RECORDS  
4.DELETION OF ALL RECORDS  
5.EXIT  
  
enter your choice:4  
4..TO DELETE ALL THE RECORDS FROM THE TABLE  
are you sure you want to delete all records?yes/no yes  
Enter Table Nameproduct  
  
All Record Deleted successfully  
  
-----MENU-----  
1.INSERTION OF RECORDS  
2.UPDATION OF RECORD DATA  
3.DELETION OF RECORDS  
4.DELETION OF ALL RECORDS  
5.EXIT  
  
enter your choice:4  
4..TO DELETE ALL THE RECORDS FROM THE TABLE  
are you sure you want to delete all records?yes/no yes  
Enter Table Namecustomer  
  
All Record Deleted successfully  
  
-----MENU-----  
1.INSERTION OF RECORDS  
2.UPDATION OF RECORD DATA  
3.DELETION OF RECORDS  
4.DELETION OF ALL RECORDS  
5.EXIT  
  
enter your choice:5  
-----MENU-----  
1.OPERATIONS AND UPDATIONS OF YOUR TABLE  
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE  
3.DISPLAY OF RECORDS SELECTIVELY  
4 STOCK INFORMATION  
5 INVOICE GENERATION  
6 INVOICE LIST WITH CUSTOMER INFO
```

## Displaying records after deleting all of them:

```
3 .DELETION OF RECORDS
4 .DELETION OF ALL RECORDS
5 .EXIT
enter your choice:5
-----MENU-----
1 .OPERATIONS AND UPDATIONS OF YOUR TABLE
2 .DISPLAY OF CUSTOMER AND PRODUCT TABLE
3 .DISPLAY OF RECORDS SELECTIVELY
4 .STOCK INFORMATION
5 .INVOICE GENERATION
6 .INVOICE LIST WITH CUSTOMER INFO
7 .EXIT
enter your choice no:2
                                MENU.....
1 .DISPLAY OF CUSTOMER TABLE
2 .DISPLAY OF PRODUCT TABLE
enter your choice no:1
                                CUSTOMER TABLE

no records matching query exists..
+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:yes

                                MENU.....
1 .DISPLAY OF CUSTOMER TABLE
2 .DISPLAY OF PRODUCT TABLE
enter your choice no:2
                                PRODUCT TABLE

no records matching query exists..
+-----+-----+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+
do you want the display of any other table??..yes/no:no

-----MENU-----
1 .OPERATIONS AND UPDATIONS OF YOUR TABLE
2 .DISPLAY OF CUSTOMER AND PRODUCT TABLE
3 .DISPLAY OF RECORDS SELECTIVELY
4 .STOCK INFORMATION
5 .INVOICE GENERATION
6 .INVOICE LIST WITH CUSTOMER INFO
7 .EXIT
enter your choice no:
```

## MySQL:

```
mysql> select * from customer;
Empty set (0.00 sec)

mysql> select * from product;
Empty set (0.00 sec)

mysql>
```

## **Displaying each record:**

```
-----MENU-----  
1.OPERATIONS AND UPDATIONS OF YOUR TABLE  
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE  
3.DISPLAY OF RECORDS SELECTIVELY  
4 STOCK INFORMATION  
5. INVOICE GENERATION  
6. INVOICE LIST WITH CUSTOMER INFO  
7.EXIT  
enter your choice no:3  
enter the table name for displayproduct  
enter product name:Bed  
+-----+-----+-----+-----+-----+  
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |  
+-----+-----+-----+-----+-----+  
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |  
+-----+-----+-----+-----+-----+  
do you want to continue displaying?yes/no:yes
```

```
*Python 3.8.5 Shell*  
File Edit Shell Debug Options Window Help  
+-----+-----+-----+-----+-----+  
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |  
+-----+-----+-----+-----+-----+  
do you want to continue displaying?yes/no:yes  
enter product name:Sofa cum Bed  
no records matching query exists..  
+-----+-----+-----+-----+-----+  
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |  
+-----+-----+-----+-----+-----+  
+-----+-----+-----+-----+-----+  
no matching records exist  
do you want to continue displaying?yes/no:yes  
enter product name:Rocking Chair  
+-----+-----+-----+-----+-----+  
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |  
+-----+-----+-----+-----+-----+  
| 3048 | Rocking Chair | RCH489 | 12 | 20000 | 200 |  
+-----+-----+-----+-----+-----+  
do you want to continue displaying?yes/no:no  
-----MENU-----  
1.OPERATIONS AND UPDATIONS OF YOUR TABLE  
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE  
3.DISPLAY OF RECORDS SELECTIVELY  
4 STOCK INFORMATION  
5. INVOICE GENERATION  
6. INVOICE LIST WITH CUSTOMER INFO  
7.EXIT
```

## Displaying monthly report of a particular product:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5 INVOICE GENERATION
6 INVOICE LIST WITH CUSTOMER INFO
7 EXIT
enter your choice no:4
ENTER THE NAME OF THE MONTH WHOSE REPORT YOU WANT TO GENERATE:january
ENTER NAME OF THE PRODUCT WHOSE REPORT YOU WANT TO ACCESS:Bed
        PRODUCT DETAILS
+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST |
+-----+-----+-----+-----+
|    1001     |    Bed    |   FUB840  |      12   |    12000    |
+-----+-----+-----+-----+
3
        -----PRODUCT REPORT-----
        NAME OF THE PRODUCT--:Bed
|-----+-----|
| CURRENT STOCK AVAILABILITY| SOLD   |
|-----+-----|
|      3                  |  0     |
|-----+-----|
CUSTOMERS WHO HAVE PURCHASED THE PRODUCT: BED
no records matching query exists..
+-----+-----+-----+
| NAME | MOBILE_NO | address | DOP |
+-----+-----+-----+
+-----+-----+-----+
YOU EARNED AN AMOUNT OF Rs 0/- BY SELLING Bed

YOU COLLECTED GST AMOUNTING TO Rs 0/- BY SELLING Bed

POOR SALES! YOU HAVE INCURRED A HUGE LOSS, YOU NEED TO INCREASE YOUR Bed SALES

NOTE: THIS DATA IS FOR THE MONTH OF JANUARY
```

```

*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4.STOCK INFORMATION
5.INVOICE GENERATION
6.INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:4
ENTER THE NAME OF THE MONTH WHOSE REPORT YOU WANT TO GENERATE:january
ENTER NAME OF THE PRODUCT WHOSE REPORT YOU WANT TO ACCESS:Teapoy
        PRODUCT DETAILS
+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST |
+-----+-----+-----+-----+
|    6907    |   Teapoy  |   TPY849  |     12    |     1000    |
+-----+-----+-----+-----+
84
        -----PRODUCT REPORT-----
        NAME OF THE PRODUCT--:Teapoy
        |-----|
        |CURRENT STOCK AVAILIBILITY| SOLD   |
        |-----|
        |    84                  |    8    |
        |-----|
CUSTOMERS WHO HAVE PURCHASED THE PRODUCT: TEAPOY
+-----+-----+-----+-----+
|      NAME      | MOBILE_NO |                               address          | DOP   |
+-----+-----+-----+-----+
| Alfio Fdo    | 789473330 | A1/12, Dinah Appartments, Sector-36, Navi Mumbai | 2021-01-10 |
| Terence D'souza | 990894493 | N-14/304, Juhi Towers, Sector-44, Panvel, Navi Mumbai | 2021-01-10 |
+-----+-----+-----+-----+
YOU EARNED AN AMOUNT OF Rs 8960/- BY SELLING Teapoy

YOU COLLECTED GST AMOUNTING TO Rs 960/- BY SELLING Teapoy

NOT SUFFICIENT ENOUGH,YOU NEED TO INCREASE YOUR SALES

NOTE: THIS DATA IS FOR THE MONTH OF JANUARY

```

```

*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5 INVOICE GENERATION
6 INVOICE LIST WITH CUSTOMER INFO
7 EXIT
enter your choice no:4
ENTER THE NAME OF THE MONTH WHOSE REPORT YOU WANT TO GENERATE:january
ENTER NAME OF THE PRODUCT WHOSE REPORT YOU WANT TO ACCESS:Cupboard
    PRODUCT DETAILS
+-----+-----+-----+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST |
+-----+-----+-----+-----+
|     9832   | Cupboard | CPD789   |     13    |    10000   |
+-----+-----+-----+-----+
93
    -----PRODUCT REPORT-----
    NAME OF THE PRODUCT--:Cupboard
+-----+
| CURRENT STOCK AVAILABILITY| SOLD |
+-----+
|      93                  |    7  |
+-----+
CUSTOMERS WHO HAVE PURCHASED THE PRODUCT: CUPBOARD
+-----+-----+-----+-----+
|      NAME      | MOBILE_NO |           address          | DOP   |
+-----+-----+-----+-----+
| Ishpreet Arora | 983273687 | B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai | 2021-01-10 |
+-----+-----+-----+-----+
YOU EARNED AN AMOUNT OF Rs 79100/- BY SELLING Cupboard

YOU COLLECTED GST AMOUNTING TO Rs 9100/- BY SELLING Cupboard

WOW, YOUR Cupboard SALES ARE BOOMING!

NOTE: THIS DATA IS FOR THE MONTH OF JANUARY

```

## **Displaying the invoice list:**

----- MENU -----

1. OPERATIONS AND UPDATIONS OF YOUR TABLE
2. DISPLAY OF CUSTOMER AND PRODUCT TABLE
3. DISPLAY OF RECORDS SELECTIVELY
4. STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7. EXIT

enter your choice no:6

```
[('INVOICE NO:', 970576), ('NAME:', 'Hanberi Jonse'), ('CONTACT NO:', '9987634859')]  
[('INVOICE NO:', 572035), ('NAME:', 'Hanberi Jonse'), ('CONTACT NO:', '998597853')]  
[('INVOICE NO:', 373014), ('NAME:', 'Tys Onsin'), ('CONTACT NO:', '980934529')]  
[('INVOICE NO:', 765184), ('NAME:', 'Jennifer Aniston'), ('CONTACT NO:', '970683590')]  
[('INVOICE NO:', 363277), ('NAME:', 'Hulu Mince'), ('CONTACT NO:', '998940594')]  
[('INVOICE NO:', 274923), ('NAME:', 'Joniah Sandler'), ('CONTACT NO:', '903849302')]  
[('INVOICE NO:', 418439), ('NAME:', "Ganges D'Inde"), ('CONTACT NO:', '789740893')]  
[('INVOICE NO:', 755885), ('NAME:', "Terence D'souza"), ('CONTACT NO:', '990894493')]  
[('INVOICE NO:', 851063), ('NAME:', 'Alfio Fdo'), ('CONTACT NO:', '789473330')]  
[('INVOICE NO:', 562311), ('NAME:', 'Ylves Larock'), ('CONTACT NO:', '890889845')]  
[('INVOICE NO:', 120579), ('NAME:', 'Ylves Larock'), ('CONTACT NO:', '948350498')]  
[('INVOICE NO:', 760714), ('NAME:', 'Wiseroy Amerkar'), ('CONTACT NO:', '957324580')]  
[('INVOICE NO:', 299099), ('NAME:', 'Safiya Hafeez'), ('CONTACT NO:', '748957348')]  
[('INVOICE NO:', 810865), ('NAME:', 'Akbar Al Azad'), ('CONTACT NO:', '889034834')]  
[('INVOICE NO:', 71356), ('NAME:', 'Umesh Maganty'), ('CONTACT NO:', '890854930')]  
[('INVOICE NO:', 981247), ('NAME:', 'Ajinder Mann'), ('CONTACT NO:', '894085944')]  
[('INVOICE NO:', 146889), ('NAME:', 'Ishpreet Arora'), ('CONTACT NO:', '983273687')]  
[('INVOICE NO:', 540123), ('NAME:', 'Unnikrishnan Namboothiri'), ('CONTACT NO:', '995789454')]  
[('INVOICE NO:', 832653), ('NAME:', 'Unnikrishnan Nair'), ('CONTACT NO:', '995789454')]  
[('INVOICE NO:', 833688), ('NAME:', 'Yumi Zulu'), ('CONTACT NO:', '787078808')]  
[('INVOICE NO:', 8429), ('NAME:', 'Gigi Hadid'), ('CONTACT NO:', '786957954')]  
[('INVOICE NO:', 876721), ('NAME:', 'Gigi Hadid'), ('CONTACT NO:', '786957954')]  
[('INVOICE NO:', 395734), ('NAME:', 'Katherine Hudson'), ('CONTACT NO:', '869783749')]  
end of records
```

## Generating invoice of customers who have purchased products:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
[('INVOICE NO:', 8429), ('NAME:', 'Gigi Hadid'), ('CONTACT NO:', '786957954')]
[('INVOICE NO:', 876721), ('NAME:', 'Gigi Hadid'), ('CONTACT NO:', '786957954')]
[('INVOICE NO:', 395734), ('NAME:', 'Katherine Hudson'), ('CONTACT NO:', '869783749')]
end of records
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:5
ENTER MOBILE_NO OF THE CUSTOMER TO GENERATE TAX INVOICE9987634859
no records matching query exists..
+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+
+-----+
+-----+
no such record exist
error in data entry...
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:5
ENTER MOBILE_NO OF THE CUSTOMER TO GENERATE TAX INVOICE786957954
+-----+-----+-----+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+-----+-----+-----+
| 7899 | Gigi Hadid | Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai | 786957954 | Window(5) | 2021-01-10 | 220000 |
+-----+-----+-----+-----+
pl wait for a moment,the invoice is being generated.....
do you want to continue?yes/no:yes
ENTER MOBILE_NO OF THE CUSTOMER TO GENERATE TAX INVOICE983273687
+-----+-----+-----+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+-----+-----+-----+
| 9832 | Ishpreet Arora | B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai | 983273687 | Cupboard(7) | 2021-01-10 | 79100 |
+-----+-----+-----+-----+
pl wait for a moment,the invoice is being generated.....
do you want to continue?yes/no:yes
ENTER MOBILE NO OF THE CUSTOMER TO GENERATE TAX INVOICE869798749
no records matching query exists..
+-----+
| PRODUCT_ID | NAME | ADDRESS | MOBILE_NO | PRODUCT | DOP | AMOUNT |
+-----+
+-----+
```

# **ANR'S FURNITURE COMPANY**

**CUSTOMER ADDRESS:** B-16/53, Leisure Towers, Sector-1, Vashi, Navi Mumbai

**COMPANY ADDRESS:** ABC

**GSTIN :** MH5345395435

## **TAX-INVOICE**

**INVOICE No. :** 428007

**DATE :** 2021-01-19

**CUSTOMER NAME :** Ishpreet Arora

**MOBILE No. :** 983273687

HSN	PRODUCT	RATE	QTY	AMOUNT
CPD789	Cupboard	13	7	10000

This is system generated invoice

total amount(excluding gst): 70000  
gst amount: 9100.0  
total amount(including gst): 79100.0

# **ANR'S FURNITURE COMPANY**

**CUSTOMER ADDRESS:** Plot No. 19, Malik's Home, Sector- 30, Juhi Nagar, Navi Mumbai

**COMPANY ADDRESS:**ABC

**GSTIN :**MH5345395435

## **TAX-INVOICE**

**INVOICE No. :** 519176

**DATE :** 2021-01-19

**CUSTOMER NAME :** Gigi Hadid

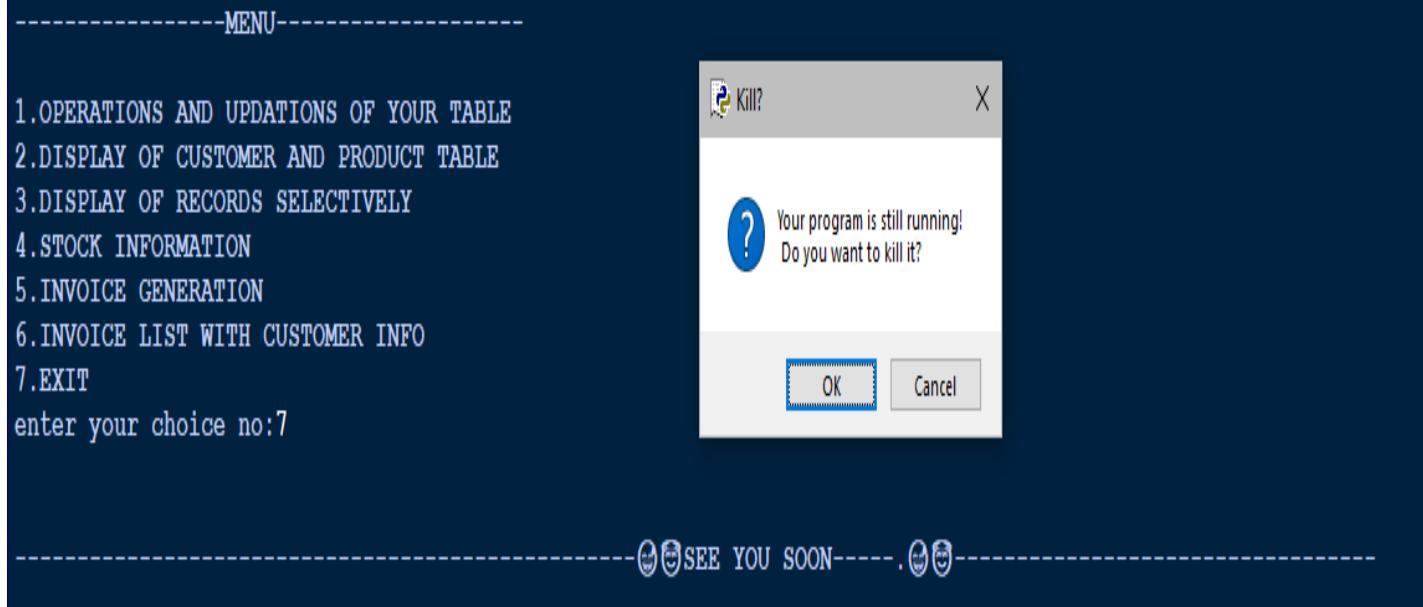
**MOBILE No. :** 786957954

HSN	PRODUCT	RATE	QTY	AMOUNT
WDW199	Window	10	5	40000

This is system generated invoice

total amount(excluding gst): 200000  
gst amount: 20000.0  
total amount(including gst): 220000.0

## Exiting from the App:

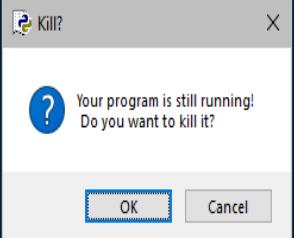


## Error handling:-

### Hadling a choice that doesn't exist:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
=====
RESTART: C:\Users\SERENA\Desktop\1.py =====
enter user password:123456
WELCOME XYZ!!
WELCOME TO GST INVOICE SYSTEM
-----
MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7. EXIT
enter your choice no:8
no such choice exists,pl refer menu and enter properly
```

### Handling incorrect password:

```
=====
RESTART: C:\Users\SERENA\Desktop\1.py =====
enter user password:12345
incorrect password! please try again...
enter user password:1234567
incorrect password! please try again...
enter user password:123
you have entered wrong password too many times,please login again...

```

## Handling ‘updating’ error:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
enter user password:123456
                    WELCOME XYZ !!

                    WELCOME TO GST INVOICE SYSTEM

-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7.EXIT
enter your choice no:1
                                MENU-----
1 . INSERTION OF RECORDS
2 . UPDATION OF RECORD DATA
3 . DELETION OF RECORDS
4 . DELETION OF ALL RECORDS
5 . EXIT
enter your choice:2
enter the table name for updatonproduct
+-----+
| PRODUCT_ID | PRODUCT_D | HSN_CODE | GST_RATE | BASIC_COST | STOCK |
+-----+
| 1001 | Bed | FUB840 | 12 | 12000 | 3 |
| 3024 | Accent Chest | CST376 | 13 | 6999 | 500 |
| 3048 | Rocking Chair | RCH489 | 12 | 20000 | 200 |
| 3481 | Mini Bed | MBD378 | 17 | 3000 | 10 |
| 4781 | Chair | CHR208 | 10 | 500 | 45 |
| 4857 | Sofa | SFA784 | 14 | 7999 | 300 |
| 5056 | Sectional Sofa | SSF281 | 15 | 9999 | 996 |
| 5908 | Mini Stool | MST847 | 10 | 1050 | 195 |
| 6570 | Table | TBL287 | 11 | 2700 | 39 |
| 6907 | Teapoy | TPY849 | 12 | 1000 | 84 |
| 7899 | Window | WDW199 | 10 | 40000 | 3 |
| 8392 | Bench | BNC280 | 11 | 4999 | 332 |
| 8596 | Ladder | LDR490 | 15 | 1200 | 100 |
| 9504 | Long Stool | LST452 | 12 | 2000 | 498 |
| 9508 | Mini Sofa | MSF444 | 16 | 7000 | 20 |
| 9721 | Side Table | STB298 | 14 | 1590 | 10 |
| 9832 | Cupboard | CPD789 | 13 | 10000 | 93 |
+-----+
enter column parameter of the product to be updatedPRODUCT_D
enter value of the column PRODUCT_D to search withMedium sofa
how many columns do you want to update?1
enter column nameLong sofa
error, column not found, pl try again..
enter column nameWindow
error, column not found, pl try again..
enter column namePRODUCT_D
enter new value for the column|
```

## Handling incorrect product details:

```
*Python 3.8.5 Shell*
File Edit Shell Debug Options Window Help
enter product: 12345678910
enter hsn code of the product: fgb389
enter gst rate of the product:12
enter basic cost : 12000
enter product quantity available:Three

failed due to error 1366 (HY000): Incorrect integer value: 'Three' for column 'STOCK' at row 1
do you want to continue inserting records in any other table?yes/no:no
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7. EXIT
enter your choice no:1
-----MENU-----
1 . INSERTION OF RECORDS
2 . UPDATION OF RECORD DATA
3 . DELETION OF RECORDS
4 . DELETION OF ALL RECORDS
5 . EXIT
enter your choice:3
3..DELETE A SINGLE RECORD FROM THE TABLE
Enter Table Name prodct
Failed to Delete all records from database table: 1146 (42S02): Table 'bpositive.prodct' doesn't exist
```

## Handling nonexistent product:

```
-----MENU-----
1.OPERATIONS AND UPDATIONS OF YOUR TABLE
2.DISPLAY OF CUSTOMER AND PRODUCT TABLE
3.DISPLAY OF RECORDS SELECTIVELY
4 STOCK INFORMATION
5. INVOICE GENERATION
6. INVOICE LIST WITH CUSTOMER INFO
7. EXIT
enter your choice no:4
ENTER THE NAME OF THE MONTH WHOSE REPORT YOU WANT TO GENERATE:February
ENTER NAME OF THE PRODUCT WHOSE REPORT YOU WANT TO ACCESS:Long Bed
THIS PRODUCT DOES NOT EXIST,PL TRY AGAIN
ENTER NAME OF THE PRODUCT WHOSE REPORT YOU WANT TO ACCESS:|
```

## LIMITATIONS:

- 1) A customer cannot purchase more than 9 pieces of a particular product.
- 2) Duplicate entry of records in customer table may result in ambiguity even though it has been avoided to certain extent.
- 3) Data entered in the table is dynamic, that is; it can be updated from time to time, but, the data entered in the file is permanent, that is; it cannot be updated once entered. Also, deleting records from the table won't remove the same from the file.
- 4) A customer can purchase only one product at a time which is entered as one record only.
- 5) The invoice number generated is in random order and not consecutive which is not true in real life.

The above limitations are corrigible.

## BIBLIOGRAPHY:

- Computer Science with Python- Textbook for class XII by Sumita Arora
- <https://pynative.com/python-mysql-tutorial/>
- <https://codespeedy.com/how-to-generate-pdf-invoice-in-python/>