



Haryana State Board of Technical Education

Bays 7-12, Sector-4, Panchkula, Pin-134112, Haryana (India)



RESTURANT MANAGEMENT SYSTEM

6TH Semester Diploma in Computer Engg.

Submitted By: Lakshay (33)

Submitted To: Ms. Payal Mam

Branch: Computer Engg.

A PROJECT REPORT

ON

“Restaurant Management System”

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF

DIPLOMA IN

Computer Engineering

SUBMITTED TO

**HARYANA STATE BOARD OF TECHNICAL EDUCATION, HARYANA
PANCHKULA**

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GOVT. POLYTECHNIC, AMBALA CITY

**ACADEMIC YEAR
2020-2023**



GOVT. POLYTECHNIC AMBALA CITY

CERTIFICATE

**This is to Certify that the project report entitled “Restaurant Management System”
Was successfully completed by Student of 6th semester Diploma in computer engineering.**

- | | |
|----|---------------|
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in partial fulfillment of the requirements for the award of the Diploma in Computer engineering and submitted to the Department of computer engineering of Govt. Polytechnic, Ambala City work carried out during a period for the academic year 2020-2023 as per curriculum .

Name of Guide:
Ms. Payal

Name of HOD:
Mr. Munish Gupta

External Examiner

Principal
Dr. Rajeev Sapra

ACKNOWLEDGMENT

This project is done as a semester project, as a part course titled “**Restaurant Management System**” We are really thankful to our course the Principal **Dr. Rajeev sapra** and the HOD **Mr. Munish Gputa** ,**computer engineering**, Govt. Polytechnic Ambala City, Ambala for his invaluable guidance and assistance, without which the accomplishment of the task would have never been possible.

We also thank **Govt. polytechnic Ambala city** for giving this opportunity to explore into the real world and realize the interrelation without which a Project can never progress. In our present project we have chosen the topic- “**Restaurant Management system**”.

We are also thankful to parents, friend and all staff of **computer engineering** for providing us relevant information and necessary clarifications, and great support.

Restaurant management system project in Python



About Restaurant Management System Project in Python:-

In the **Restaurant management system project in Python**, we will be having a **GUI** using which we will be able to do complete billing for any customer. Like we will be able to add items and their price to the bill and also calculate their total price using the total button. Also, the data can be stored in our text file.

The first step in building the project is to define the scope and requirements of the system. This can be done by analyzing the current processes and identifying areas that can be improved. The next step is to design the system architecture and database schema. This involves

identifying the entities and relationships involved in the system and creating a data model that can store and manage the data.

After designing the system, the next step is to develop the system components. This involves writing the code for various modules such as user interface, database access, business logic, etc. The code should be modular and well-organized, following best practices for software development.

Once the development is complete, the system should be tested thoroughly to ensure that it meets the requirements and functions as expected. Any bugs or issues should be identified and fixed before deploying the system.

Overall, a Restaurant Management System Project in Python can be a challenging and rewarding project for developers. It requires a good understanding of software development principles and the ability to design and implement complex systems. However, with the right approach and tools, it can be a highly valuable system for restaurant owners to streamline their operations and improve their business performance

Project overview:- Restaurant management system project in Python

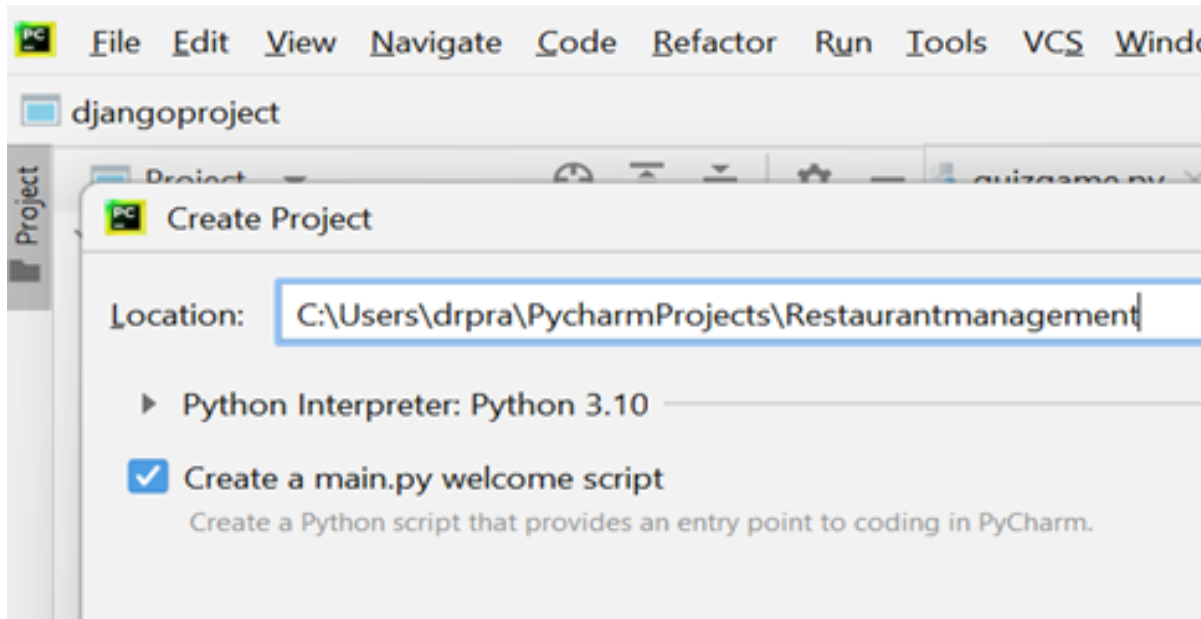
Project Name:	Restaurant management system project in Python
Abstract:	This is a straightforward GUI-based program that is simple to grasp and utilize. The GUI is created with the Tkinter package.
Language:	Python, Tkinter,
IDE:	Pycharm(Recommended)
Python version (recommended):	3.10
Topic/Category:	Final Year Project using Python

Features and Benefits:-

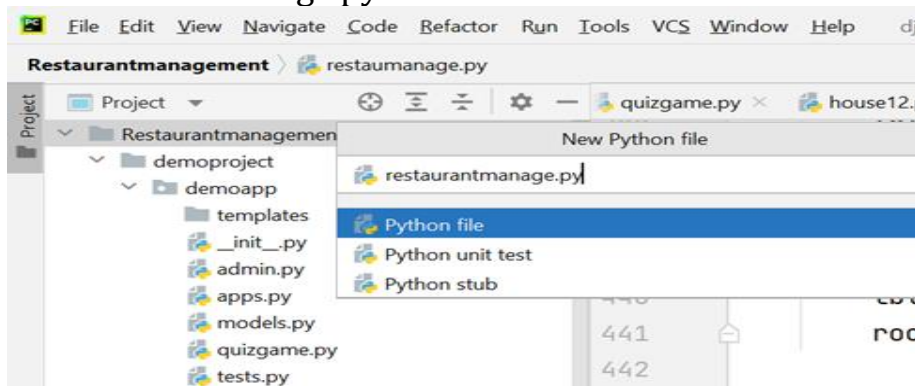
- Fill in the order the customer wants
- Complete bill management
- Add tax and services
- Calculate the total in 1 click
- Reset the data

Use of Pycharm IDE for Project creation of Restaurant Billing System Project in python:-

- First Instal pycharm community addition (community edition is to be installed)
- Create New Project and enter "Create"
-



- Right-click on the project name you have created and Create a New Python File as restaurantmanage.py



Once you create the python file, write the entire code which includes all the modules for restaurant management.

- Execute the Python Program

Code flow:

Import the modules required for the project

```
from tkinter import *
import random
import time
from tkinter import filedialog, messagebox
```

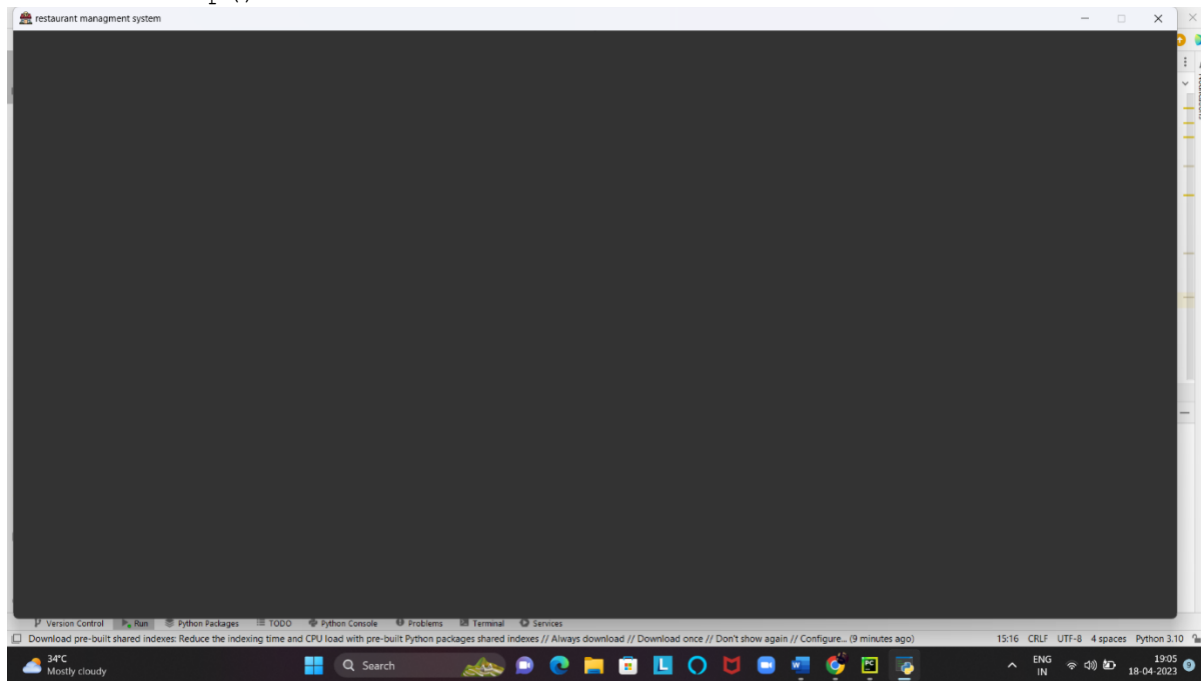
First we create front end side of our project :-

First we create GUI

```
from tkinter import *
import random
import time
from tkinter import filedialog,messagebox

root=Tk()
root.geometry('1485x750+0+0')
root.resizable(0,0)
root.config(bg='grey20')
root.title("restaurant managment system")
root.iconbitmap('restaurant.ico')
topframe=Frame(root,bd=10,relief=RIDGE,bg='grey11')
topframe.pack(side=TOP)

root.mainloop()
```



Add restaurant management system label

```
labeltitle=Label(topframe,text='Restaurant Management System',font=('lucida
handwriting',30,'bold'),fg='gold',
bg='grey20',width=52,pady=10)
labeltitle.grid(row=0,column=0)
```




Add all frames:-

```
# all frames
#left sides frames
menuframe=Frame(root,bd=10,relief=RIDGE,bg="grey20")
menuframe.pack(side=LEFT)

costframe=Frame(menuframe,bd=5,relief=RIDGE,bg='grey20',pady=28)
costframe.pack(side=BOTTOM)

foodframe=LabelFrame(menuframe,text='Food',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
foodframe.pack(side=LEFT)

drinkframe=LabelFrame(menuframe,text='Drinks',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
drinkframe.pack(side=LEFT)

cakesframe=LabelFrame(menuframe,text='Cakes',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
cakesframe.pack(side=LEFT)

#right side frames
rightframe=Frame(root,bd=10,relief=RIDGE,padx=64,bg='grey20')
rightframe.pack(side=RIGHT,pady=45)

calculatorframe=Frame(rightframe,bd=4,relief=RIDGE,bg='grey20')
calculatorframe.pack()

recieptframe=Frame(rightframe,relief=RIDGE,bd=4,bg='grey20')
recieptframe.pack()

buttonframe=Frame(rightframe,bd=4,relief=RIDGE,bg='grey20')
buttonframe.pack()
```

Define all the variables :-

#all variables

```
var1=IntVar()  
var2=IntVar()  
var3=IntVar()  
var4=IntVar()  
var5=IntVar()  
var6=IntVar()  
var7=IntVar()  
var8=IntVar()  
var9=IntVar()  
var10=IntVar()  
var11=IntVar()  
var12=IntVar()  
var13=IntVar()  
var14=IntVar()  
var15=IntVar()  
var16=IntVar()  
var17=IntVar()  
var18=IntVar()  
var19=IntVar()  
var20=IntVar()  
var21=IntVar()  
var22=IntVar()  
var23=IntVar()  
var24=IntVar()  
var25=IntVar()  
var26=IntVar()  
var27=IntVar()
```

#entry food

```
e_roti=StringVar()  
e_daal=StringVar()  
e_sabji=StringVar()  
e_fish=StringVar()  
e_kebab=StringVar()  
e_chawal=StringVar()  
e_mutton=StringVar()  
e_panner=StringVar()  
e_chicken=StringVar()
```

#entry drinks

```
e_lassi=StringVar()  
e_coffe=StringVar()  
e_faluda=StringVar()  
e_shikanji=StringVar()  
e_jaljeera=StringVar()  
e_roohafza=StringVar()  
e_masalatea=StringVar()  
e_badammilk=StringVar()  
e_colddrink=StringVar()
```

#entry cakes

```
e_oreo=StringVar()  
e_apple=StringVar()  
e_kitkat=StringVar()  
e_vanilla=StringVar()
```

```
e_banana=StringVar()  
e_brownie=StringVar()  
e_pineapple=StringVar()  
e_chocolate=StringVar()  
e_blackforest=StringVar()
```

```
costoffoodvar=StringVar()  
costofdrinksvar=StringVar()  
costofcakesvar=StringVar()  
totalcostvar=StringVar()  
gstvar=StringVar()  
subtotalvar=StringVar()
```

Add default set values:-

```
# default set value
```

```
e_roti.set('0')  
e_daal.set('0')  
e_sabji.set('0')  
e_fish.set('0')  
e_kebab.set('0')  
e_chawal.set('0')  
e_mutton.set('0')  
e_panner.set('0')  
e_chicken.set('0')
```

```
e_lassi.set('0')  
e_coffe.set('0')  
e_faluda.set('0')  
e_shikanji.set('0')  
e_jaljeera.set('0')  
e_roohafza.set('0')  
e_masalatea.set('0')  
e_badammilk.set('0')  
e_colddrink.set('0')
```

```
e_oreo.set('0')  
e_apple.set('0')  
e_kitkat.set('0')  
e_vanilla.set('0')  
e_banana.set('0')  
e_brownie.set('0')  
e_pineapple.set('0')  
e_chocolate.set('0')  
e_blackforest.set('0')
```

Now we create food frame:-

```
#food
```

```
roti=Checkbutton(foodframe,text='Roti',font=('universe'  
,18,'bold'),offvalue=0,onvalue=1,variable=var1,  
command=roti,bg='grey20',fg='gold')  
roti.grid(row=0,column=0,sticky=W)
```

```
sabji=Checkbutton(foodframe,text='Sabji',font=('universe'
```

```
,18,'bold'),offvalue=0,onvalue=1,variable=var2,
command=sabji,bg='grey20',fg='gold')
sabji.grid(row=1,column=0,sticky=W)

dall=Checkbutton(foodframe,text='Daal',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var3,
command=daal,bg='grey20',fg='gold')
dall.grid(row=2,column=0,sticky=W)

fish=Checkbutton(foodframe,text='Fish',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var4,
command=fish,bg='grey20',fg='gold')
fish.grid(row=3,column=0,sticky=W)

kebab=Checkbutton(foodframe,text='Kebab',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var5,
command=kebab,bg='grey20',fg='gold')
kebab.grid(row=4,column=0,sticky=W)

chawal=Checkbutton(foodframe,text='Chawal',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var6,
command=chawal,bg='grey20',fg='gold')
chawal.grid(row=5,column=0,sticky=W)

mutton=Checkbutton(foodframe,text='Mutton',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var7,
command=mutton,bg='grey20',fg='gold')
mutton.grid(row=6,column=0,sticky=W)

panner=Checkbutton(foodframe,text='Paneer',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var8,
command=panner,bg='grey20',fg='gold')
panner.grid(row=7,column=0,sticky=W)

chicken=Checkbutton(foodframe,text='Chicken',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var9,
command=chicken,bg='grey20',fg='gold')
chicken.grid(row=8,column=0,sticky=W)

#entry
textroti=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,text
variable=e_roti)
textroti.grid(row=0,column=1)

textsabji=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xvariable=e_sabji)
textsabji.grid(row=1,column=1)

textdaal=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xvariable=e_daal)
textdaal.grid(row=2,column=1)

textfish=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xvariable=e_fish)
textfish.grid(row=3,column=1)

textkebab=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
```

```

tvariable=e_kebab)
textkebab.grid(row=4,column=1)

textchawal=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xtvariable=e_chawal)
textchawal.grid(row=5,column=1)

textmutton=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xtvariable=e_mutton)
textmutton.grid(row=6,column=1)

textpanner=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,te
xtvariable=e_panner)
textpanner.grid(row=7,column=1)

textchicken=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,t
extvariable=e_chicken)
textchicken.grid(row=8,column=1)

```



Create drinks frame:-

```

#drinks
lassi=Checkbutton(drinkframe,text='Lassi',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var10,
command=lassi,bg='grey20',fg='gold')
lassi.grid(row=0,column=0,sticky=W)

coffe=Checkbutton(drinkframe,text='Coffee',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var11,
command=coffe,bg='grey20',fg='gold')
coffe.grid(row=1,column=0,sticky=W)

faluda=Checkbutton(drinkframe,text='Faluda',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var12,
command=faluda,bg='grey20',fg='gold')
faluda.grid(row=2,column=0,sticky=W)

```

```
shikanji=Checkbutton(drinkframe,text='Shikanji',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var13,command=shikanji,bg='grey20',fg='gold')
shikanji.grid(row=3,column=0,sticky=W)

jaljeera=Checkbutton(drinkframe,text='Jaljeera',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var14,command=jaljeera,bg='grey20',fg='gold')
jaljeera.grid(row=4,column=0,sticky=W)

roohafza=Checkbutton(drinkframe,text='Roohafza',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var15,command=roohafza,bg='grey20',fg='gold')
roohafza.grid(row=5,column=0,sticky=W)

masalatea=Checkbutton(drinkframe,text='Masala tea',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var16,command=masalatea,bg='grey20',fg='gold')
masalatea.grid(row=6,column=0,sticky=W)

badammilk=Checkbutton(drinkframe,text='Badam milk',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var17,command=badammilk,bg='grey20',fg='gold')
badammilk.grid(row=7,column=0,sticky=W)

colddrink=Checkbutton(drinkframe,text='Cold drink',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var18,command=colddrink,bg='grey20',fg='gold')
colddrink.grid(row=8,column=0,sticky=W)

#entry drinks

textlassi=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_lassi)
textlassi.grid(row=0,column=1)

textcoffe=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_coffe)
textcoffe.grid(row=1,column=1)

textfaluda=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_faluda)
textfaluda.grid(row=2,column=1)

textshikanji=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_shikanji)
textshikanji.grid(row=3,column=1)

textjaljeera=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_jaljeera)
textjaljeera.grid(row=4,column=1)

textroohafza=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_roohafza)
textroohafza.grid(row=5,column=1)

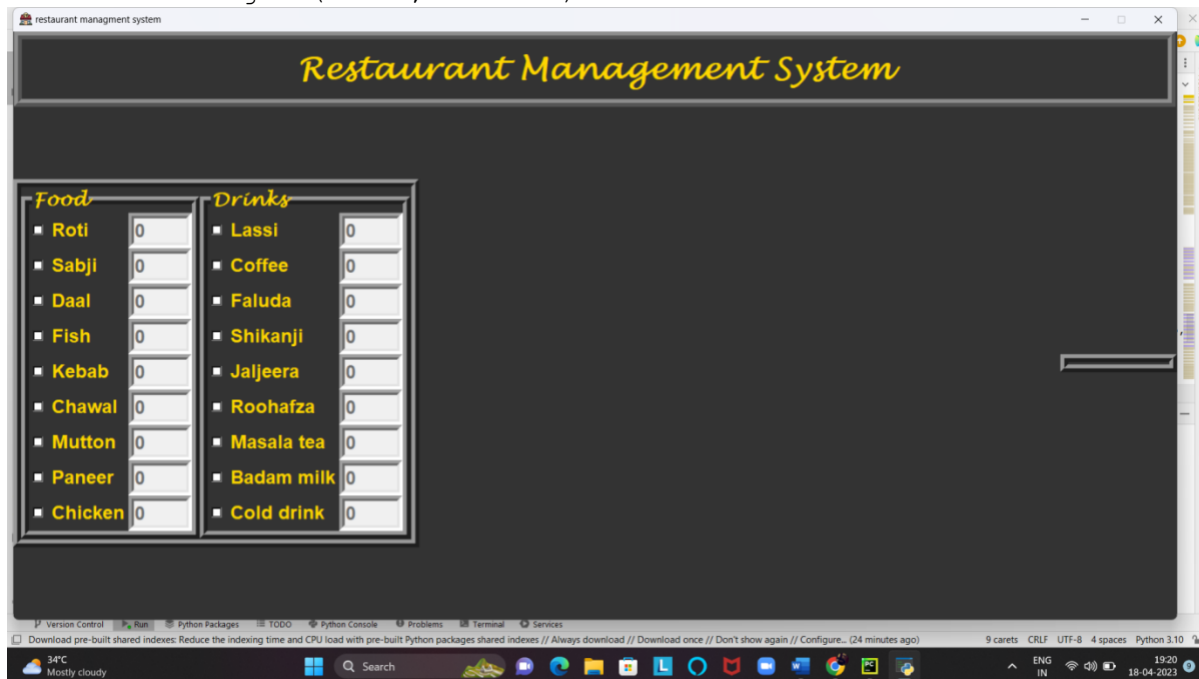
textmasalatea=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_masalatea)
textmasalatea.grid(row=6,column=1)
```

Lakshay

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```
textbadammilk=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_badammilk)
textbadammilk.grid(row=7,column=1)
```

```
textcolddrink=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_colddrink)
textcolddrink.grid(row=8,column=1)
```



Create cakes frame:-

#cakes

```
oreo=Checkbutton(cakesframe,text='Oreo',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var19,command=oreo,bg='grey20',fg='gold')
oreo.grid(row=0,column=0,sticky=W)
```

```
apple=Checkbutton(cakesframe,text='Apple',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var20,command=apple,bg='grey20',fg='gold')
apple.grid(row=1,column=0,sticky=W)
```

```
kitkat=Checkbutton(cakesframe,text='Kitkat',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var21,command=kitkat,bg='grey20',fg='gold')
kitkat.grid(row=2,column=0,sticky=W)
```

```
vanilla=Checkbutton(cakesframe,text='Vanilla',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var22,command=vanilla,bg='grey20',fg='gold')
vanilla.grid(row=3,column=0,sticky=W)
```

```
banana=Checkbutton(cakesframe,text='Banana',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var23,command=banana,bg='grey20',fg='gold')
banana.grid(row=4,column=0,sticky=W)
```

```
brownie=Checkbutton(cakesframe,text='Brownie',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var24,command=brownie,bg='grey20',fg='gold')
brownie.grid(row=5,column=0,sticky=W)

pineapple=Checkbutton(cakesframe,text='Pineapple',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var25,command=pineapple,bg='grey20',fg='gold')
pineapple.grid(row=6,column=0,sticky=W)

chocolate=Checkbutton(cakesframe,text='Chocolate',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var26,command=chocolate,bg='grey20',fg='gold')
chocolate.grid(row=7,column=0,sticky=W)

blackforest=Checkbutton(cakesframe,text='Blackforest',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var27,command=blackforest,bg='grey20',fg='gold')
blackforest.grid(row=8,column=0,sticky=W)

#entry cakes

textoreo=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_oreo)
textoreo.grid(row=0,column=1)

textapple=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_apple)
textapple.grid(row=1,column=1)

textkitkat=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_kitkat)
textkitkat.grid(row=2,column=1)

textvanilla=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_vanilla)
textvanilla.grid(row=3,column=1)

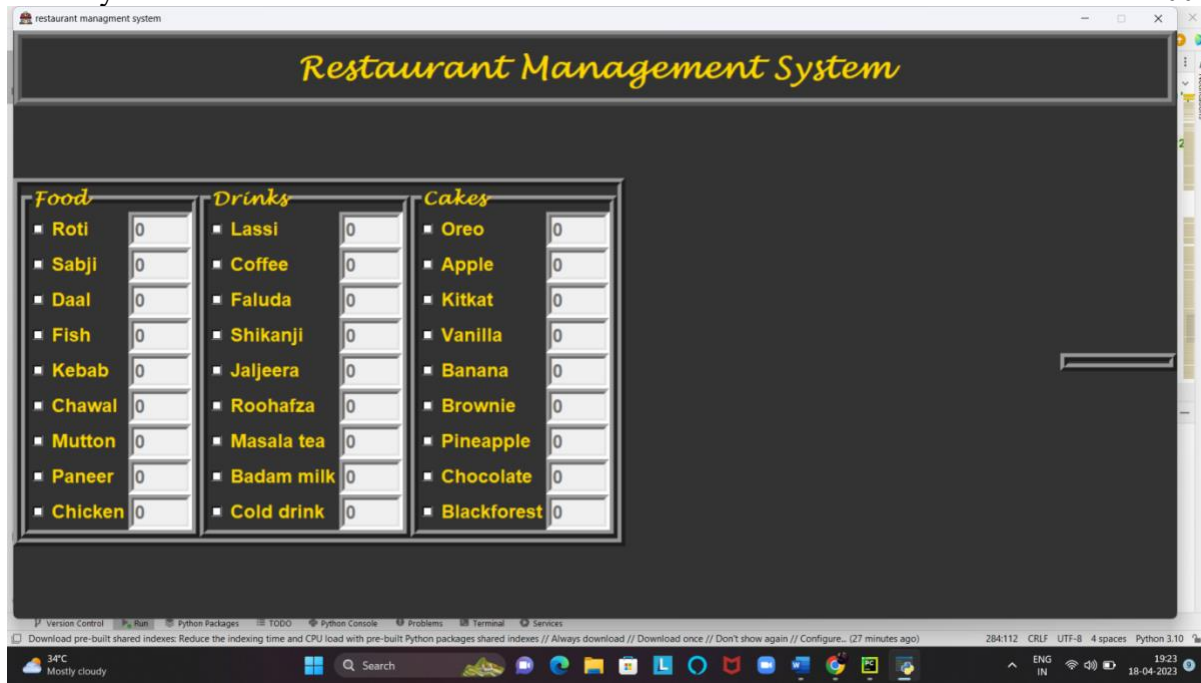
textbanana=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_banana)
textbanana.grid(row=4,column=1)

textbrownie=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_brownie)
textbrownie.grid(row=5,column=1)

textpineapple=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_pineapple)
textpineapple.grid(row=6,column=1)

textchocolate=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_chocolate)
textchocolate.grid(row=7,column=1)

textblackforest=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_blackforest)
textblackforest.grid(row=8,column=1)
```

Create cost frame:-

```
#cost frame
```

```
labelcostoffood=Label(costframe,text='Cost Of
Food',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostoffood.grid(row=0,column=0)
textcostoffood=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='reado
nly',textvariable=costoffoodvar)
textcostoffood.grid(row=0,column=1,padx=27)
```

```
labelcostofdrinks=Label(costframe,text='Cost Of
Drinks',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostofdrinks.grid(row=1,column=0)
textcostofdrinks=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='rea
donly',textvariable=costofdrinksvar)
textcostofdrinks.grid(row=1,column=1,padx=27)
```

```
labelcostofcakes=Label(costframe,text='Cost Of
Cakes',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostofcakes.grid(row=2,column=0)
textcostofcakes=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='read
only',textvariable=costofcakesvar)
textcostofcakes.grid(row=2,column=1,padx=27)
```

```
labelsubtotal=Label(costframe,text='Sub
Total',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelsubtotal.grid(row=0,column=2)
textsubtotal=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='readonl
y',textvariable=subtotalvar)
textsubtotal.grid(row=0,column=3,padx=27)
```

```
labelgst=Label(costframe,text='GST',font=('universe',15,'bold'),bg='grey20',fg='gold'
)
labelgst.grid(row=1,column=2)
textgst=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='readonly',te
xtvariable=gstvar)
```

```
textgst.grid(row=1, column=3, padx=27)
```

```
labeltotalcost=Label(costframe, text='Total
Cost', font=('universe', 15, 'bold'), bg='grey20', fg='gold')
labeltotalcost.grid(row=2, column=2)
texttotalcost=Entry(costframe, font=('universe', 18, 'bold'), bd=4, width=14, state='readonly', textvariable=totalcostvar)
texttotalcost.grid(row=2, column=3, padx=27)
```



Now we create Buttons:-

```
#buttons
```

```
buttontotal=Button(buttonframe, text='Total', font=('universe', 14, 'bold'), bd=3, fg='yellow', bg='grey20', padx=32,
command=totalcost)
buttontotal.grid(row=0, column=0)
```

```
buttonreceipt=Button(buttonframe, text='Receipt', font=('universe', 14, 'bold'), bd=3, fg='gold', bg='grey20', padx=15,
command=receipt)
buttonreceipt.grid(row=0, column=1)
```

```
buttonsend=Button(buttonframe, text='Send', font=('universe', 14, 'bold'), bd=3, fg='gold', bg='grey20', padx=15,
command=send)
buttonsend.grid(row=0, column=2)
```

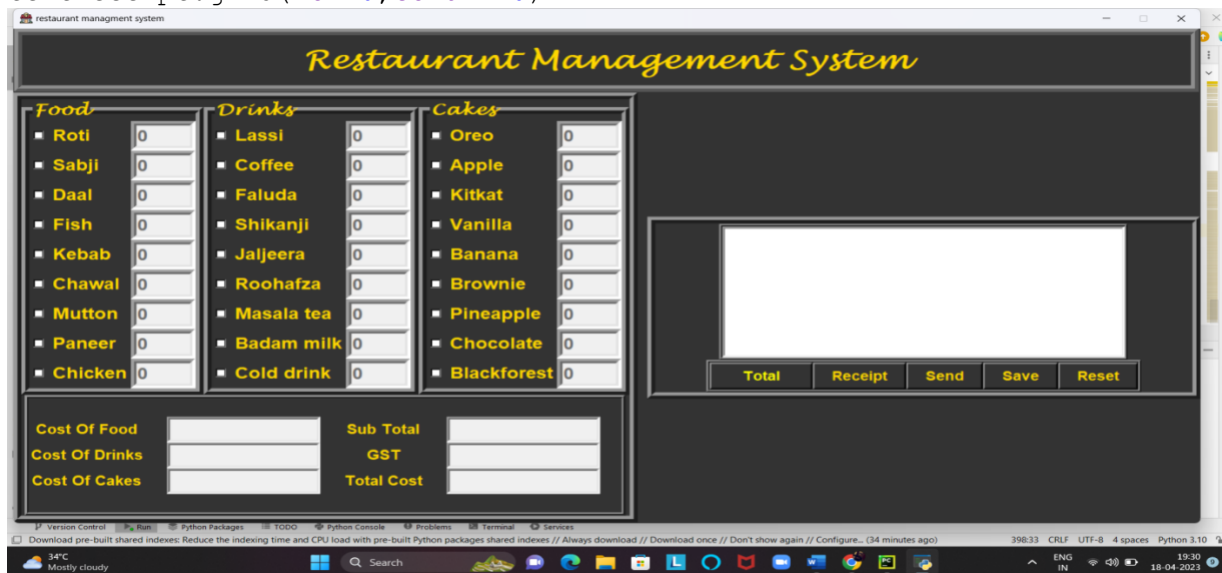
```
buttonsave=Button(buttonframe, text='Save', font=('universe', 14, 'bold'), bd=3, fg='gold', bg='grey20', padx=15,
command=save)
buttonsave.grid(row=0, column=3)
```

```
buttonreset=Button(buttonframe, text='Reset', font=('universe', 14, 'bold'), bd=3, fg='gold', bg='grey20', padx=15,
command=reset)
buttonreset.grid(row=0, column=4)
```



Add text area for receipt:-

```
#text area for receipt
textreceipt=Text(recioptframe,font=('universe',12,'bold'),bd=3,width=55,height=10)
textreceipt.grid(row=0,column=0)
```



Now we create calculator :-

```
#calculator
operator=''
def buttonclick(number):
    global operator
    operator=operator+number
    calculatorfield.delete(0,END)
    calculatorfield.insert(END,operator)
def clear():
    global operator
    calculatorfield.delete(0,END)
```

```
    operator=''
def ans():
    global operator
    result=str(eval(operator))
    calculatorfield.delete(0,END)
    calculatorfield.insert(0,result)
    operator=''

calculatorfield=Entry(calculatorframe,font=('universe',18,'bold'),width=40,bd=5)
calculatorfield.grid(row=0,column=0,columnspan=4)

button7=Button(calculatorframe,text='7',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('7'))
button7.grid(row=1,column=0)

button8=Button(calculatorframe,text='8',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('8'))
button8.grid(row=1,column=1)

button9=Button(calculatorframe,text='9',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('9'))
button9.grid(row=1,column=2)

buttonplus=Button(calculatorframe,text='+',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('+'))
buttonplus.grid(row=1,column=3)

button4=Button(calculatorframe,text='4',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('4'))
button4.grid(row=2,column=0)

button5=Button(calculatorframe,text='5',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('5'))
button5.grid(row=2,column=1)

button6=Button(calculatorframe,text='6',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('6'))
button6.grid(row=2,column=2)

buttonminus=Button(calculatorframe,text='-',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('-'))
buttonminus.grid(row=2,column=3)

button1=Button(calculatorframe,text='1',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('1'))
button1.grid(row=3,column=0)

button2=Button(calculatorframe,text='2',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('2'))
button2.grid(row=3,column=1)
```

```

button3=Button(calculatorframe,text='3',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('3'))
button3.grid(row=3,column=2)

buttonmul=Button(calculatorframe,text='*',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('*'))
buttonmul.grid(row=3,column=3)

buttonans=Button(calculatorframe,text='Ans',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=ans)
buttonans.grid(row=4,column=0)

buttonclear=Button(calculatorframe,text='Clear',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=clear)
buttonclear.grid(row=4,column=1)

buttonzero=Button(calculatorframe,text='0',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('0'))
buttonzero.grid(row=4,column=2)

buttondivison=Button(calculatorframe,text='/',bd=5,fg='gold',bg='grey20',font=('universe',16,'bold'),width=9,
command=lambda:buttonclick('/'))
buttondivison.grid(row=4,column=3)

```



Now we create back-end:-

Defining the Total button function:-

```

def totalcost():
global priceoffood, priceofdrinks ,priceofcakes,subtotalitems,gstamount,totalcost

```

```
if var1.get() != 0 or var2.get() != 0 or var3.get() != 0 or var4.get() != 0 or
var5.get() != 0 or var6.get() != 0 \
or var7.get() != 0 or var8.get() != 0 or var9.get() != 0 or var10.get() != 0 or
var11.get() != 0 or var12.get() != 0 \
or var13.get() != 0 or var14.get() != 0 or var15.get() != 0 or var16.get() != 0 or
var17.get() != 0 or var18.get() != 0 \
or var19.get() != 0 or var20.get() != 0 or var21.get() != 0 or var22.get() != 0 or
var23.get() != 0 or var24.get() != 0 \
or var25.get() != 0 or var26.get() != 0 or var27.get() != 0:

    item1=int(e_roti.get())
    item2=int(e_sabji.get())
    item3=int(e_daal.get())
    item4 = int(e_fish.get())
    item5 = int(e_kebab.get())
    item6 = int(e_chawal.get())
    item7 = int(e_mutton.get())
    item8 = int(e_panner.get())
    item9 = int(e_chicken.get())

    item10 = int(e_lassi.get())
    item11 = int(e_coffe.get())
    item12 = int(e_faluda.get())
    item13 = int(e_shikanji.get())
    item14 = int(e_jaljeera.get())
    item15 = int(e_roohafza.get())
    item16 = int(e_masalatea.get())
    item17= int(e_badammilk.get())
    item18 = int(e_colddrink.get())

    item19 = int(e_oreo.get())
    item20 = int(e_apple.get())
    item21 = int(e_kitkat.get())
    item22 = int(e_vanilla.get())
    item23 = int(e_banana.get())
    item24 = int(e_brownie.get())
    item25= int(e_pineapple.get())
    item26= int(e_chocolate.get())
    item27= int(e_blackforest.get())

    priceoffood=(item1*10)+(item2*100)+(item3*80)+(item4*300)+(item5*250)+(item6*100)+(it
em7*350)+(item8*200)\
        +(item9*250)

    priceofdrinks=(item10*50)+(item11*70)+(item12*60)+(item13*30)+(item14*30)+(item15*30)
    +(item16*25)\
        +(item17*50)+(item18*25)

    priceofcakes=(item19*250)+(item20*200)+(item21*300)+(item22*150)+(item23*200)+(item24
*400)+(item25*180)\
        +(item26*300)+(item27*500)
    costoffoodvar.set(str(priceoffood)+' RS')
    costofdrinksvar.set(str(priceofdrinks)+ ' RS')
    costofcakesvar.set(str(priceofcakes)+' RS')
    subtotalitems=priceoffood+priceofdrinks+priceofcakes
    subtotalvar.set(str(subtotalitems)+ ' RS')
    gstamount=subtotalitems*5/100
    gstvar.set(str(gstamount)+' RS')
    totalcost=subtotalitems+gstamount
```

```

totalcostvar.set(str(totalcost)+' RS')
else:
    messagebox.showerror('Error','No items is select ')

```

Defining the Receipt button function:-

```

def receipt():
    global billnumber,date
    if costoffoodvar.get() != '' or costofcakesvar.get() != '' or costofdrinksvar.get() != '':
        textreceipt.delete(1.0,END)
        x=random.randint(100,1000)
        billnumber='BILL'+str(x)
        date=time.strftime('%d/%m/%Y')
        textreceipt.insert(END,'Bill reff..\t\t'+billnumber+'\t\t\t'+date+'\n')

    textreceipt.insert(END,'*****\n')
    textreceipt.insert(END,'ITEMS:\t\t\t COST OF ITEMS(RS)\n')
    textreceipt.insert(END,
    '*****\n')
    if e_roti.get()!='0':
        textreceipt.insert(END,f'Roti\t\t\t\t{ int(e_roti.get())*10}RS\n\n')
    if e_sabji.get()!='0':
        textreceipt.insert(END,f'Sabji\t\t\t\t{ int(e_sabji.get())*100}RS\n\n')
    if e_daal.get()!='0':
        textreceipt.insert(END,f'Daal\t\t\t\t{ int(e_daal.get())*80}RS\n\n')
    if e_fish.get()!='0':
        textreceipt.insert(END,f'Fish\t\t\t\t{ int(e_fish.get())*300}RS\n\n')
    if e_kebab.get()!='0':
        textreceipt.insert(END,f'Kebab\t\t\t\t{ int(e_kebab.get())*250}RS\n\n')
    if e_chawal.get()!='0':
        textreceipt.insert(END,f'Chawal\t\t\t\t{ int(e_chawal.get())*100}RS\n\n')
    if e_mutton.get()!='0':
        textreceipt.insert(END,f'Mutton\t\t\t\t{ int(e_mutton.get())*350}RS\n\n')
    if e_panner.get()!='0':
        textreceipt.insert(END,f'Panner\t\t\t\t{ int(e_panner.get())*200}RS\n\n')
    if e_chicken.get()!='0':
        textreceipt.insert(END,f'Chicken\t\t\t\t{
int(e_chicken.get())*250}RS\n\n')

    if e_lassi.get()!='0':
        textreceipt.insert(END,f'Lassi\t\t\t\t{ int(e_lassi.get())*50}RS\n\n')
    if e_coffe.get()!='0':
        textreceipt.insert(END,f'Coffe\t\t\t\t{ int(e_coffe.get())*70}RS\n\n')
    if e_faluda.get()!='0':
        textreceipt.insert(END,f'Faluda\t\t\t\t{ int(e_faluda.get())*60}RS\n\n')
    if e_shikanji.get()!='0':
        textreceipt.insert(END,f'Shikanji\t\t\t\t{
int(e_shikanji.get())*30}RS\n\n')
    if e_jaljeera.get()!='0':
        textreceipt.insert(END,f'Jaljeera\t\t\t\t{
int(e_jaljeera.get())*30}RS\n\n')
    if e_roohafza.get()!='0':
        textreceipt.insert(END,f'Roohafza\t\t\t\t{
int(e_roohafza.get())*30}RS\n\n')
    if e_masalatea.get()!='0':
        textreceipt.insert(END,f'Masalatea\t\t\t\t{

```



```

int(e_masalatea.get())*25}RS\n\n')
if e_badammilk.get()!='0':
    textreceipt.insert(END,f'Badammilk\t\t\t\t\t{
int(e_badammilk.get())*50}RS\n\n')
if e_colddrink.get()!='0':
    textreceipt.insert(END,f'Colddrink\t\t\t\t\t{
int(e_colddrink.get())*25}RS\n\n')

if e_oreo.get()!='0':
    textreceipt.insert(END,f'Oreo\t\t\t\t\t{ int(e_oreo.get())*250}RS\n\n')
if e_apple.get()!='0':
    textreceipt.insert(END,f'Apple\t\t\t\t\t{ int(e_apple.get())*200}RS\n\n')
if e_kitkat.get()!='0':
    textreceipt.insert(END,f'Kitkat\t\t\t\t\t{ int(e_kitkat.get())*300}RS\n\n')
if e_vanilla.get()!='0':
    textreceipt.insert(END,f'Vanilla\t\t\t\t\t{
int(e_vanilla.get())*150}RS\n\n')
if e_banana.get()!='0':
    textreceipt.insert(END,f'Banana\t\t\t\t\t{ int(e_banana.get())*200}RS\n\n')
if e_brownie.get()!='0':
    textreceipt.insert(END,f'Brownie\t\t\t\t\t{
int(e_brownie.get())*400}RS\n\n')
if e_pineapple.get()!='0':
    textreceipt.insert(END,f'Pineapple\t\t\t\t\t{
int(e_pineapple.get())*180}RS\n\n')
if e_chocolate.get()!='0':
    textreceipt.insert(END,f'Chocolate\t\t\t\t\t{
int(e_chocolate.get())*300}RS\n\n')
if e_blackforest.get()!='0':
    textreceipt.insert(END,f'Blackforest\t\t\t\t\t{
int(e_blackforest.get())*500}RS\n\n')

    textreceipt.insert(END,
'*****\n
')
if costoffoodvar.get()!='0':
    textreceipt.insert(END,f'Cost of Food \t\t\t\t\t{priceoffood}RS\n\n')
if costofdrinksvar.get()!='0':
    textreceipt.insert(END,f'Cost of Drinks \t\t\t\t\t{priceofdrinks}RS\n\n')
if costofcakesvar.get()!='0':
    textreceipt.insert(END,f'Cost of Cakes \t\t\t\t\t{priceofcakes}RS\n\n')

    textreceipt.insert(END,f'Sub Total \t\t\t\t\t{subtotalitems}RS\n\n')
    textreceipt.insert(END,f'GST \t\t\t\t\t{gstamount}RS\n\n')
    textreceipt.insert(END,
'*****\n
')
    textreceipt.insert(END,f'Total Cost \t\t\t\t\t{totalcost}RS\n\n,')
    textreceipt.insert(END,
'*****\n
')
else:
    messagebox.showerror('Error','No items is select')

```

Defining the Save button functions:-

```

def save():
if textreceipt.get(1.0,END) =='\n':
pass

```



```
    else:
        url=filedialog.asksaveasfile(mode='w',defaultextension='.txt')
if url==None:
pass
    else:
        bill_data=textreceipt.get(1.0,END)
        url.write(bill_data)
        url.close()
        messagebox.showinfo('information','your bill is succesfully saved')
```

Defining the Reset button function:-

```
def reset():
    textreceipt.delete(1.0,END)
    e_roti.set('0')
    e_daal.set('0')
    e_sabji.set('0')
    e_fish.set('0')
    e_kebab.set('0')
    e_chawal.set('0')
    e_mutton.set('0')
    e_panner.set('0')
    e_chicken.set('0')

    e_lassi.set('0')
    e_coffe.set('0')
    e_faluda.set('0')
    e_shikanji.set('0')
    e_jaljeera.set('0')
    e_roohafza.set('0')
    e_masalatea.set('0')
    e_badammilk.set('0')
    e_colddrink.set('0')

    e_oreo.set('0')
    e_apple.set('0')
    e_kitkat.set('0')
    e_vanilla.set('0')
    e_banana.set('0')
    e_brownie.set('0')
    e_pineapple.set('0')
    e_chocolate.set('0')
    e_blackforest.set('0')

    textroti.config(state=DISABLED)
    textdaal.config(state=DISABLED)
    textsabji.config(state=DISABLED)
    textfish.config(state=DISABLED)
    textkebab.config(state=DISABLED)
    textchawal.config(state=DISABLED)
    textmutton.config(state=DISABLED)
    textpanner.config(state=DISABLED)
    textchicken.config(state=DISABLED)

    textlassi.config(state=DISABLED)
    textcoffe.config(state=DISABLED)
    textfaluda.config(state=DISABLED)
    textshikanji.config(state=DISABLED)
    textjaljeera.config(state=DISABLED)
```

```
textroohafza.config(state=DISABLED)
textmasalatea.config(state=DISABLED)
textbadammilk.config(state=DISABLED)
textcolddrink.config(state=DISABLED)

textoreo.config(state=DISABLED)
textapple.config(state=DISABLED)
textkitkat.config(state=DISABLED)
textvanilla.config(state=DISABLED)
textbanana.config(state=DISABLED)
textbrownie.config(state=DISABLED)
textpineapple.config(state=DISABLED)
textchocolate.config(state=DISABLED)
textblackforest.config(state=DISABLED)

var1.set(0)
var2.set(0)
var3.set(0)
var4.set(0)
var5.set(0)
var6.set(0)
var7.set(0)
var8.set(0)
var9.set(0)
var10.set(0)
var11.set(0)
var12.set(0)
var13.set(0)
var14.set(0)
var15.set(0)
var16.set(0)
var17.set(0)
var18.set(0)
var19.set(0)
var20.set(0)
var21.set(0)
var22.set(0)
var23.set(0)
var24.set(0)
var25.set(0)
var26.set(0)
var27.set(0)

costoffoodvar.set('')
costofdrinksvar.set('')
costofcakesvar.set('')
subtotalvar.set('')
gstvar.set('')
totalcostvar.set('')
```

Defining the Send button function:-

```
def send():
def send_email():

# Email details
sender_email = 'chiragkapoor1711@gmail.com'
sender_password = 'sender_password'
mail=mailentry.get()
        message=textarea.get(1.0,END)
```

```

subject = 'Bill'

# SMTP server details
smtp_server = 'smtp.gmail.com'
smtp_port = 587

# Create a secure SSL context
context = smtplib.SMTP(smtp_server, smtp_port)
context.starttls()

# Login to the email account
context.login(sender_email, sender_password)

# Create the email message
email_message = f"Subject: {subject}\n\n{message}"

# Send the email
context.sendmail(sender_email, mail, email_message)

# Close the SMTP context
context.quit()

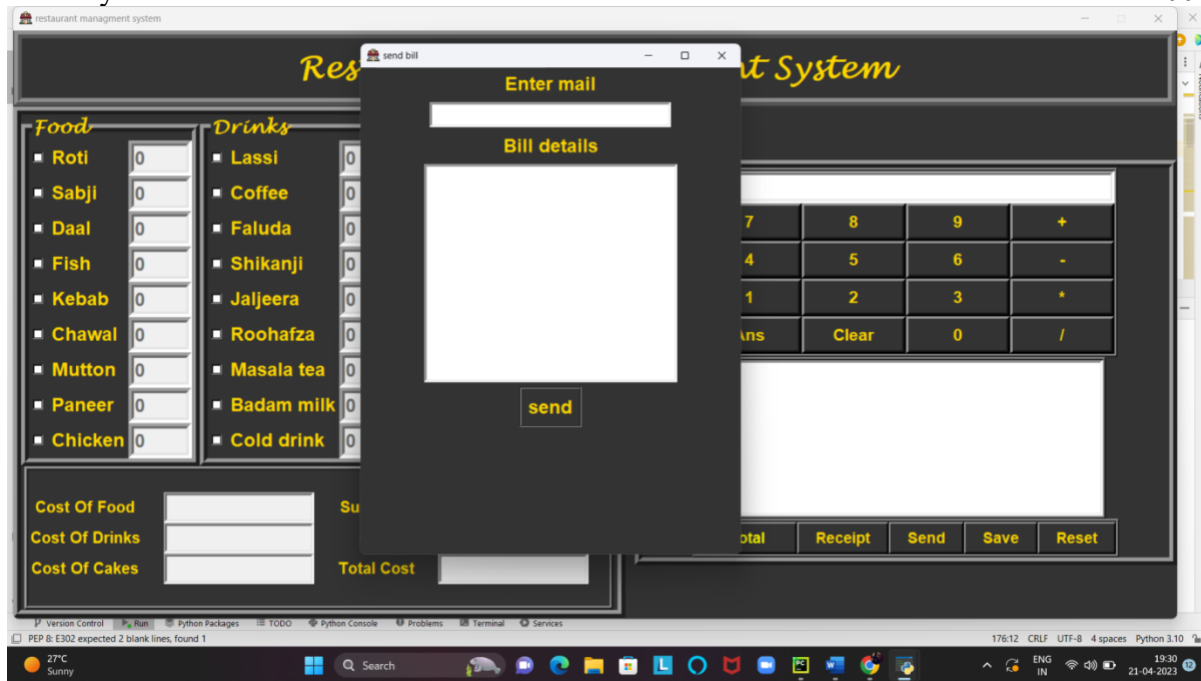
root2=Toplevel()
root2.title('send bill')
root2.iconbitmap('restaurant.ico')
root2.config(bg='grey20')
root2.geometry('485x620+50+50')
maillabel=Label(root2,text="Enter
mail",font=('universe',18,'bold'),bg='grey20',fg='gold')
maillabel.pack(pady=3)
mailentry=Entry(root2,font=('universe',16),border=3,width=25)
mailentry.pack(pady=3)
maillabel = Label(root2, text="Bill details", font=('universe', 18, 'bold'),
bg='grey20', fg='gold')
maillabel.pack(pady=3)
textarea=Text(root2,font=('universe',12),border=3,height=15,width=35)
textarea.pack(pady=3)

send_button=Button(root2,font=('universe',18,'bold'),text="send",relief=GROOVE,bg='gr
ey20',fg='gold',
command=send_email)
send_button.pack(pady=3)
textarea.insert(END,'receipt reff. \t\t'+billnumber+'\t'+date+'\n\n')
if costoffoodvar.get() != '0':
    textarea.insert(END, f'Cost of food \t\t\t {priceoffood}RS\n')
if costofdrinksvar.get() != '0':
    textarea.insert(END, f'Cost of Drinks \t\t\t {priceofdrinks}RS\n')
if costofcakesvar.get() != '0':
    textarea.insert(END, f'Cost of cakes \t\t\t {priceofcakes}RS\n')

textarea.insert(END, f'sub total \t\t\t {subtotalitems}RS\n')
textarea.insert(END, f'GST \t\t\t {gstamount}RS\n\n')
textarea.insert(END, f'Total cost \t\t\t {totalcost}RS\n')

root2.mainloop()

```



Defining all the items in menu functionality:-

```
def roti():
    if var1.get() == 1:
        textroti.config(state=NORMAL)
        textroti.delete(0, END)
        textroti.focus()
    else:
        textroti.config(state=DISABLED)
        e_roti.set('0')

def sabji():
    if var2.get() == 1:
        textsabji.config(state=NORMAL)
        textsabji.delete(0, END)
        textsabji.focus()
    else:
        textsabji.config(state=DISABLED)
        e_sabji.set('0')

def daal():
    if var3.get() == 1:
        textdaal.config(state=NORMAL)
        textdaal.delete(0, END)
        textdaal.focus()
    else:
        textdaal.config(state=DISABLED)
        e_daal.set('0')

def fish():
    if var4.get() == 1:
        textfish.config(state=NORMAL)
        textfish.delete(0, END)
        textfish.focus()
    else:
        textfish.config(state=DISABLED)
        e_fish.set('0')
```

```
def kebab():
    if var5.get() == 1:
        textkebab.config(state=NORMAL)
        textkebab.delete(0, END)
        textkebab.focus()
    else:
        textkebab.config(state=DISABLED)
        e_kebab.set('0')
def chawal():
    if var6.get() == 1:
        textchawal.config(state=NORMAL)
        textchawal.delete(0, END)
        textchawal.focus()
    else:
        textchawal.config(state=DISABLED)
        e_chawal.set('0')
def mutton():
    if var7.get() == 1:
        textmutton.config(state=NORMAL)
        textmutton.delete(0, END)
        textmutton.focus()
    else:
        textmutton.config(state=DISABLED)
        e_mutton.set('0')
def panner():
    if var8.get() == 1:
        textpanner.config(state=NORMAL)
        textpanner.delete(0, END)
        textpanner.focus()
    else:
        textpanner.config(state=DISABLED)
        e_panner.set('0')
def chicken():
    if var9.get() == 1:
        textchicken.config(state=NORMAL)
        textchicken.delete(0, END)
        textchicken.focus()
    else:
        textchicken.config(state=DISABLED)
        e_chicken.set('0')
def lassi():
    if var10.get() == 1:
        textlassi.config(state=NORMAL)
        textlassi.delete(0, END)
        textlassi.focus()
    else:
        textlassi.config(state=DISABLED)
        e_lassi.set('0')
def coffe():
    if var11.get() == 1:
        textcoffe.config(state=NORMAL)
        textcoffe.delete(0, END)
        textcoffe.focus()
    else:
        textcoffe.config(state=DISABLED)
        e_coffe.set('0')
def faluda():
    if var12.get() == 1:
```

```
textfaluda.config(state=NORMAL)
textfaluda.delete(0,END)
textfaluda.focus()

else:
    textfaluda.config(state=DISABLED)
    e_faluda.set('0')

def shikanji():
    if var13.get()==1:
        textshikanji.config(state=NORMAL)
        textshikanji.delete(0,END)
        textshikanji.focus()

    else:
        textshikanji.config(state=DISABLED)
        e_shikanji.set('0')

def jaljeera():
    if var14.get()==1:
        textjaljeera.config(state=NORMAL)
        textjaljeera.delete(0,END)
        textjaljeera.focus()

    else:
        textjaljeera.config(state=DISABLED)
        e_jaljeera.set('0')

def roohafza():
    if var15.get()==1:
        textroohafza.config(state=NORMAL)
        textroohafza.delete(0,END)
        textroohafza.focus()

    else:
        textroohafza.config(state=DISABLED)
        e_roohafza.set('0')

def masalatea():
    if var16.get()==1:
        textmasalatea.config(state=NORMAL)
        textmasalatea.delete(0,END)
        textmasalatea.focus()

    else:
        textmasalatea.config(state=DISABLED)
        e_masalatea.set('0')

def badammilk():
    if var17.get()==1:
        textbadammilk.config(state=NORMAL)
        textbadammilk.delete(0,END)
        textbadammilk.focus()

    else:
        textbadammilk.config(state=DISABLED)
        e_badammilk.set('0')

def colddrink():
    if var18.get()==1:
        textcolddrink.config(state=NORMAL)
        textcolddrink.delete(0,END)
        textcolddrink.focus()

    else:
        textcolddrink.config(state=DISABLED)
        e_colddrink.set('0')

def oreo():
    if var19.get()==1:
        textoreo.config(state=NORMAL)
        textoreo.delete(0,END)
        textoreo.focus()

    else:
```

```
textoreo.config(state=DISABLED)
e_oreo.set('0')
def apple():
if var20.get()==1:
    textapple.config(state=NORMAL)
    textapple.delete(0,END)
    textapple.focus()
else:
    textapple.config(state=DISABLED)
    e_apple.set('0')
def kitkat():
if var21.get()==1:
    textkitkat.config(state=NORMAL)
    textkitkat.delete(0,END)
    textkitkat.focus()
else:
    textkitkat.config(state=DISABLED)
    e_kitkat.set('0')
def vanilla():
if var22.get()==1:
    textvanilla.config(state=NORMAL)
    textvanilla.delete(0,END)
    textvanilla.focus()
else:
    textvanilla.config(state=DISABLED)
    e_vanilla.set('0')
def banana():
if var23.get()==1:
    textbanana.config(state=NORMAL)
    textbanana.delete(0,END)
    textbanana.focus()
else:
    textbanana.config(state=DISABLED)
    e_banana.set('0')
def brownie():
if var24.get()==1:
    textbrownie.config(state=NORMAL)
    textbrownie.delete(0,END)
    textbrownie.focus()
else:
    textbrownie.config(state=DISABLED)
    e_brownie.set('0')
def pineapple():
if var25.get()==1:
    textpineapple.config(state=NORMAL)
    textpineapple.delete(0,END)
    textpineapple.focus()
else:
    textpineapple.config(state=DISABLED)
    e_pineapple.set('0')
def chocolate():
if var26.get()==1:
    textchocolate.config(state=NORMAL)
    textchocolate.delete(0,END)
    textchocolate.focus()
else:
    textchocolate.config(state=DISABLED)
    e_chocolate.set('0')
def blackforest():
if var27.get()==1:
```

```
textblackforest.config(state=NORMAL)
textblackforest.delete(0,END)
textblackforest.focus()

else:
    textblackforest.config(state=DISABLED)
    e_blackforest.set('0')
```

Complete Source code of Restaurant management system project in Python:-

```
import smtplib
from tkinter import *
import random
import time
from tkinter import *
import filedialog,messagebox
```

#functions

```
def reset():
    textreceipt.delete(1.0,END)
    e_roti.set('0')
    e_daal.set('0')
    e_sabji.set('0')
    e_fish.set('0')
    e_kebab.set('0')
    e_chawal.set('0')
    e_mutton.set('0')
    e_panner.set('0')
    e_chicken.set('0')

    e_lassi.set('0')
    e_coffe.set('0')
    e_faluda.set('0')
    e_shikanji.set('0')
    e_jaljeera.set('0')
    e_roohafza.set('0')
    e_masalatea.set('0')
    e_badammilk.set('0')
    e_colddrink.set('0')

    e_oreo.set('0')
    e_apple.set('0')
    e_kitkat.set('0')
    e_vanilla.set('0')
    e_banana.set('0')
    e_brownie.set('0')
    e_pineapple.set('0')
    e_chocolate.set('0')
    e_blackforest.set('0')

    textroti.config(state=DISABLED)
    textdaal.config(state=DISABLED)
    textsabji.config(state=DISABLED)
    textfish.config(state=DISABLED)
    textkebab.config(state=DISABLED)
    textchawal.config(state=DISABLED)
    textmutton.config(state=DISABLED)
```



```
textpanner.config(state=DISABLED)
textchicken.config(state=DISABLED)

textlassi.config(state=DISABLED)
textcoffe.config(state=DISABLED)
textfaluda.config(state=DISABLED)
textshikanji.config(state=DISABLED)
textjaljeera.config(state=DISABLED)
textroohafza.config(state=DISABLED)
textmasalatea.config(state=DISABLED)
textbadammilk.config(state=DISABLED)
textcolddrink.config(state=DISABLED)

textoreo.config(state=DISABLED)
textapple.config(state=DISABLED)
textkitkat.config(state=DISABLED)
textvanilla.config(state=DISABLED)
textbanana.config(state=DISABLED)
textbrownie.config(state=DISABLED)
textpineapple.config(state=DISABLED)
textchocolate.config(state=DISABLED)
textblackforest.config(state=DISABLED)

var1.set(0)
var2.set(0)
var3.set(0)
var4.set(0)
var5.set(0)
var6.set(0)
var7.set(0)
var8.set(0)
var9.set(0)
var10.set(0)
var11.set(0)
var12.set(0)
var13.set(0)
var14.set(0)
var15.set(0)
var16.set(0)
var17.set(0)
var18.set(0)
var19.set(0)
var20.set(0)
var21.set(0)
var22.set(0)
var23.set(0)
var24.set(0)
var25.set(0)
var26.set(0)
var27.set(0)

costoffoodvar.set('')
costofdrinksvar.set('')
costofcakesvar.set('')
subtotalvar.set('')
gstvar.set('')
totalcostvar.set('')
```

```

def send():
def send_email():

# Email details
sender_email = 'chiragkapoor1711@gmail.com'
sender_password = 'sender_password'
mail=mailentry.get()
        message=textarea.get(1.0,END)
        subject = 'Bill'

# SMTP server details
smtp_server = 'smtp.gmail.com'
smtp_port = 587

# Create a secure SSL context
context = smtplib.SMTP(smtp_server, smtp_port)
        context.starttls()

# Login to the email account
context.login(sender_email, sender_password)

# Create the email message
email_message = f"Subject: {subject}\n\n{message}"

# Send the email
context.sendmail(sender_email, mail, email_message)

# Close the SMTP context
context.quit()


root2=Toplevel()
root2.title('send bill')
root2.iconbitmap('restaurant.ico')
root2.config(bg='grey20')
root2.geometry('485x620+50+50')
maillabel=Label(root2,text="Enter
mail",font=('universe',18,'bold'),bg='grey20',fg='gold')
maillabel.pack(pady=3)
mailentry=Entry(root2,font=('universe',16),border=3,width=25)
mailentry.pack(pady=3)
maillabel = Label(root2, text="Bill details", font=('universe', 18,
'bold'), bg='grey20', fg='gold')
maillabel.pack(pady=3)
textarea=Text(root2,font=('universe',12),border=3,height=15,width=35)
textarea.pack(pady=3)

send_button=Button(root2,font=('universe',18,'bold'),text="send",relief=GROOVE,
bg='grey20',fg='gold',
command=send_email)
        send_button.pack(pady=3)
        textarea.insert(END,'receipt reff. \t\t'+billnumber+'\t'+date+'\n\n')
if costoffoodvar.get() != '0':
        textarea.insert(END, f'Cost of food \t\t\t {priceoffood}RS\n')
if costofdrinksvar.get() != '0':
        textarea.insert(END, f'Cost of Drinks \t\t\t {priceofdrinks}RS\n')

```

```

if costofcakesvar.get() != '0':
    textarea.insert(END, f'Cost of cakes \t\t\t {priceofcakes}RS\n')

    textarea.insert(END, f'sub total \t\t\t {subtotalitems}RS\n')
    textarea.insert(END, f'GST \t\t\t {gstamount}RS\n\n')
    textarea.insert(END, f'Total cost \t\t\t {totalcost}RS\n')

    root2.mainloop()

def save():
    if textreceipt.get(1.0,END) =='\n':
        pass
    else:
        url=filedialog.asksaveasfile(mode='w',defaultextension='.txt')
    if url==None:
        pass
    else:
        bill_data=textreceipt.get(1.0,END)
        url.write(bill_data)
        url.close()
        messagebox.showinfo('information','your bill is succesfully saved')

def receipt():
    global billnumber,date
    if costoffoodvar.get() != '' or costofcakesvar.get() != '' or
    costofdrinksvar.get() != '':
        textreceipt.delete(1.0,END)
        x=random.randint(100,1000)
        billnumber='BILL'+str(x)
        date=time.strftime('%d/%m/%Y')
        textreceipt.insert(END, 'Bill reff..\t\t'+billnumber+'\t\t\t'+date+'\n')

    textreceipt.insert(END, '*****\n')
    textreceipt.insert(END, 'ITEMS:\t\t\t COST OF ITEMS (RS) \n')
    textreceipt.insert(END,
    '*****\n')
    if e_roti.get() != '0':
        textreceipt.insert(END, f'Roti\t\t\t\t\t{
int(e_roti.get())*10}RS\n\n')
    if e_sabji.get() != '0':
        textreceipt.insert(END, f'Sabji\t\t\t\t\t{
int(e_sabji.get())*100}RS\n\n')
    if e_daal.get() != '0':
        textreceipt.insert(END, f'Daal\t\t\t\t\t{
int(e_daal.get())*80}RS\n\n')
    if e_fish.get() != '0':
        textreceipt.insert(END, f'Fish\t\t\t\t\t{
int(e_fish.get())*300}RS\n\n')
    if e_kebab.get() != '0':
        textreceipt.insert(END, f'Kebab\t\t\t\t\t{
int(e_kebab.get())*250}RS\n\n')
    if e_chawal.get() != '0':
        textreceipt.insert(END, f'Chawal\t\t\t\t\t{
int(e_chawal.get())*100}RS\n\n')
    if e_mutton.get() != '0':
        textreceipt.insert(END, f'Mutton\t\t\t\t\t{
int(e_mutton.get())*350}RS\n\n')

```

```
if e_panner.get() != '0':
    textreceipt.insert(END, f'Panner\t\t\t\t\t{
int(e_panner.get())*200}RS\n\n')
if e_chicken.get() != '0':
    textreceipt.insert(END, f'Chicken\t\t\t\t\t{
int(e_chicken.get())*250}RS\n\n')

if e_lassi.get() != '0':
    textreceipt.insert(END, f'Lassi\t\t\t\t\t{
int(e_lassi.get())*50}RS\n\n')
if e_coffe.get() != '0':
    textreceipt.insert(END, f'Coffe\t\t\t\t\t{
int(e_coffe.get())*70}RS\n\n')
if e_faluda.get() != '0':
    textreceipt.insert(END, f'Faluda\t\t\t\t\t{
int(e_faluda.get())*60}RS\n\n')
if e_shikanji.get() != '0':
    textreceipt.insert(END, f'Shikanji\t\t\t\t\t{
int(e_shikanji.get())*30}RS\n\n')
if e_jaljeera.get() != '0':
    textreceipt.insert(END, f'Jaljeera\t\t\t\t\t{
int(e_jaljeera.get())*30}RS\n\n')
if e_roohafza.get() != '0':
    textreceipt.insert(END, f'Roohafza\t\t\t\t\t{
int(e_roohafza.get())*30}RS\n\n')
if e_masalatea.get() != '0':
    textreceipt.insert(END, f'Masalatea\t\t\t\t\t{
int(e_masalatea.get())*25}RS\n\n')
if e_badammilk.get() != '0':
    textreceipt.insert(END, f'Badammilk\t\t\t\t\t{
int(e_badammilk.get())*50}RS\n\n')
if e_colddrink.get() != '0':
    textreceipt.insert(END, f'Colddrink\t\t\t\t\t{
int(e_colddrink.get())*25}RS\n\n')

if e_oreo.get() != '0':
    textreceipt.insert(END, f'Oreo\t\t\t\t\t{
int(e_oreo.get())*250}RS\n\n')
if e_apple.get() != '0':
    textreceipt.insert(END, f'Apple\t\t\t\t\t{
int(e_apple.get())*200}RS\n\n')
if e_kitkat.get() != '0':
    textreceipt.insert(END, f'Kitkat\t\t\t\t\t{
int(e_kitkat.get())*300}RS\n\n')
if e_vanilla.get() != '0':
    textreceipt.insert(END, f'Vanilla\t\t\t\t\t{
int(e_vanilla.get())*150}RS\n\n')
if e_banana.get() != '0':
    textreceipt.insert(END, f'Banana\t\t\t\t\t{
int(e_banana.get())*200}RS\n\n')
if e_brownie.get() != '0':
    textreceipt.insert(END, f'Brownie\t\t\t\t\t{
int(e_brownie.get())*400}RS\n\n')
if e_pineapple.get() != '0':
    textreceipt.insert(END, f'Pineapple\t\t\t\t\t{
int(e_pineapple.get())*180}RS\n\n')
if e_chocolate.get() != '0':
    textreceipt.insert(END, f'Chocolate\t\t\t\t\t{
```

```

int(e_chocolate.get())*300}RS\n\n')
if e_blackforest.get()!='0':
    textreceipt.insert(END,f'Blackforest\t\t\t\t\t{
int(e_blackforest.get())*500}RS\n\n')

    textreceipt.insert(END,
'*****\n')
if costoffoodvar.get()!='0':
    textreceipt.insert(END,f'Cost of Food \t\t\t\t\t{
{priceoffood}RS\n\n')
if costofdrinksvar.get()!='0':
    textreceipt.insert(END,f'Cost of Drinks \t\t\t\t\t{
{priceofdrinks}RS\n\n')
if costofcakesvar.get()!='0':
    textreceipt.insert(END,f'Cost of Cakes \t\t\t\t\t{
{priceofcakes}RS\n\n')

    textreceipt.insert(END,f'Sub Total \t\t\t\t\t{subtotalitems}RS\n\n')
    textreceipt.insert(END,f'GST \t\t\t\t\t{gstamount}RS\n\n')
    textreceipt.insert(END,
'*****\n')
    textreceipt.insert(END,f'Total Cost \t\t\t\t\t{totalcost}RS\n\n,')
    textreceipt.insert(END,
'*****\n')
else:
    messagebox.showerror('Error','No items is select')

def totalcost():
global priceoffood, priceofdrinks
,priceofcakes,subtotalitems,gstamount,totalcost
if var1.get() != 0 or var2.get() != 0 or var3.get() != 0 or var4.get() != 0 or
var5.get() != 0 or var6.get() != 0 \
or var7.get() != 0 or var8.get() != 0 or var9.get() != 0 or var10.get() != 0 or
var11.get() != 0 or var12.get() != 0 \
or var13.get() != 0 or var14.get() != 0 or var15.get() != 0 or var16.get() != 0
or var17.get() != 0 or var18.get() != 0 \
or var19.get() != 0 or var20.get() != 0 or var21.get() != 0 or var22.get() != 0
or var23.get() != 0 or var24.get() != 0 \
or var25.get() != 0 or var26.get() != 0 or var27.get() != 0:

    item1=int(e_roti.get())
    item2=int(e_sabji.get())
    item3=int(e_daal.get())
    item4 = int(e_fish.get())
    item5 = int(e_kebab.get())
    item6 = int(e_chawal.get())
    item7 = int(e_mutton.get())
    item8 = int(e_panner.get())
    item9 = int(e_chicken.get())

    item10 = int(e_lassi.get())
    item11 = int(e_coffe.get())

```

```
item12 = int(e_faluda.get())
item13 = int(e_shikanji.get())
item14 = int(e_jaljeera.get())
item15 = int(e_roohafza.get())
item16 = int(e_masalatea.get())
item17= int(e_badammilk.get())
item18 = int(e_colddrink.get())

item19 = int(e_oreo.get())
item20 = int(e_apple.get())
item21 = int(e_kitkat.get())
item22 = int(e_vanilla.get())
item23 = int(e_banana.get())
item24 = int(e_brownie.get())
item25= int(e_pineapple.get())
item26= int(e_chocolate.get())
item27= int(e_blackforest.get())

priceoffood=(item1*10)+(item2*100)+(item3*80)+(item4*300)+(item5*250)+(item6*10
0)+(item7*350)+(item8*200)\
+(item9*250)

priceofdrinks=(item10*50)+(item11*70)+(item12*60)+(item13*30)+(item14*30)+(item
15*30)+(item16*25)\
+(item17*50)+(item18*25)

priceofcakes=(item19*250)+(item20*200)+(item21*300)+(item22*150)+(item23*200)+(
item24*400)+(item25*180)\
+(item26*300)+(item27*500)
costoffoodvar.set(str(priceoffood)+' RS')
costofdrinksvar.set(str(priceofdrinks)+ ' RS')
costofcakesvar.set(str(priceofcakes)+' RS')
subtotalitems=priceoffood+priceofdrinks+priceofcakes
subtotalvar.set(str(subtotalitems)+ ' RS')
gstamount=subtotalitems*5/100
gstvar.set(str(gstamount)+' RS')
totalcost=subtotalitems+gstamount
totalcostvar.set(str(totalcost)+' RS')

else:
    messagebox.showerror('Error','No items is select ')

def roti():
    if var1.get()==1:
        textroti.config(state=NORMAL)
        textroti.delete(0,END)
        textroti.focus()
    else:
        textroti.config(state=DISABLED)
        e_roti.set('0')

def sabji():
    if var2.get()==1:
        textsabji.config(state=NORMAL)
        textsabji.delete(0,END)
        textsabji.focus()
    else:
        textsabji.config(state=DISABLED)
```

```
e_sabji.set('0')

def daal():
    if var3.get()==1:
        textdaal.config(state=NORMAL)
        textdaal.delete(0,END)
        textdaal.focus()
    else:
        textdaal.config(state=DISABLED)
        e_daal.set('0')
def fish():
    if var4.get()==1:
        textfish.config(state=NORMAL)
        textfish.delete(0,END)
        textfish.focus()
    else:
        textfish.config(state=DISABLED)
        e_fish.set('0')
def kebab():
    if var5.get()==1:
        textkebab.config(state=NORMAL)
        textkebab.delete(0,END)
        textkebab.focus()
    else:
        textkebab.config(state=DISABLED)
        e_kebab.set('0')
def chawal():
    if var6.get()==1:
        textchawal.config(state=NORMAL)
        textchawal.delete(0,END)
        textchawal.focus()
    else:
        textchawal.config(state=DISABLED)
        e_chawal.set('0')
def mutton():
    if var7.get()==1:
        textmutton.config(state=NORMAL)
        textmutton.delete(0,END)
        textmutton.focus()
    else:
        textmutton.config(state=DISABLED)
        e_mutton.set('0')

def panner():
    if var8.get()==1:
        textpanner.config(state=NORMAL)
        textpanner.delete(0,END)
        textpanner.focus()
    else:
        textpanner.config(state=DISABLED)
        e_panner.set('0')
def chicken():
    if var9.get()==1:
        textchicken.config(state=NORMAL)
        textchicken.delete(0,END)
        textchicken.focus()
    else:
        textchicken.config(state=DISABLED)
```

```
e_chicken.set('0')

def lassi():
    if var10.get() == 1:
        textlassi.config(state=NORMAL)
        textlassi.delete(0, END)
        textlassi.focus()
    else:
        textlassi.config(state=DISABLED)
        e_lassi.set('0')
def coffe():
    if var11.get() == 1:
        textcoffe.config(state=NORMAL)
        textcoffe.delete(0, END)
        textcoffe.focus()
    else:
        textcoffe.config(state=DISABLED)
        e_coffe.set('0')
def faluda():
    if var12.get() == 1:
        textfaluda.config(state=NORMAL)
        textfaluda.delete(0, END)
        textfaluda.focus()
    else:
        textfaluda.config(state=DISABLED)
        e_faluda.set('0')
def shikanji():
    if var13.get() == 1:
        textshikanji.config(state=NORMAL)
        textshikanji.delete(0, END)
        textshikanji.focus()
    else:
        textshikanji.config(state=DISABLED)
        e_shikanji.set('0')
def jaljeera():
    if var14.get() == 1:
        textjaljeera.config(state=NORMAL)
        textjaljeera.delete(0, END)
        textjaljeera.focus()
    else:
        textjaljeera.config(state=DISABLED)
        e_jaljeera.set('0')
def roohafza():
    if var15.get() == 1:
        textroohafza.config(state=NORMAL)
        textroohafza.delete(0, END)
        textroohafza.focus()
    else:
        textroohafza.config(state=DISABLED)
        e_roohafza.set('0')
def masalatea():
    if var16.get() == 1:
        textmasalatea.config(state=NORMAL)
        textmasalatea.delete(0, END)
        textmasalatea.focus()
    else:
        textmasalatea.config(state=DISABLED)
        e_masalatea.set('0')
```



```
def badammilk():
    if var17.get() == 1:
        textbadammilk.config(state=NORMAL)
        textbadammilk.delete(0, END)
        textbadammilk.focus()
    else:
        textbadammilk.config(state=DISABLED)
        e_badammilk.set('0')
def colddrink():
    if var18.get() == 1:
        textcolddrink.config(state=NORMAL)
        textcolddrink.delete(0, END)
        textcolddrink.focus()
    else:
        textcolddrink.config(state=DISABLED)
        e_colddrink.set('0')
def oreo():
    if var19.get() == 1:
        textoreo.config(state=NORMAL)
        textoreo.delete(0, END)
        textoreo.focus()
    else:
        textoreo.config(state=DISABLED)
        e_oreo.set('0')
def apple():
    if var20.get() == 1:
        textapple.config(state=NORMAL)
        textapple.delete(0, END)
        textapple.focus()
    else:
        textapple.config(state=DISABLED)
        e_apple.set('0')
def kitkat():
    if var21.get() == 1:
        textkitkat.config(state=NORMAL)
        textkitkat.delete(0, END)
        textkitkat.focus()
    else:
        textkitkat.config(state=DISABLED)
        e_kitkat.set('0')
def vanilla():
    if var22.get() == 1:
        textvanilla.config(state=NORMAL)
        textvanilla.delete(0, END)
        textvanilla.focus()
    else:
        textvanilla.config(state=DISABLED)
        e_vanilla.set('0')
def banana():
    if var23.get() == 1:
        textbanana.config(state=NORMAL)
        textbanana.delete(0, END)
        textbanana.focus()
    else:
        textbanana.config(state=DISABLED)
        e_banana.set('0')
def brownie():
    if var24.get() == 1:
```

```
textbrownie.config(state=NORMAL)
textbrownie.delete(0,END)
textbrownie.focus()

else:
    textbrownie.config(state=DISABLED)
    e_brownie.set('0')

def pineapple():
    if var25.get()==1:
        textpineapple.config(state=NORMAL)
        textpineapple.delete(0,END)
        textpineapple.focus()

    else:
        textpineapple.config(state=DISABLED)
        e_pineapple.set('0')

def chocolate():
    if var26.get()==1:
        textchocolate.config(state=NORMAL)
        textchocolate.delete(0,END)
        textchocolate.focus()

    else:
        textchocolate.config(state=DISABLED)
        e_chocolate.set('0')

def blackforest():
    if var27.get()==1:
        textblackforest.config(state=NORMAL)
        textblackforest.delete(0,END)
        textblackforest.focus()

    else:
        textblackforest.config(state=DISABLED)
        e_blackforest.set('0')

root=Tk()
root.geometry('1485x750+0+0')
root.resizable(0,0)
root.config(bg='grey20')
root.title("restaurant managment system")
root.iconbitmap('restaurant.ico')
topframe=Frame(root,bd=10,relief=RIDGE,bg='grey11')
topframe.pack(side=TOP)
labeltitle=Label(topframe,text='Restaurant Management System',font=('lucida
handwriting',30,'bold'),fg='gold',
bg='grey20',width=52,pady=10)
labeltitle.grid(row=0,column=0)
# all frames
#left sides frames
menuframe=Frame(root,bd=10,relief=RIDGE,bg="grey20")
menuframe.pack(side=LEFT)

costframe=Frame(menuframe,bd=5,relief=RIDGE,bg='grey20',pady=28)
costframe.pack(side=BOTTOM)

foodframe=LabelFrame(menuframe,text='Food',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
foodframe.pack(side=LEFT)

drinkframe=LabelFrame(menuframe,text='Drinks',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
```

```
drinkframe.pack(side=LEFT)

cakesframe=LabelFrame(menuframe,text='Cakes',bd=10,relief=RIDGE,font=('lucida
handwriting',18,'bold'),fg='gold',
bg='grey20')
cakesframe.pack(side=LEFT)

#right side frames
rightframe=Frame(root,bd=10,relief=RIDGE,padx=64,bg='grey20')
rightframe.pack(side=RIGHT,pady=45)

calculatorframe=Frame(rightframe,bd=4,relief=RIDGE,bg='grey20')
calculatorframe.pack()

recieptframe=Frame(rightframe,relief=RIDGE,bd=4,bg='grey20')
recieptframe.pack()

buttonframe=Frame(rightframe,bd=4,relief=RIDGE,bg='grey20')
buttonframe.pack()

#all variables
var1=IntVar()
var2=IntVar()
var3=IntVar()
var4=IntVar()
var5=IntVar()
var6=IntVar()
var7=IntVar()
var8=IntVar()
var9=IntVar()
var10=IntVar()
var11=IntVar()
var12=IntVar()
var13=IntVar()
var14=IntVar()
var15=IntVar()
var16=IntVar()
var17=IntVar()
var18=IntVar()
var19=IntVar()
var20=IntVar()
var21=IntVar()
var22=IntVar()
var23=IntVar()
var24=IntVar()
var25=IntVar()
var26=IntVar()
var27=IntVar()

#entry food
e_roti=StringVar()
e_daal=StringVar()
e_sabji=StringVar()
e_fish=StringVar()
e_kebab=StringVar()
e_chawal=StringVar()
e_mutton=StringVar()
e_panner=StringVar()
```

```
e_chicken=StringVar()

#entry drinks
e_lassi=StringVar()
e_coffe=StringVar()
e_faluda=StringVar()
e_shikanji=StringVar()
e_jaljeera=StringVar()
e_roohafza=StringVar()
e_masalatea=StringVar()
e_badammilk=StringVar()
e_colddrink=StringVar()

#entry cakes
e_oreo=StringVar()
e_apple=StringVar()
e_kitkat=StringVar()
e_vanilla=StringVar()
e_banana=StringVar()
e_brownie=StringVar()
e_pineapple=StringVar()
e_chocolate=StringVar()
e_blackforest=StringVar()

costoffoodvar=StringVar()
costofdrinksvar=StringVar()
costofcakesvar=StringVar()
totalcostvar=StringVar()
gstvar=StringVar()
subtotalvar=StringVar()

# default set value

e_roti.set('0')
e_daal.set('0')
e_sabji.set('0')
e_fish.set('0')
e_kebab.set('0')
e_chawal.set('0')
e_mutton.set('0')
e_panner.set('0')
e_chicken.set('0')

e_lassi.set('0')
e_coffe.set('0')
e_faluda.set('0')
e_shikanji.set('0')
e_jaljeera.set('0')
e_roohafza.set('0')
e_masalatea.set('0')
e_badammilk.set('0')
e_colddrink.set('0')

e_oreo.set('0')
e_apple.set('0')
e_kitkat.set('0')
e_vanilla.set('0')
```

```
e_banana.set('0')
e_brownie.set('0')
e_pineapple.set('0')
e_chocolate.set('0')
e_blackforest.set('0')
#Food
roti=Checkbutton(foodframe,text='Roti',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var1,
command=roti,bg='grey20',fg='gold')
roti.grid(row=0,column=0,sticky=W)

sabji=Checkbutton(foodframe,text='Sabji',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var2,
command=sabji,bg='grey20',fg='gold')
sabji.grid(row=1,column=0,sticky=W)

dall=Checkbutton(foodframe,text='Daal',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var3,
command=daal,bg='grey20',fg='gold')
dall.grid(row=2,column=0,sticky=W)

fish=Checkbutton(foodframe,text='Fish',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var4,
command=fish,bg='grey20',fg='gold')
fish.grid(row=3,column=0,sticky=W)

kebab=Checkbutton(foodframe,text='Kebab',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var5,
command=kebab,bg='grey20',fg='gold')
kebab.grid(row=4,column=0,sticky=W)

chawal=Checkbutton(foodframe,text='Chawal',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var6,
command=chawal,bg='grey20',fg='gold')
chawal.grid(row=5,column=0,sticky=W)

mutton=Checkbutton(foodframe,text='Mutton',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var7,
command=mutton,bg='grey20',fg='gold')
mutton.grid(row=6,column=0,sticky=W)

panner=Checkbutton(foodframe,text='Paneer',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var8,
command=panner,bg='grey20',fg='gold')
panner.grid(row=7,column=0,sticky=W)

chicken=Checkbutton(foodframe,text='Chicken',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var9,
command=chicken,bg='grey20',fg='gold')
chicken.grid(row=8,column=0,sticky=W)

#entry
textroti=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLE
D,textvariable=e_roti)
textroti.grid(row=0,column=1)
```

```
textsabji=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_sabji)
textsabji.grid(row=1,column=1)

textdaal=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_daal)
textdaal.grid(row=2,column=1)

textfish=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_fish)
textfish.grid(row=3,column=1)

textkebab=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_kebab)
textkebab.grid(row=4,column=1)

textchawal=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_chawal)
textchawal.grid(row=5,column=1)

textmutton=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_mutton)
textmutton.grid(row=6,column=1)

textpanner=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_panner)
textpanner.grid(row=7,column=1)

textchicken=Entry(foodframe,font=('universe',18,'bold'),bd=7,width=5,state=DISABLED,textvariable=e_chicken)
textchicken.grid(row=8,column=1)

#drinks
lassi=Checkbutton(drinkframe,text='Lassi',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var10,command=lassi,bg='grey20',fg='gold')
lassi.grid(row=0,column=0,sticky=W)

coffe=Checkbutton(drinkframe,text='Coffee',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var11,command=coffe,bg='grey20',fg='gold')
coffe.grid(row=1,column=0,sticky=W)

faluda=Checkbutton(drinkframe,text='Faluda',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var12,command=faluda,bg='grey20',fg='gold')
faluda.grid(row=2,column=0,sticky=W)

shikanji=Checkbutton(drinkframe,text='Shikanji',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var13,command=shikanji,bg='grey20',fg='gold')
shikanji.grid(row=3,column=0,sticky=W)

jaljeera=Checkbutton(drinkframe,text='Jaljeera',font=('universe',18,'bold'),offvalue=0,onvalue=1,variable=var14,
```

```
command=jaljeera,bg='grey20',fg='gold')
jaljeera.grid(row=4,column=0,sticky=W)

roohafza=Checkbutton(drinkframe,text='Roohafza',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var15,
command=roohafza,bg='grey20',fg='gold')
roohafza.grid(row=5,column=0,sticky=W)

masalatea=Checkbutton(drinkframe,text='Masala tea',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var16,
command=masalatea,bg='grey20',fg='gold')
masalatea.grid(row=6,column=0,sticky=W)

badammilk=Checkbutton(drinkframe,text='Badam milk',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var17,
command=badammilk,bg='grey20',fg='gold')
badammilk.grid(row=7,column=0,sticky=W)

colddrink=Checkbutton(drinkframe,text='Cold drink',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var18,
command=colddrink,bg='grey20',fg='gold')
colddrink.grid(row=8,column=0,sticky=W)

#entry drinks

textlassi=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISAB
LED,textvariable=e_lassi)
textlassi.grid(row=0,column=1)

textcoffe=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISAB
LED,textvariable=e_coffe)
textcoffe.grid(row=1,column=1)

textfaluda=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DISA
BLED,textvariable=e_faluda)
textfaluda.grid(row=2,column=1)

textshikanji=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DI
SABLED,textvariable=e_shikanji)
textshikanji.grid(row=3,column=1)

textjaljeera=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DI
SABLED,textvariable=e_jaljeera)
textjaljeera.grid(row=4,column=1)

textroohafza=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=DI
SABLED,textvariable=e_roohafza)
textroohafza.grid(row=5,column=1)

textmasalatea=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=D
ISABLED,textvariable=e_masalatea)
textmasalatea.grid(row=6,column=1)

textbadammilk=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=D
ISABLED,textvariable=e_badammilk)
textbadammilk.grid(row=7,column=1)

textcolddrink=Entry(drinkframe,font=('universe',18,'bold'),bd=7,width=5,state=D
```

```
ISABLED,textvariable=e_colddrink)
textcolddrink.grid(row=8,column=1)
```

```
#cakes
```

```
oreo=Checkbutton(cakesframe,text='Oreo',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var19,
command=oreo,bg='grey20',fg='gold')
oreo.grid(row=0,column=0,sticky=W)
```

```
apple=Checkbutton(cakesframe,text='Apple',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var20,
command=apple,bg='grey20',fg='gold')
apple.grid(row=1,column=0,sticky=W)
```

```
kitkat=Checkbutton(cakesframe,text='Kitkat',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var21,
command=kitkat,bg='grey20',fg='gold')
kitkat.grid(row=2,column=0,sticky=W)
```

```
vanilla=Checkbutton(cakesframe,text='Vanilla',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var22,
command=vanilla,bg='grey20',fg='gold')
vanilla.grid(row=3,column=0,sticky=W)
```

```
banana=Checkbutton(cakesframe,text='Banana',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var23,
command=banana,bg='grey20',fg='gold')
banana.grid(row=4,column=0,sticky=W)
```

```
brownie=Checkbutton(cakesframe,text='Brownie',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var24,
command=brownie,bg='grey20',fg='gold')
brownie.grid(row=5,column=0,sticky=W)
```

```
pineapple=Checkbutton(cakesframe,text='Pineapple',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var25,
command=pineapple,bg='grey20',fg='gold')
pineapple.grid(row=6,column=0,sticky=W)
```

```
chocolate=Checkbutton(cakesframe,text='Chocolate',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,variable=var26,
command=chocolate,bg='grey20',fg='gold')
chocolate.grid(row=7,column=0,sticky=W)
```

```
blackforest=Checkbutton(cakesframe,text='Blackforest',font=('universe'
,18,'bold'),offvalue=0,onvalue=1,
variable=var27,command=blackforest,bg='grey20',fg='gold')
blackforest.grid(row=8,column=0,sticky=W)
```

```
#entry cakes
```

```
textoreo=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISAB
LED,textvariable=e_oreo)
textoreo.grid(row=0,column=1)
```

```
textapple=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISAB
LED,textvariable=e_apple)
```



```
textapple.grid(row=1,column=1)

textkitkat=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISA
BLED,textvariable=e_kitkat)
textkitkat.grid(row=2,column=1)

textvanilla=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DIS
ABLED,textvariable=e_vanilla)
textvanilla.grid(row=3,column=1)

textbanana=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DISA
BLED,textvariable=e_banana)
textbanana.grid(row=4,column=1)

textbrownie=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=DIS
ABLED,textvariable=e_brownie)
textbrownie.grid(row=5,column=1)

textpineapple=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=D
ISABLED,textvariable=e_pineapple)
textpineapple.grid(row=6,column=1)

textchocolate=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state=D
ISABLED,textvariable=e_chocolate)
textchocolate.grid(row=7,column=1)

textblackforest=Entry(cakesframe,font=('universe',18,'bold'),bd=7,width=5,state
=DISABLED,textvariable=e_blackforest)
textblackforest.grid(row=8,column=1)

#cost frame

labelcostoffood=Label(costframe,text='Cost Of
Food',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostoffood.grid(row=0,column=0)
textcostoffood=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state=
'readonly',textvariable=costoffoodvar)
textcostoffood.grid(row=0,column=1,padx=27)

labelcostofdrinks=Label(costframe,text='Cost Of
Drinks',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostofdrinks.grid(row=1,column=0)
textcostofdrinks=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,stat
e='readonly',textvariable=costofdrinksvar)
textcostofdrinks.grid(row=1,column=1,padx=27)

labelcostofcakes=Label(costframe,text='Cost Of
Cakes',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelcostofcakes.grid(row=2,column=0)
textcostofcakes=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state
='readonly',textvariable=costofcakesvar)
textcostofcakes.grid(row=2,column=1,padx=27)

labelsubtotal=Label(costframe,text='Sub
Total',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelsubtotal.grid(row=0,column=2)
textsubtotal=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='r
```

```
eadonly',textvariable=subtotalvar)
textsubtotal.grid(row=0,column=3,padx=27)

labelgst=Label(costframe,text='GST',font=('universe',15,'bold'),bg='grey20',fg='gold')
labelgst.grid(row=1,column=2)
textgst=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='readonly',textvariable=gstvar)
textgst.grid(row=1,column=3,padx=27)

labeltotalcost=Label(costframe,text='Total Cost',font=('universe',15,'bold'),bg='grey20',fg='gold')
labeltotalcost.grid(row=2,column=2)
texttotalcost=Entry(costframe,font=('universe',18,'bold'),bd=4,width=14,state='readonly',textvariable=totalcostvar)
texttotalcost.grid(row=2,column=3,padx=27)

#buttons
buttontotal=Button(buttonframe,text='Total',font=('universe',14,'bold'),bd=3,fg='yellow',bg='grey20',padx=32,command=totalcost)
buttontotal.grid(row=0,column=0)

buttonreceipt=Button(buttonframe,text='Receipt',font=('universe',14,'bold'),bd=3,fg='gold',bg='grey20',padx=15,command=receipt)
buttonreceipt.grid(row=0,column=1)

buttonsend=Button(buttonframe,text='Send',font=('universe',14,'bold'),bd=3,fg='gold',bg='grey20',padx=15,command=send)
buttonsend.grid(row=0,column=2)

buttonsave=Button(buttonframe,text='Save',font=('universe',14,'bold'),bd=3,fg='gold',bg='grey20',padx=15,command=save)
buttonsave.grid(row=0,column=3)

buttonreset=Button(buttonframe,text='Reset',font=('universe',14,'bold'),bd=3,fg='gold',bg='grey20',padx=15,command=reset)
buttonreset.grid(row=0,column=4)

#text area for receipt
textreceipt=Text(recieptframe,font=('universe',12,'bold'),bd=3,width=55,height=10)
textreceipt.grid(row=0,column=0)

#calculator
operator=''
def buttonclick(number):
    global operator
    operator=operator+number
    calculatorfield.delete(0,END)
    calculatorfield.insert(END,operator)
def clear():
    global operator
    calculatorfield.delete(0,END)
```

```
    operator=''
def ans():
global operator
    result=str(eval(operator))
    calculatorfield.delete(0,END)
    calculatorfield.insert(0,result)
    operator=''

calculatorfield=Entry(calculatorframe, font=('universe',18,'bold'),width=40,bd=5
)
calculatorfield.grid(row=0,column=0,columnspan=4)

button7=Button(calculatorframe, text='7', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('7'))
button7.grid(row=1, column=0)

button8=Button(calculatorframe, text='8', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('8'))
button8.grid(row=1, column=1)

button9=Button(calculatorframe, text='9', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('9'))
button9.grid(row=1, column=2)

buttonplus=Button(calculatorframe, text='+', bd=5, fg='gold', bg='grey20', font=('un
iverse',16,'bold'), width=9,
command=lambda:buttonclick('+'))
buttonplus.grid(row=1, column=3)

button4=Button(calculatorframe, text='4', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('4'))
button4.grid(row=2, column=0)

button5=Button(calculatorframe, text='5', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('5'))
button5.grid(row=2, column=1)

button6=Button(calculatorframe, text='6', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('6'))
button6.grid(row=2, column=2)

buttonminus=Button(calculatorframe, text='-
', bd=5, fg='gold', bg='grey20', font=('universe',16,'bold'), width=9,
command=lambda:buttonclick('-'))
buttonminus.grid(row=2, column=3)

button1=Button(calculatorframe, text='1', bd=5, fg='gold', bg='grey20', font=('unive
rse',16,'bold'), width=9,
command=lambda:buttonclick('1'))
button1.grid(row=3, column=0)

button2=Button(calculatorframe, text='2', bd=5, fg='gold', bg='grey20', font=('unive
```

```

rse',16,'bold'),width=9,
command=lambda:buttonclick('2'))
button2.grid(row=3,column=1)

button3=Button(calculatorframe,text='3',bd=5,fg='gold',bg='grey20',font=('unive
rse',16,'bold'),width=9,
command=lambda:buttonclick('3'))
button3.grid(row=3,column=2)

buttonmul=Button(calculatorframe,text='*',bd=5,fg='gold',bg='grey20',font=('uni
verse',16,'bold'),width=9,
command=lambda:buttonclick('*'))
buttonmul.grid(row=3,column=3)

buttonans=Button(calculatorframe,text='Ans',bd=5,fg='gold',bg='grey20',font=('u
niverse',16,'bold'),width=9,
command=ans)
buttonans.grid(row=4,column=0)
buttonclear=Button(calculatorframe,text='Clear',bd=5,fg='gold',bg='grey20',font
=('universe',16,'bold'),width=9,
command=clear)
buttonclear.grid(row=4,column=1)

buttonzero=Button(calculatorframe,text='0',bd=5,fg='gold',bg='grey20',font=('un
iverse',16,'bold'),width=9,
command=lambda:buttonclick('0'))
buttonzero.grid(row=4,column=2)

buttondivison=Button(calculatorframe,text='/',bd=5,fg='gold',bg='grey20',font=(
'universe',16,'bold'),width=9,
command=lambda:buttonclick('/'))
buttondivison.grid(row=4,column=3)
root.mainloop()

```

Output:-

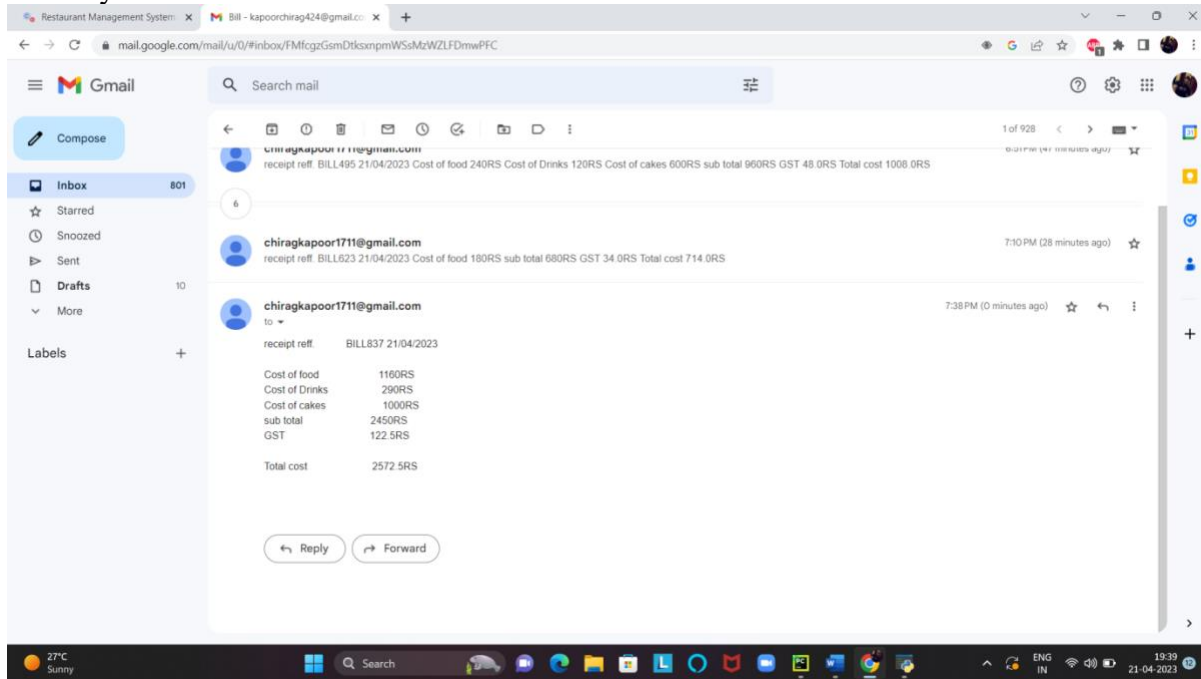


Then we send the bill to email:-

The screenshot displays a 'restaurant management system' window. A 'send bill' dialog is open, prompting the user to 'Enter mail' with the email 'kapoorchirag424@gmail.com'. The dialog also shows 'Bill details' for receipt ref. BILL837 dated 21/04/2023. The bill summary lists: Cost of food (1160RS), Cost of Drinks (290RS), Cost of cakes (1000RS), sub total (2450RS), GST (122.5RS), and Total cost (2572.5RS). A 'send' button is at the bottom of the dialog. In the background, the main system window shows a list of cakes (Oreo, Apple, Kitkat, Vanilla, Banana, Brownie, Pineapple, Chocolate, Blackforest) with their respective counts and prices. A calculator is also visible on the right side of the main window.

ITEMS:	COST OF ITEMS(RS)
Roti	100RS
Daal	160RS
Kebab	500RS

Got the bill on email:-



Conclusion:-

This **Restaurant Management System Project in Python with Source Code** is the way to enhance and broaden our competencies and logic ideas which is essential in training the python

Also this **Restaurant Management System** is a easy GUI primarily based application which is very smooth to recognize and use. It makes use of Tkinter module for the GUI.

THANK YOU