**import** tkinter **as** tk  
**import** smtplib  
**from** email.mime.multipart **import** MIMEMultipart  
**from** email.mime.text **import** MIMEText  
**from** email.mime.application **import** MIMEApplication  
  
  
**import** ssl  
**from** tkinter **import** \*  
**import** random  
**import** time  
**from** tkinter **import** filedialog,messagebox  
**from** email.message **import** EmailMessage  
*#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\_email():  
 *# Email details* sender\_email = **'polytechnic578@gmail.com'** sender\_password = **'Jlgpkihpaxzlcyhf'** recipient\_email = **'kapoorchirag424@gmail.com'** subject = **'Bill'** message = **'Detail of food'** *# 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, recipient\_email, email\_message)  
  
 *# Close the SMTP context* context.quit()  
  
**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{** 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{** int(e\_badammilk.get())\*50**}RS\n\n'**)  
 **if** e\_colddrink.get()!=**'0'**:  
 textreceipt.insert(END,**f'Colddrink\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{** int(e\_oreo.get())\*250**}RS\n\n'**)  
 **if** e\_apple.get()!=**'0'**:  
 textreceipt.insert(END,**f'apple\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{** int(e\_kitkat.get())\*300**}RS\n\n'**)  
 **if** e\_vanilla.get()!=**'0'**:  
 textreceipt.insert(END,**f'vanilla\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{** int(e\_banana.get())\*200**}RS\n\n'**)  
 **if** e\_brownie.get()!=**'0'**:  
 textreceipt.insert(END,**f'brownie\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{** int(e\_pineapple.get())\*180**}RS\n\n'**)  
 **if** e\_chocolate.get()!=**'0'**:  
 textreceipt.insert(END,**f'chocolate\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{** 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 {**priceoffood**}RS\n\n'**)  
 **if** costofdrinksvar.get()!=**'0'**:  
 textreceipt.insert(END,**f'Cost of Drinks \t\t\t\t {**priceofdrinks**}RS\n\n'**)  
 **if** costofcakesvar.get()!=**'0'**:  
 textreceipt.insert(END,**f'Cost of cakes \t\t\t\t {**priceofcakes**}RS\n\n'**)  
  
 textreceipt.insert(END,**f'sub total \t\t\t\t {**subtotalitems**}RS\n\n'**)  
 textreceipt.insert(END,**f'GST \t\t\t\t {**gstamount**}RS\n\n'**)  
 textreceipt.insert(END,**f'Total cost \t\t\t\t {**totalcost**}RS\n\n'**)  
 textreceipt.insert(END, **'\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n'**)  
 **else**:  
 messagebox.showerror(**'Eror'**,**'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** var27.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)+(item7\*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 '**)  
  
**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=DISABLED,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=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)  
  
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)  
  
*#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)  
  
  
*#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,state=**'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=**'readonly'**,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\_email)  
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=(**'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)  
root.mainloop()