EX NO: 12

MINI PROJECT: SHOPPING MART APPLICATION

AIM

To develop a java application for Purchasing and Billing the products with email notification.

PROCEDURE

1. Create the class Class1 which contains all the information of the product, buttons, text fields etc.

2. Create the class Shopping which defined the layout and visibility of panel etc, with buttons aligned.

3. Create the class UserMail which sends OTP to confirm mail id and sends the bill after purchase.

4. Create the class UserName which gets the name, mail id, of the customer.

5. The program will be multilevel inherited as UserMail <- UserName <- Class1 <- Shopping (Base Class to Derived class).

PROGRAM

//////////////////////////////<CLASS USERMAIL><Starts>//////////////////////////////////////

package Shop;

import java.util.Properties;

import java.util.Random;

import javax.mail.*;

import javax.mail.internet.*;

public class UserMail

{

//inal String user;

public final String user="******"; //FOR PRIVACY REASONS USERNAME HAS BEEN OMITTED

public final String password="*"; //FOR PRIVACY REASONS PASSWORD HAS BEEN OMITTED

```
/*

CONDITIONS

All features of this application can be used or shown only by the programmer. Since this
application contains mailing feature, for privacy reasons mail-id and password are removed
here. Running this application without adding mail id and password will through error.

*/

public String to;

public String MailId;

static String U_Name;

static String U_Email;

String MailContent=" ";


  int OTPmail(String Name,String MailId,String MailCont)

  {


 Random rand = new Random();


        // Generate random integers in range 0 to 999

         int OTP = rand.nextInt(10000);


  to = MailId;

  if(MailCont=="0")

  MailContent="Welcome "+Name+",\n \tYour OTP is : "+OTP+"\n\n\n\nWith Regards\n3 Star
Team";

  else

  MailContent=MailCont;

  //Get the session object

  Properties props = new Properties();

  props.put("mail.smtp.auth", "true");

  props.put("mail.smtp.starttls.enable","true");

  props.put("mail.smtp.host","smtp.gmail.com");

  props.put("mail.smtp.port",587);


  Session session = Session.getInstance(props,new Authenticator()

  {

        protected PasswordAuthentication getPasswordAuthentication()
```

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```java
        {
                return new PasswordAuthentication(user,password);
        }
});


//Compose the message
try
{
  MimeMessage message = new MimeMessage(session);
  message.setFrom(new InternetAddress(user));
  message.addRecipient(Message.RecipientType.TO,new InternetAddress(to));


  message.setRecipients(Message.RecipientType.BCC,"cvrnishanth@gmail.com");
  message.setSubject("3 Star SHOPPING MART");
  message.setText(MailContent);


 //send the message
  Transport.send(message);


  } catch (MessagingException e) {e.printStackTrace();}
return OTP;
    }
    void MemoBill(String Content)
    {
            Properties props = new Properties();
props.put("mail.smtp.auth", "true");
props.put("mail.smtp.starttls.enable","true");
props.put("mail.smtp.host","smtp.gmail.com");
props.put("mail.smtp.port",587);



Session session = Session.getInstance(props,new Authenticator()
{
     protected PasswordAuthentication getPasswordAuthentication()
     {
```

```
        return new PasswordAuthentication(user,password);
      }
  });


  //Compose the message
  try
  {
    MimeMessage message = new MimeMessage(session);
    message.setFrom(new InternetAddress(user));
    message.addRecipient(Message.RecipientType.TO,new InternetAddress(to));
    message.setSubject("3 Star SHOPPING MART Bill");
    message.setText(Content);



    //send the message
    Transport.send(message);


    System.out.println("message sent successfully...");


    } catch (MessagingException e) {e.printStackTrace();}




      }
}


/////////////////////////<CLASS USERMAIL><Ends>/////////////////////////////
/////////////////////////<CLASS USERNAME><Starts>/////////////////////////////
package Shop;


import java.awt.BorderLayout;
import java.awt.Frame;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
```

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```java
import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;

import javax.swing.JPasswordField;

import javax.swing.JTextField;

import javax.swing.border.EmptyBorder;




public class UserName extends UserMail
{
/////////////////////////////////
/////////////////////////////////
    boolean UserFlag=false;
    static JFrame F;
    Frame F1 = new Frame();
    JButton Login = new JButton(" Login ");
    JButton OTP   = new JButton("Send OTP");
    JButton B_Exit   = new JButton("EXIT");
    int otp=0;
    JPanel UserLogin =new JPanel();
    JPanel User =new JPanel();
    //JLabel UserName = new JLabel("USER NAME");
    //JLabel Password = new JLabel("Password");
    JTextField T_UserName = new JTextField(10);
    //JTextField T_Password = new JTextField(10);

    JLabel L_Name = new JLabel(" NAME");
    JLabel L_Email = new JLabel("Email Id.");

    JTextField T_Name = new JTextField(20);
    JTextField T_Email = new JTextField(30);
    JTextField T_OTP = new JTextField(4);
```

```java
//public String U_Name;

int U_OTP;
int G_OTP;

JPasswordField T_Password = new JPasswordField();

//MailId
UserMail UM = new UserMail();

void LogIn()
{
    F1.setSize(1300, 800);
    T_UserName.setText("UserName..");

    User.setLayout(new BorderLayout());
    UserLogin.setLayout(new GridLayout(4,2,10,10));
    UserLogin.add(L_Name);
    UserLogin.add(T_Name);
    UserLogin.add(L_Email);
    UserLogin.add(T_Email);
    UserLogin.add(OTP);
    UserLogin.add(T_OTP);
    UserLogin.add(Login);
    UserLogin.add(B_Exit);

    User.add(UserLogin, BorderLayout.CENTER);
    User.setBorder(new EmptyBorder(270, 450, 270, 450));
    F1.add(User);
    F1.setVisible(true);

    OTP.addActionListener(new ActionListener()
    {   @Override
        public void actionPerformed(ActionEvent e)
```

```java
            {
                otp_Button();
            }
        });


        Login.addActionListener(new ActionListener()
        {   @Override
            public void actionPerformed(ActionEvent e)
            {
                U_OTP = Integer.parseInt( T_OTP.getText());
                //if(U_OTP.length()!=0)
                if(U_OTP == G_OTP)
                {
                    UserFlag=true;
                    F1.setVisible(false);
                    F.setVisible(UserFlag);
                }
            }
        });
        B_Exit.addActionListener(new ActionListener()
        {   @Override
            public void actionPerformed(ActionEvent e)
            {
             System.exit(0);
            }
        });
}
void otp_Button()
{
        U_Name = String.valueOf( T_Name.getText());
    U_Email = String.valueOf( T_Email.getText());
    if(U_Name.length()!=0)
    if(U_Email.contains("@"))
    {
        if (otp==0)
```

```
                {
            T_OTP.setText("OTP Generated");

            G_OTP = UM.OTPmail(U_Name,U_Email,"0");

        }

        otp++;

        }

    }

    void MContext(String Cont)

    {

            G_OTP = UM.OTPmail(U_Name,U_Email,Cont);

    }

}
```

/////////////////////////////<CLASS USERNAME ><Ends>/////////////////////////////////

/////////////////////////////<CLASS CLASS1><Starts>/////////////////////////////////

```java
package Shop;

import java.awt.BorderLayout;

import java.awt.GridLayout;

import java.awt.Label;


import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;


public class Class1 extends UserName

{

    JFrame F1;

    int FlagA = -1;

    int FlagS = -1;

    int FlagAOver = 0;

    int TRY=0;

    String S="           ";
```

```java
int MODE = 1;

JButton P0_Mode = new JButton(" LIGHT MODE ");

JPanel P0_Mode_Panel = new JPanel(new BorderLayout());


Label Title = new Label(" 3 Star Shopping Mart ");

Label Star = new Label("\t\t***");

Label Test0 = new Label(" ");

Label Test1 = new Label(" ");

Label Test2 = new Label(" ");



Label P2_W0 = new Label(" This Project  ");

Label P2_W1 = new Label("  is Coded in  ");

JButton P2_W2 = new JButton("   ~~JAVA~~    ");


Label P2_E0 = new Label("By 3 Star Team ");

JButton P2_E1 = new JButton(" ~ NITHYA NARAYANAN ");

JButton P2_E2 = new JButton(" ~ THAMARAI SELVAN    ");

JButton P2_E3 = new JButton(" ~ KATHIRVEL         ");

JButton P2_E4 = new JButton(" ~ MADHESH         ");


Label TitleFront = new Label(" ~ ~ ~ ~ ~ ~ ~ ~ ~ ~");

Label TitleBack = new Label("~ ~ ~ ~ ~ ~ ~ ~  ");


String ItemButtonText[] = {" Fruits\t"," Vegitables\t"," Books\t"," Stationary\t","
Bevarages "," Dress\t"," Sports\t"," Laptop\t"," HomeApps\t"," Mobiles\t"};


//Fruits

int PAGE=0;

int TotalItem=0;
```

```
    String Item00[]    = {"Orange     ","Apple        ","Watermelon   ","Pomegranate  ","Mango
","Grapes      ","Pine      ","Gova      ","Litchi    ","Kirni      "};

    double[] R00 = {140,150,200,130,160,90,70,90,320,120};

    double[] Q00 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price0 = {0,0,0,0,0,0,0,0,0,0};


    //Vegitables
    String Item01[]    = {"Tomato        ","Brinjal        ","Ladiesfinger ","Potato        ","Onion
","Ginger      ","Garlic      ","Drumstick    ","Cucumber    ","Beans      "};

    double[] R01 = {60,80,70,50,100,90,170,80,70,110};

    double[] Q01 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price1 = {0,0,0,0,0,0,0,0,0,0};


    //Books
    String Item02[]    = {"Mahabharata ","Ramayanam    ","BhagavadGita ","Kuran
","Bible      ","Thirukural    ","Manimekalai ","Purananuru    ","Agananooru    ","WingsOfFire
"};

    double[] R02 = {780,690,990,950,140,180,200,240,250,260};

    double[] Q02 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price2 = {0,0,0,0,0,0,0,0,0,0};

    double PriceTotal=0;


    //Stationary

    String Item03[]    = {"Pencil      ","Pen            ","Eraser        ","Sharpener    ","Long
scale   ","Marker              ","Writing Pad ","Stick File    ","Paper Clips  ","Glue
      "};

    double[] R03 = {3,5,2,4,14,23,45,10,6,12};

    double[] Q03 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price3 = {0,0,0,0,0,0,0,0,0,0};


    //Bevarages

    String Item04[]    = {"Bovonto             ","Maa Juice    ","B Natural    ","Safal Juice
","VIBRO            ","TIGO            ","ZYPSY            ","ZIMZO
","AmulLassi   ","AvinLassi    "};

    double[] R04 = {80,30,45,50,40,33,35,40,20,20};

    double[] Q04 = {0,0,0,0,0,0,0,0,0,0};
```

```
    double[] Price4 = {0,0,0,0,0,0,0,0,0,0};


    //Dress

    //St g Item00[]    = {"         \t"," 	         \t"," 	         \t"," 	         \t"," 	         \t"," 	         \t","
\t","         \t","         \t","         \t"};

    String Item05[]    = {" MenShirt   "," MenPant     "," BoyShirt   "," BoyPant     "," Saree
"," Chudidar    "," WhiteShirt "," Vesti      "," ColorShirt "," HandNapkin  "};

    double[] R05 = {350,400,250,300,900,400,200,240,250,25};

    double[] Q05 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price5 = {0,0,0,0,0,0,0,0,0,0};


    //Sports

    String Item06[]    = {"Bat                  ","Ball                  ","Stump
   ","FootBall              ","VollyBall     ","HockeyBat    ","HockeyBall
   ","TenniesBat   ","TenniesBall  ","SportsCap    "};

    double[] R06 = {450,40,100,700,650,430,700,600,50,160};

    double[] Q06 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price6 = {0,0,0,0,0,0,0,0,0,0};


    //Laptop

    String Item07[]    = {"HP Pavilion  ","HP NoteBook         "," MS Surface 1"," MS Surface 2
","DELL Inspiron ","MAC Book     "," MacBookPro  "," Chromebook   "," Cromebook2
","ChromeBook3   "};

    double[] R07 = {80000,60000,100000,120000,45000,150000,200000,240000,150000,160000};

    double[] Q07 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price7 = {0,0,0,0,0,0,0,0,0,0};


    //Electronics

    String Item08[]    = {" SplitAC      "," WindowAC        "," TV LED           "," TV LCD
"," FridgeD    "," FridgeS    "," Mixie      "," Grinder    "," Heater     "," FAN        "};

    double[] R08 = {26000,16000,30000,20000,20000,15000,3000,5000,4500,2500};

    double[] Q08 = {0,0,0,0,0,0,0,0,0,0};

    double[] Price8 = {0,0,0,0,0,0,0,0,0,0};


    //Mobiles

    String Item09[]    = {" Galaxy M10  "," Galaxy M20        "," Galaxy A10  "," Galaxy A20   ","
Galaxy S10   "," Galaxy S20  "," Iphone X    "," Iphone Xs   "," Iphone 11   "," Iphone 11 +  "};

    double[] R09 = {9999,11999,14999,19999,24999,29999,49999,59999,99999,129999};
```

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```
double[] Q09 = {0,0,0,0,0,0,0,0,0,0};
double[] Price9 = {0,0,0,0,0,0,0,0,0,0};



double[] QTemp = {0,0,0,0,0,0,0,0,0,0};


String Price[] = {" 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"};// Price
String Quant[] = {"   ","   ","   ","   ","   ","   ","   ","   ","   ","   ",};
//String Quant[] = {"   ","   ","   ","   ","   ","   ","   ","   ","   ","   ",};


String ItemTemp[]      = {" 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"};
String ItemTempP[]     = {" 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"," 0"};


JButton Page1Cart = new JButton(S+S+" Your Cart "+S+S);
String Page1Total;


JLabel[] ACItemName    = new JLabel[20];
JLabel[] ACIteamQy     = new JLabel[20];
JLabel[] ACItemTotPric = new JLabel[20];


JLabel[] L_QTY = new JLabel[12]; // Page2 TextField
JLabel[] L_Item = new JLabel[12];
JLabel[] L_Price = new JLabel[12];
JLabel L_ADD,L_SUB;



///Cart Page1 Items Up
JButton Back = new JButton("Main Page");
JButton Bill = new JButton("      ");
JButton Exit = new JButton(" EXIT ");


JButton B00 = new JButton();
JButton B01 = new JButton();
JButton B02 = new JButton();
JButton B03 = new JButton();
```

```java
JButton B04 = new JButton();
JButton B05 = new JButton();
JButton B06 = new JButton();
JButton B07 = new JButton();
JButton B08 = new JButton();
JButton B09 = new JButton();


JButton[] ButtonAdd = new JButton[10];
JButton[] ButtonSub = new JButton[10];


Label Category;
Label ThankYou = new Label();


JPanel panel0 = new JPanel(new BorderLayout());
JPanel P0 = new JPanel(new GridLayout(2, 4, 50, 40));


JPanel panel2 = new JPanel(new BorderLayout());
JPanel panel2ThankYou = new JPanel(new GridLayout(1,3,200,200));


JPanel panel2_WEST = new JPanel(new GridLayout(3,1));
JPanel panel2_EAST = new JPanel(new GridLayout(5,1));


JPanel Panel11;
JPanel Panel12;
JPanel Panel10;


JPanel Panel1Bill = new JPanel();
JPanel Panel1BillList = new JPanel();
JPanel Panel2BillMemo = new JPanel();
String PayStringAddCart[]={"  "," "," "," "," "," "," "," "," "," "," "," "," "};


JPanel TitleCenter;


int C,AC=0;
```

```
        Label BillTxt;


        //Mail Items
        String M_ItemName[]= {"   "," "," "," "," "," "," "," "," "," "," "," "," "," "," "};
        double M_Qty[]= {0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0};
        double M_Rate[]= {0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0};
        double M_Price[]= {0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0};
        double M_Total=0;
        /////////////


}
//////////////////////////<CLASS CLASS1><Ends>//////////////////////////////////
//////////////////////////<CLASS SHOPPING><Starts>//////////////////////////////
package Shop;
import java.io.FileOutputStream;
import java.io.FileWriter;

import com.itextpdf.text.*;
import com.itextpdf.text.pdf.*;
import java.awt.BorderLayout;
import java.awt.Color;
import java.awt.Desktop;
import java.awt.Font;
import java.awt.GridBagConstraints;
import java.awt.GridBagLayout;
import java.awt.GridLayout;
import java.awt.Insets;
import java.awt.Label;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
//import java.io.FileOutputStream;
import java.net.URI;
import java.util.Properties;
```

```java
import javax.mail.Authenticator;

import javax.mail.Message;

import javax.mail.MessagingException;

import javax.mail.PasswordAuthentication;

import javax.mail.Session;

import javax.mail.Transport;

import javax.mail.internet.InternetAddress;

import javax.mail.internet.MimeMessage;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JPanel;

import javax.swing.border.EmptyBorder;

import javax.swing.text.Document;


import java.io.File;  // Import the File class

import java.io.IOException;



public class Shopping extends Class1

{

  public static void main(String args[])

  {

    //boolean UserFlags = false;

    Class1 L1 = new Class1();


    L1.LogIn();


    //if(UserFlag)

    new Shopping();


  }

  public Shopping()

  {
```

```
//***************************** */
F = new JFrame();
//++JFrame F2 = new JFrame();
F.setLayout(new BorderLayout());
F.add(panel0,BorderLayout.CENTER);
F.add(Bill,BorderLayout.SOUTH);
//F.setVisible(true);
F.setSize(1300, 800);
F.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
//***************************** */


//F1.add(panel0);
Page1Total=" ";


//*************Category**************** */
panel0.setBorder(new EmptyBorder(30, 40, 200, 30));
panel0.setBackground(Color.DARK_GRAY);


P0.setFont(new Font("Arial", Font.BOLD, 25));
P0.setBackground(Color.DARK_GRAY);


//P0_Mode.setBorder(new EmptyBorder(20, 30, 20, 30));
P0_Mode_Panel.add(P0_Mode,BorderLayout.EAST);
P0_Mode_Panel.setBackground(Color.DARK_GRAY);


//P0_Mode.setBounds(10,10,5,5);
panel0.add(P0_Mode_Panel,BorderLayout.NORTH);
panel0.add(P0,BorderLayout.SOUTH);
ADDPage0();
//*************END-Category**************** */


Panel1BillList.setLayout(new GridBagLayout());
```

```
    Panel1BillList.setBorder(new EmptyBorder(100, 10, 20, 30));


    Panel2BillMemo.setLayout(new GridBagLayout());
    Panel2BillMemo.setBorder(new EmptyBorder(40, 200, 5, 200));


    TITLE();
    Page1();
    ButtonPress();


  }


//==============================================================================
  void Page1Layout()
  {
    PAGE=1;
    //***************************** */ items and qty show
    Panel11 = new JPanel(new GridBagLayout());
    Panel11.setBorder(new EmptyBorder(5, 200, 5, 150));
    //***************************** */




    //***************************** */
    Panel12 = new JPanel(new GridLayout(1,3,200,300)); //for back, catogory name
    Panel12.setBorder(new EmptyBorder(10, 10, 10, 10));
    //***************************** */




    //*************Page 1** Your Cart***************** */
    Panel1Bill.setLayout(new BorderLayout());
    Panel1Bill.setBorder(new EmptyBorder(10, 5, 20, 30));
    Panel1Bill.add(Page1Cart,BorderLayout.NORTH);
    //***************************** */


    if(MODE%2==0)
    {
```

```java
    Panel11.setBackground(Color.LIGHT_GRAY);
    Panel12.setBackground(Color.LIGHT_GRAY);
    Panel1Bill.setBackground(Color.LIGHT_GRAY);
}
else
{
    Panel11.setBackground(Color.DARK_GRAY);
    Panel12.setBackground(Color.DARK_GRAY);
    Panel1Bill.setBackground(Color.DARK_GRAY);
}


//**************************** */
for(int x = 0; x< 20;x++)
{
    ACItemName[x]   = new JLabel("   ");//.setText("   ");
    ACIteamQy[x]    = new JLabel("   ");//.setText("   ");
    ACItemTotPric[x] = new JLabel("   ");//.setText("   ");
}
//**************************** */


//**************************** */
Panel10 = new JPanel(new BorderLayout());
Panel10.add(Panel12,BorderLayout.NORTH);
Panel10.add(Panel11,BorderLayout.CENTER);//, BorderLayout.CENTER;   //Panel
Panel10.add(Panel1Bill,BorderLayout.EAST);//******* */
//**************************** */



//**************************** */
Panel1Bill.add(Panel1BillList,BorderLayout.CENTER);
Page1AddCart();
AddToBill();
//**************************** */
```

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```java
Category=new Label("\t\t\t\t"+ItemButtonText[C]);
if(MODE%2==0)
{
    Category.setForeground(Color.BLACK);
    Star.setForeground(Color.BLACK);
}
else
{
    Category.setForeground(Color.WHITE);
    Star.setForeground(Color.WHITE);
}
Panel12.setFont(new Font("Arial", Font.BOLD, 35));
Panel12.add(Back);
Panel12.add(Category);
Panel12.add(Star);



F.add(Panel10,BorderLayout.CENTER);



Back.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {   PAGE=0;
        QTempToQ();
        Panel10.setVisible(false);
        Bill.setVisible(true);
    }
});
ADDPage1();
Bill.setVisible(true);
}


void PageBill()
{
```

```
if(MODE%2==0)
{

    panel2ThankYou.setBackground(Color.LIGHT_GRAY);
    panel2.setBackground(Color.LIGHT_GRAY);
    P2_W0.setBackground(Color.LIGHT_GRAY);
    P2_W1.setBackground(Color.LIGHT_GRAY);
    P2_W2.setBackground(Color.LIGHT_GRAY);
    P2_E0.setBackground(Color.LIGHT_GRAY);
    P2_E1.setBackground(Color.LIGHT_GRAY);
    P2_E2.setBackground(Color.LIGHT_GRAY);
    P2_E3.setBackground(Color.LIGHT_GRAY);
    P2_E4.setBackground(Color.LIGHT_GRAY);
    panel2_EAST.setBackground(Color.LIGHT_GRAY);
    panel2_WEST.setBackground(Color.LIGHT_GRAY);
    Panel1BillList.setBackground(Color.GRAY);
    Panel2BillMemo.setBackground(Color.GRAY);

    Panel2BillMemo.setForeground(Color.BLACK);
    ThankYou.setForeground(Color.BLACK);
    P2_W0.setForeground(Color.BLUE);
    P2_W1.setForeground(Color.BLUE);
    P2_W2.setForeground(Color.BLUE);
    P2_E0.setForeground(Color.BLUE);
    P2_E1.setForeground(Color.BLUE);
    P2_E2.setForeground(Color.BLUE);
    P2_E3.setForeground(Color.BLUE);
    P2_E4.setForeground(Color.BLUE);
}
else
{
    panel2ThankYou.setBackground(Color.DARK_GRAY);
    panel2.setBackground(Color.DARK_GRAY);
    P2_W0.setBackground(Color.DARK_GRAY);
    P2_W1.setBackground(Color.DARK_GRAY);
```

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```
        P2_W2.setBackground(Color.DARK_GRAY);

        P2_E0.setBackground(Color.DARK_GRAY);

        P2_E1.setBackground(Color.DARK_GRAY);

        P2_E2.setBackground(Color.DARK_GRAY);

        P2_E3.setBackground(Color.DARK_GRAY);

        P2_E4.setBackground(Color.DARK_GRAY);

        panel2_EAST.setBackground(Color.DARK_GRAY);

        panel2_WEST.setBackground(Color.DARK_GRAY);

        Panel1BillList.setBackground(Color.LIGHT_GRAY);

        Panel2BillMemo.setBackground(Color.LIGHT_GRAY);


        Panel2BillMemo.setForeground(Color.BLACK);

        ThankYou.setForeground(Color.WHITE);

        P2_W0.setForeground(Color.CYAN);

        P2_W1.setForeground(Color.CYAN);

        P2_W2.setForeground(Color.CYAN);

        P2_E0.setForeground(Color.CYAN);

        P2_E1.setForeground(Color.CYAN);

        P2_E2.setForeground(Color.CYAN);

        P2_E3.setForeground(Color.CYAN);

        P2_E4.setForeground(Color.CYAN);
}
panel0.setVisible(false);

panel2ThankYou.add(Back);

ThankYou.setText(" Thank You");

panel2ThankYou.add(ThankYou);

panel2ThankYou.add(Exit);

Exit.setFont(new Font("Arial", Font.BOLD, 25));

panel2.add(panel2ThankYou,BorderLayout.NORTH);

panel2ThankYou.setFont(new Font("Cooper", Font.BOLD, 30));


panel2_EAST.setBorder(new EmptyBorder(180, 10, 180, 5));

panel2_WEST.setBorder(new EmptyBorder(200, 5, 200, 10));


panel2_WEST.setFont(new Font("Courier", Font.BOLD , 30));
```

```
panel2_EAST.setFont(new Font("Courier", Font.BOLD , 30));


P2_W2.setBorder(new EmptyBorder(200, 5, 200, 10));
P2_E1.setBorder(new EmptyBorder(200, 5, 200, 10));


P2_E2.setBorder(new EmptyBorder(200, 5, 200, 10));
P2_E3.setBorder(new EmptyBorder(200, 5, 200, 10));
P2_E4.setBorder(new EmptyBorder(200, 5, 200, 10));
P2_W2.setFont(new Font("Courier", Font.BOLD , 22));
P2_E1.setFont(new Font("Courier", Font.BOLD , 22));
P2_E2.setFont(new Font("Courier", Font.BOLD , 20));
P2_E3.setFont(new Font("Courier", Font.BOLD , 20));
P2_E4.setFont(new Font("Courier", Font.BOLD , 20));
panel2_WEST.add(P2_W0);
panel2_WEST.add(P2_W1);
panel2_WEST.add(P2_W2);
panel2_EAST.add(P2_E0);
panel2_EAST.add(P2_E1);
panel2_EAST.add(P2_E2);
panel2_EAST.add(P2_E3);
panel2_EAST.add(P2_E4);


panel2ThankYou.setBorder(new EmptyBorder(0, 50, 10, 50));

panel2.setBorder(new EmptyBorder(30, 10, 30, 1));
F.add(panel2);


panel2.add(panel2_WEST,BorderLayout.WEST);
panel2.add(Panel2BillMemo,BorderLayout.CENTER);
panel2.add(panel2_EAST,BorderLayout.EAST);


PageBill_Memo();

}
```

```
//^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
//^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
//^^^^^^^^^^^^^^^^^^No Need To GO Beyond^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
//^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
//^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^


  void Page1AddCart()
  {
     AC=0;
     PriceTotal=0;
     for (int i =0;i<15;i++)
     {
          M_ItemName[i]=" ";
          M_Rate[i]=0;
          M_Qty[i]=0;
          M_Price[i]=0;
     }
     M_Total=0;

     for(int i=0;i<10;i++)
     {
       if(Q00[i]>0)
       {
         ACItemName[AC].setText(Item00[i]);
         ACIteamQy[AC].setText(""+Q00[i]);
         Price0[i]=R00[i]*Q00[i];
         ACItemTotPric[AC].setText(""+(Price0[i]));
         PriceTotal+=Price0[i];

         M_ItemName[AC]=Item00[i];
         M_Rate[AC]=R00[i];
         M_Qty[AC]=Q00[i];
         M_Price[AC]=Price0[i];
```

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```
    AC+=1;


}
if(Q01[i]>0)
{
    ACItemName[AC].setText(Item01[i]);
    ACIteamQy[AC].setText(""+Q01[i]);
    Price1[i]=R01[i]*Q01[i];
    ACItemTotPric[AC].setText(""+(Price1[i]));
    PriceTotal+=Price1[i];


    M_ItemName[AC]=Item01[i];
     M_Rate[AC]=R01[i];
     M_Qty[AC]=Q01[i];
     M_Price[AC]=Price1[i];



    AC+=1;
}
if(Q02[i]>0)
{
    ACItemName[AC].setText(Item02[i]);
    ACIteamQy[AC].setText(""+Q02[i]);
    Price2[i]=R02[i]*Q02[i];
    ACItemTotPric[AC].setText(""+(Price2[i]));
    PriceTotal+=Price2[i];


    M_ItemName[AC]=Item02[i];
     M_Rate[AC]=R02[i];
     M_Qty[AC]=Q02[i];
     M_Price[AC]=Price2[i];



    AC+=1;
```

```
        }
    if(Q03[i]>0)
    {
        ACItemName[AC].setText(Item03[i]);
        ACIteamQy[AC].setText(""+Q03[i]);
        Price3[i]=R03[i]*Q03[i];
        ACItemTotPric[AC].setText(""+(Price3[i]));
        PriceTotal+=Price3[i];


        M_ItemName[AC]=Item03[i];
         M_Rate[AC]=R03[i];
         M_Qty[AC]=Q03[i];
         M_Price[AC]=Price3[i];



        AC+=1;
    }
    if(Q04[i]>0)
    {
        ACItemName[AC].setText(Item04[i]);
        ACIteamQy[AC].setText(""+Q04[i]);
        Price4[i]=R04[i]*Q04[i];
        ACItemTotPric[AC].setText(""+(Price4[i]));
        PriceTotal+=Price4[i];



        M_ItemName[AC]=Item04[i];
         M_Rate[AC]=R04[i];
         M_Qty[AC]=Q04[i];
         M_Price[AC]=Price4[i];



        AC+=1;
    }
    if(Q05[i]>0)
```

```
{
   ACItemName[AC].setText(Item05[i]);
   ACIteamQy[AC].setText(""+Q05[i]);
   Price5[i]=R05[i]*Q05[i];
   ACItemTotPric[AC].setText(""+(Price5[i]));
   PriceTotal+=Price5[i];


   M_ItemName[AC]=Item05[i];
   M_Rate[AC]=R05[i];
   M_Qty[AC]=Q05[i];
   M_Price[AC]=Price5[i];


   AC+=1;
}
if(Q06[i]>0)
{
   ACItemName[AC].setText(Item06[i]);
   ACIteamQy[AC].setText(""+Q06[i]);
   Price6[i]=R06[i]*Q06[i];
   ACItemTotPric[AC].setText(""+(Price6[i]));
   PriceTotal+=Price6[i];


   M_ItemName[AC]=Item06[i];
   M_Rate[AC]=R06[i];
   M_Qty[AC]=Q06[i];
   M_Price[AC]=Price6[i];
   AC+=1;
}
if(Q07[i]>0)
{
   ACItemName[AC].setText(Item07[i]);
   ACIteamQy[AC].setText(""+Q07[i]);
   Price7[i]=R07[i]*Q07[i];
   ACItemTotPric[AC].setText(""+(Price7[i]));
   PriceTotal+=Price7[i];
```

```java
      M_ItemName[AC]=Item07[i];
       M_Rate[AC]=R07[i];
       M_Qty[AC]=Q07[i];
       M_Price[AC]=Price7[i];


    AC+=1;
}
if(Q08[i]>0)
{
    ACItemName[AC].setText(Item08[i]);
    ACIteamQy[AC].setText(""+Q08[i]);
    Price8[i]=R08[i]*Q08[i];
    ACItemTotPric[AC].setText(""+(Price8[i]));
    PriceTotal+=Price8[i];



    M_ItemName[AC]=Item08[i];
     M_Rate[AC]=R08[i];
     M_Qty[AC]=Q08[i];
     M_Price[AC]=Price8[i];


    AC+=1;
}
if(Q09[i]>0)
{
    ACItemName[AC].setText(Item09[i]);
    ACIteamQy[AC].setText(""+Q09[i]);
    Price9[i]=R09[i]*Q09[i];
    ACItemTotPric[AC].setText(""+(Price9[i]));
    PriceTotal+=Price9[i];



    M_ItemName[AC]=Item09[i];
```

```java
      M_Rate[AC]=R09[i];
      M_Qty[AC]=Q09[i];
      M_Price[AC]=Price9[i];


      AC+=1;
}
TotalItem=AC;//For getting Total Quatity every time
M_Total=PriceTotal;
if(TotalItem==15 )
{
   for(int j=0;j<10;j++)
   {
      if(QTemp[j]==0)
      {
      ButtonAdd[j].setText(" + ");
      if(MODE%2==0)
      ButtonAdd[j].setForeground(Color.RED);
      else
      ButtonAdd[j].setForeground(Color.RED);
      FlagAOver = 1;
      }
   }
}
else
{
   for(int j=0;j<10;j++)
   {
      ButtonAdd[j].setText(" + ");
      if(MODE%2==0)
      ButtonAdd[j].setForeground(Color.BLUE);
      else
      ButtonAdd[j].setForeground(Color.GREEN);
      FlagAOver = 0;
   }
}
```

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```
        //Page1Total.setText("Tot I: "+AC+"| Total Amount : "+ PriceTotal);
    }
  }
//==============================================================================
  void AddToBill()
  {
    GridBagConstraints P1Bill = new GridBagConstraints();
    P1Bill.insets = new Insets(2, 2, 2, 2);


    for(int I=0;I<20;I++)
    {
      if(MODE%2==0)
      {
        ACItemName[I].setForeground(Color.BLACK);
        ACIteamQy[I].setForeground(Color.BLACK);
        ACItemTotPric[I].setForeground(Color.BLACK);
      }
      else
      {
        ACItemName[I].setForeground(Color.BLACK);
        ACIteamQy[I].setForeground(Color.BLACK);
        ACItemTotPric[I].setForeground(Color.BLACK);
      }

      P1Bill.gridy = I;

      P1Bill.gridx = 0;
      P1Bill.ipadx = 20;
      P1Bill.ipady = 3;

      Panel1BillList.add(ACItemName[I],P1Bill);
      P1Bill.gridx = 1;
      P1Bill.ipadx = 10;
      Panel1BillList.add(ACIteamQy[I],P1Bill);
      P1Bill.gridx = 2;
```

```
        P1Bill.ipadx = 10;

        Panel1BillList.add(ACItemTotPric[I],P1Bill);



    }
    if( TotalItem==0)

         Page1Total=" ";

    else

    Page1Total=(S+S+S+S+S+"      Proceed  to  Bill     "+S+S+S+"   Total Amount : "+
PriceTotal);

    Bill.setText(Page1Total);

    if(MODE%2==0)

    {

       Panel1BillList.setBackground(Color.GRAY);

       Panel2BillMemo.setBackground(Color.GRAY);

    }

    else

    {

       Panel1BillList.setBackground(Color.LIGHT_GRAY);

       Panel2BillMemo.setBackground(Color.LIGHT_GRAY);

    }

 }
//===============================================================================
 void Page1RemoveCart()

 {

    for(int I=0;I<20;I++)

    {

       Panel1BillList.remove(ACItemName[I]);

       Panel1BillList.remove(ACIteamQy[I]);

       Panel1BillList.remove(ACItemTotPric[I]);


       Panel2BillMemo.remove(ACItemName[I]);

       Panel2BillMemo.remove(ACIteamQy[I]);

       Panel2BillMemo.remove(ACItemTotPric[I]);

    }
```

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```
    }
//================================================================
  void Page1CartInz()
  {
    for(int x = 0; x< 20;x++)
    {
      ACItemName[x].setText("   ");
      ACIteamQy[x].setText("   ");
      ACItemTotPric[x].setText("   ");
    }
  }
//================================================================
  void TITLE()
  {
    Title.setFont(new Font("Courier", Font.BOLD, 30));
    TitleFront.setFont(new Font("Courier", Font.BOLD, 40));
    TitleBack.setFont(new Font("Courier", Font.BOLD, 40));


    TitleCenter = new JPanel(new GridLayout(1,3,30,30));
    TitleCenter.setBorder(new EmptyBorder(20, 20, 2, 20));


    TitleCenter.setBackground(Color.DARK_GRAY);
    TitleFront.setBackground(Color.DARK_GRAY);
    Title.setBackground(Color.DARK_GRAY);
    TitleBack.setBackground(Color.DARK_GRAY);
    TitleFront.setForeground(Color.BLUE);
    Title.setForeground(Color.YELLOW);
    TitleBack.setForeground(Color.BLUE);


    TitleCenter.add(TitleFront);
    TitleCenter.add(Title);
    TitleCenter.add(TitleBack);
    F.add(TitleCenter,BorderLayout.NORTH);
  }
  void ADDPage0()
```

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```
{
   P0.add(B00);

   P0.add(B01);

   P0.add(B02);

   P0.add(B03);

   P0.add(B04);

   P0.add(B05);

   P0.add(B06);

   P0.add(B07);

   P0.add(B08);

   P0.add(B09);
}
void ADDPage1()
{
   //Initializing The Front Q value to Back Q value

   Quant[0]="   "+QTemp[0];

   Quant[1]="   "+QTemp[1];

   Quant[2]="   "+QTemp[2];

   Quant[3]="   "+QTemp[3];

   Quant[4]="   "+QTemp[4];

   Quant[5]="   "+QTemp[5];

   Quant[6]="   "+QTemp[6];

   Quant[7]="   "+QTemp[7];

   Quant[8]="   "+QTemp[8];

   Quant[9]="   "+QTemp[9];


   L_Item[10] = new JLabel(" Item Name ");


   L_Price[10]=new JLabel("   ");


   L_ADD = new JLabel("Add Qty ");

   L_SUB = new JLabel("Reduce Qty");

   L_ADD.setFont((new Font("Arial", Font.BOLD, 20)));

   L_SUB.setFont((new Font("Arial", Font.BOLD, 20)));
```

```java
L_QTY[10] = new JLabel("Qty");
L_Item[10].setFont((new Font("Arial", Font.BOLD, 20)));
L_Price[10].setFont((new Font("Arial", Font.BOLD, 20)));
L_QTY[10].setFont((new Font("Arial", Font.BOLD,20)));


if(MODE%2==0)
{
    L_ADD.setForeground(Color.BLACK);
    L_SUB.setForeground(Color.BLACK);
    L_Item[10].setForeground(Color.BLACK);
    L_Price[10].setForeground(Color.BLACK);
    L_QTY[10].setForeground(Color.BLACK);
}
else
{
    L_ADD.setForeground(Color.WHITE);
    L_SUB.setForeground(Color.WHITE);
    L_Item[10].setForeground(Color.WHITE);
    L_Price[10].setForeground(Color.WHITE);
    L_QTY[10].setForeground(Color.WHITE);
}


for(int I=0;I<10;I++)
{
    L_Item[I] = new JLabel(ItemTemp[I]);
    L_Price[I]=new JLabel(ItemTempP[I]);
    L_QTY[I] = new JLabel(Quant[I]);
    L_Item[I].setFont((new Font("Arial", Font.ITALIC, 18)));
    L_Price[I].setFont((new Font("Arial", Font.ITALIC, 18)));
    L_QTY[I].setFont((new Font("Arial", Font.ITALIC, 18)));


    if(MODE%2==0)
    {
        L_Item[I].setForeground(Color.BLACK);
```

```
        L_Price[I].setForeground(Color.BLACK);

        L_QTY[I].setForeground(Color.BLACK);

    }

    else

    {

        L_Item[I].setForeground(Color.WHITE);

        L_Price[I].setForeground(Color.WHITE);

        L_QTY[I].setForeground(Color.WHITE);

    }

}
GridBagConstraints P1Con = new GridBagConstraints();


if(C>1)
L_Price[10].setText("Rate/Unit");
if(C<2)
L_Price[10].setText("Rate/Kg");
P1Con.insets = new Insets(2, 2, 2, 2);


P1Con.gridy = 0;


P1Con.gridx = 0;
P1Con.ipadx = 30;
P1Con.ipady = 10;


Panel11.add(L_Item[10], P1Con);
P1Con.gridx = 1;
Panel11.add(L_Price[10], P1Con);
P1Con.gridx = 2;
Panel11.add(L_ADD, P1Con);
P1Con.gridx = 3;
Panel11.add(L_QTY[10], P1Con);
P1Con.gridx = 4;
Panel11.add(L_SUB, P1Con);
```

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```java
for( int Y =0;Y<10;Y++)
{
    P1Con.gridy = Y+1;

    P1Con.gridx = 0;
    P1Con.ipadx = 30;
    P1Con.ipady = 8;

    Panel11.add(L_Item[Y], P1Con);
    P1Con.gridx = 1;
    Panel11.add(L_Price[Y], P1Con);
    P1Con.gridx = 2;
    P1Con.ipadx = 20;
    Panel11.add(ButtonAdd[Y], P1Con);
    P1Con.gridx = 3;
    Panel11.add(L_QTY[Y], P1Con);
    P1Con.gridx = 4;
    Panel11.add(ButtonSub[Y], P1Con);
    if(QTemp[Y]==0)
    {
        ButtonSub[Y].setText(" - ");
        if(MODE%2==0)
            ButtonSub[Y].setForeground(Color.RED);//setVisible(false);
        else
            ButtonSub[Y].setForeground(Color.RED);//setVisible(false);
    }
    if(QTemp[Y]!=0)
    {
        ButtonSub[Y].setText(" - ");
        if(MODE%2==0)
            ButtonSub[Y].setForeground(Color.BLUE);//setVisible(false);
        else
            ButtonSub[Y].setForeground(Color.GREEN);//setVisible(false);
    }
```

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```
        }



    }

//==============================================================================

  void Page1()

  {

      B00.setText(ItemButtonText[0]);

      B01.setText(ItemButtonText[1]);

      B02.setText(ItemButtonText[2]);

      B03.setText(ItemButtonText[3]);

      B04.setText(ItemButtonText[4]);

      B05.setText(ItemButtonText[5]);

      B06.setText(ItemButtonText[6]);

      B07.setText(ItemButtonText[7]);

      B08.setText(ItemButtonText[8]);

      B09.setText(ItemButtonText[9]);


////////////////////////////////////////////////////////////////////////////

      Back.setFont(new Font("Arial", Font.BOLD, 25));

      Bill.setFont(new Font("Arial", Font.BOLD, 25));


////////////////////////////////////////////////////////////////////////////


      B00.setFont(new Font("Arial", Font.BOLD, 25));

      B01.setFont(new Font("Arial", Font.BOLD, 25));

      B02.setFont(new Font("Arial", Font.BOLD, 25));

      B03.setFont(new Font("Arial", Font.BOLD, 25));

      B04.setFont(new Font("Arial", Font.BOLD, 25));

      B05.setFont(new Font("Arial", Font.BOLD, 25));

      B06.setFont(new Font("Arial", Font.BOLD, 25));

      B07.setFont(new Font("Arial", Font.BOLD, 25));

      B08.setFont(new Font("Arial", Font.BOLD, 25));
```

```java
    B09.setFont(new Font("Arial", Font.BOLD, 25));


}
void TryWEB()
{
   if (TRY==1)
   try
   {
      Desktop desktop = java.awt.Desktop.getDesktop();
      URI oURL = new URI("http://www.github.com/NithyaNarayananV");
      desktop.browse(oURL);
   }
   catch (Exception e)
   {
      e.printStackTrace();
   }


   if (TRY==2)
   try
   {
      Desktop desktop = java.awt.Desktop.getDesktop();
      URI oURL = new URI("http://www.github.com/Thamaraimks");
      desktop.browse(oURL);
   }
   catch (Exception e)
   {
      e.printStackTrace();
   }


   if (TRY==3)
   try
   {
      Desktop desktop = java.awt.Desktop.getDesktop();
      URI oURL = new URI("http://www.github.com/KathirvelP207");
      desktop.browse(oURL);
```

```java
    }
    catch (Exception e)
    {
      e.printStackTrace();
    }
    /*if (TRY==4)
    try
    {
      Desktop desktop = java.awt.Desktop.getDesktop();
      URI oURL = new URI("http://www.github.com/NithyaNarayananV");
      desktop.browse(oURL);
    }
    catch (Exception e)
    {
      e.printStackTrace();
    }*/
    if (TRY==5)
    try
    {
      Desktop desktop = java.awt.Desktop.getDesktop();
      URI oURL = new
URI("https://github.com/NithyaNarayananV/ShoppingCart/blob/master/Shopping.java");
      desktop.browse(oURL);
    }
    catch (Exception e)
    {
      e.printStackTrace();
    }
}
//*************Action Listener*************** */
//*************Action Listener*************** */
//*************Action Listener*************** */
//*************Action Listener*************** */
void ButtonPress()
{
```

```
P2_E1.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        TRY=1;
        TryWEB();
    }
});
P2_E2.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        TRY=2;
        TryWEB();
    }
});
P2_E3.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        TRY=3;
        TryWEB();
    }
});
P2_E4.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        TRY=4;
        TryWEB();
    }
});
P2_W2.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
```

```
    {
       TRY=5;
       TryWEB();
    }
});
Back.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
       panel2.setVisible(false);
       Page1();
       F.add(panel0);
       panel0.setVisible(true);
       Page1RemoveCart();
       if( TotalItem>0)
          Bill.setVisible(true);
       if( TotalItem==0)
          Page1Total=" ";
    }
});
Bill.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
       if( TotalItem!=0)
       {
       Panel10.setVisible(false);
       panel2.setVisible(true);
       PageBill();
       Page1Total=" ";
       Bill.setVisible(false);
       }
    }
});
Exit.addActionListener(new ActionListener()
```

```
    {
        @Override
        public void actionPerformed(ActionEvent e)
        {
                //Mail_Memo();
                String Context=" ";
        Context+="3 Star SHOPPING MART";
            Context+="\n\t\tMemo  Bill";
            Context+="\n Sno. \t Item \t\t    Rate \t\t Quantity \t\t Price ";
            for(int i=0;i<15;i++)
            {
                if(M_Qty[i]==0)
                        break;
                Context+=("\n "+(i+1)+"\t"+M_ItemName[i]+"  \t"+M_Rate[i]+" \t\t"+M_Qty[i]+"
\t"+M_Price[i]);


            }
            Context+=("\n\n Total Amount : "+PriceTotal);
            Context+=("\n\n Thank You Visit Again. ");
            MContext(Context);
            //Print();
        System.exit(0);
        }
    });


//===============================================================================
=================
    B00.addActionListener(new ActionListener()
    {  @Override
        public void actionPerformed(ActionEvent e)
        {
            panel0.setVisible(false);
            ItemTemp = Item00;
            QTemp = Q00;
```

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```java
        C=0;
        for ( int i = 0; i<10;i++)
        {
           Price[i] = "Rs. "+R00[i];
        }
        ItemTempP= Price;
        if( TotalItem==0)
        Page1Total=" ";
        Page1Layout();
        Page1AddCart();
    }
});
B01.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        panel0.setVisible(false);
        ItemTemp = Item01;
        QTemp = Q01;
        C=1;
        for ( int i = 0; i<10;i++)
        {
           Price[i] = "Rs. "+R01[i];
        }
        ItemTempP= Price;
        Page1Layout();
        Page1AddCart();
        if( TotalItem==0)
        Page1Total=" ";
    }
});
B02.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
```

```java
            panel0.setVisible(false);

            ItemTemp = Item02;

            QTemp = Q02;

            C=2;

            for ( int i = 0; i<10;i++)

            {

               Price[i] = "Rs. "+R02[i];

            }

            ItemTempP= Price;

            Page1Layout();

            Page1AddCart();

            if( TotalItem==0)

            Page1Total=" ";



      }
});
B03.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {

            panel0.setVisible(false);

            ItemTemp = Item03;

            QTemp = Q03;

            C=3;

            for ( int i = 0; i<10;i++)

            {

               Price[i] = "Rs. "+R03[i];

            }

            ItemTempP= Price;

            Page1Layout();

            Page1AddCart();

            if( TotalItem==0)

            Page1Total=" ";

    }
```

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```
});
B04.addActionListener(new ActionListener()
{   @Override
   public void actionPerformed(ActionEvent e)
   {
      panel0.setVisible(false);
      ItemTemp = Item04;
      QTemp = Q04;
      C=4;
      for ( int i = 0; i<10;i++)
      {
         Price[i] = "Rs. "+R04[i];
      }
      ItemTempP= Price;
      Page1Layout();
      Page1AddCart();
      if( TotalItem==0)
      Page1Total=" ";
   }
});
B05.addActionListener(new ActionListener()
{   @Override
   public void actionPerformed(ActionEvent e)
   {
      panel0.setVisible(false);
      ItemTemp = Item05;
      QTemp = Q05;
      C=5;
      for ( int i = 0; i<10;i++)
      {
         Price[i] = "Rs. "+R05[i];
      }
      ItemTempP= Price;
      Page1Layout();
      Page1AddCart();
```

```
        if( TotalItem==0)
        Page1Total=" ";
    }
});
B06.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        panel0.setVisible(false);
        ItemTemp = Item06;
        QTemp = Q06;
        C=6;
        for ( int i = 0; i<10;i++)
        {
            Price[i] = "Rs. "+R06[i];
        }
        ItemTempP= Price;
        Page1Layout();
        Page1AddCart();
        if( TotalItem==0)
        Page1Total=" ";
    }
});
B07.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        panel0.setVisible(false);
        ItemTemp = Item07;
        QTemp = Q07;
        C=7;
        for ( int i = 0; i<10;i++)
        {
            Price[i] = "Rs. "+R07[i];
        }
```

```java
            ItemTempP= Price;
            Page1Layout();
            Page1AddCart();
            if( TotalItem==0)
            Page1Total=" ";
      }
});
B08.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        panel0.setVisible(false);
        ItemTemp = Item08;
        QTemp = Q08;
        C=8;
        for ( int i = 0; i<10;i++)
        {
            Price[i] = "Rs. "+R08[i];
        }
        ItemTempP= Price;
        Page1Layout();
        Page1AddCart();
        if( TotalItem==0)
        Page1Total=" ";
      }
});
B09.addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        panel0.setVisible(false);
        ItemTemp = Item09;
        QTemp = Q09;
        C=9;
        for ( int i = 0; i<10;i++)
```

```
        {
          Price[i] = "Rs. "+R09[i];

        }
        ItemTempP= Price;
        Page1Layout();
        Page1AddCart();
        if( TotalItem==0)
        Page1Total=" ";

      }
    });
//=============================================================================
==


  for( int I=0;I<10;I++)
  {
    ButtonAdd[I] = new JButton(" + ");
    ButtonAdd[I].setFont(new Font("Arial", Font.BOLD, 20));
    ButtonSub[I] = new JButton(" - ");
    ButtonSub[I].setFont(new Font("Arial", Font.BOLD, 20));
    ButtonAdd[I].setBackground(Color.DARK_GRAY);
    ButtonSub[I].setBackground(Color.DARK_GRAY);
    if(MODE%2==0)
    {
    ButtonAdd[I].setForeground(Color.RED);
    ButtonSub[I].setForeground(Color.RED);
    }
    else
    {
    ButtonAdd[I].setForeground(Color.RED);
    ButtonSub[I].setForeground(Color.RED);
    }
  }
    ButtonAdd[0].addActionListener(new ActionListener()
    {  @Override
      public void actionPerformed(ActionEvent e)
```

```
        {
            FlagA = 0;
            Action_MethodADD(FlagA);
        }
    });
    ButtonSub[0].addActionListener(new ActionListener()
    {   @Override
        public void actionPerformed(ActionEvent e)
        {
            FlagS = 0;
            Action_MethodSUB(FlagS);
        }
    });
    ButtonAdd[1].addActionListener(new ActionListener()
    {   @Override
        public void actionPerformed(ActionEvent e)
        {   FlagA = 1;
            Action_MethodADD(FlagA);
        }
    });
    ButtonSub[1].addActionListener(new ActionListener()
    {   @Override
        public void actionPerformed(ActionEvent e)
        {
            FlagS = 1;
            Action_MethodSUB(FlagS);
        }
    });
    ButtonAdd[2].addActionListener(new ActionListener()
    {   @Override
        public void actionPerformed(ActionEvent e)
        {
            FlagA = 2;
            Action_MethodADD(FlagA);
        }
```

```java
});
ButtonSub[2].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagS = 2;
        Action_MethodSUB(FlagS);
    }
});
ButtonAdd[3].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagA = 3;
        Action_MethodADD(FlagA);
    }
});
ButtonSub[3].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagS = 3;
        Action_MethodSUB(FlagS);
    }
});
ButtonAdd[4].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagA = 4;
        Action_MethodADD(FlagA);
    }
});
ButtonSub[4].addActionListener(new ActionListener()
{   @Override
```

```
      public void actionPerformed(ActionEvent e)
      {
         FlagS = 4;
         Action_MethodSUB(FlagS);
      }
});
ButtonAdd[5].addActionListener(new ActionListener()
{   @Override
      public void actionPerformed(ActionEvent e)
      {
         FlagA = 5;
         Action_MethodADD(FlagA);
      }
});
ButtonSub[5].addActionListener(new ActionListener()
{   @Override
      public void actionPerformed(ActionEvent e)
      {
         FlagS = 5;
         Action_MethodSUB(FlagS);
      }
});
ButtonAdd[6].addActionListener(new ActionListener()
{   @Override
      public void actionPerformed(ActionEvent e)
      {
         FlagA = 6;
         Action_MethodADD(FlagA);
      }
});
ButtonSub[6].addActionListener(new ActionListener()
{   @Override
      public void actionPerformed(ActionEvent e)
      {
         FlagS = 6;
```

```
        Action_MethodSUB(FlagS);
    }
});
ButtonAdd[7].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagA = 7;
        Action_MethodADD(FlagA);
    }
});
ButtonSub[7].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagS = 7;
        Action_MethodSUB(FlagS);
    }
});
ButtonAdd[8].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagA = 8;
        Action_MethodADD(FlagA);
    }
});
ButtonSub[8].addActionListener(new ActionListener()
{   @Override
    public void actionPerformed(ActionEvent e)
    {
        FlagS = 8;
        Action_MethodSUB(FlagS);
    }
});
```

```
    ButtonAdd[9].addActionListener(new ActionListener()
    {   @Override
      public void actionPerformed(ActionEvent e)
      {
        FlagA = 9;
        Action_MethodADD(FlagA);
      }
    });
    ButtonSub[9].addActionListener(new ActionListener()
    {   @Override
      public void actionPerformed(ActionEvent e)
      {
        FlagS = 9;
        Action_MethodSUB(FlagS);
      }
    });



    P0_Mode.addActionListener(new ActionListener()
    {   @Override
      public void actionPerformed(ActionEvent e)
      {
        MODE+=1;
        if(MODE %2 ==0)
          P0_Mode.setText(" Night Mode");
        else
          P0_Mode.setText(" Light Mode");
        ModeCanager();
      }
    });
}

void QTempToQ()
{
    switch(C)
```

```
        {
            case 0: Q00 = QTemp; break;
            case 1: Q01 = QTemp; break;
            case 2: Q02 = QTemp; break;
            case 3: Q03 = QTemp; break;
            case 4: Q04 = QTemp; break;
            case 5: Q05 = QTemp; break;
            case 6: Q06 = QTemp; break;
            case 7: Q07 = QTemp; break;
            case 8: Q08 = QTemp; break;
            case 9: Q09 = QTemp; break;
        }
    }
    int Action_MethodADD(int FlagA)
    {
        if(FlagAOver==0 || QTemp[FlagA]!=0)
        {
            QTemp[FlagA]++;
            ButtonAdd[FlagA].setText(" + ");
            ButtonSub[FlagA].setText(" - ");
            if(MODE%2==0)
            {
                ButtonAdd[FlagA].setForeground(Color.BLUE);
                ButtonSub[FlagA].setForeground(Color.BLUE);
            }
            else
            {
                ButtonAdd[FlagA].setForeground(Color.GREEN);
                ButtonSub[FlagA].setForeground(Color.GREEN);
            }
            Quant[FlagA] = "   "+QTemp[FlagA];
            QTempToQ();
            Page1AddCart();////////////
            AddToBill();
            L_QTY[FlagA].setText(Quant[FlagA]);
```

```java
  }
  if( TotalItem>0)
  Bill.setVisible(true);
  return 0;
}
int Action_MethodSUB(int FlagS)
{
  if(QTemp[FlagS]>0)
  QTemp[FlagS]--;
  Quant[FlagS] = "  "+QTemp[FlagS];
  L_QTY[FlagS].setText(Quant[FlagS]);
  QTempToQ();
  Page1CartInz();
  Page1RemoveCart();


  Page1AddCart();
  AddToBill();
  if(QTemp[FlagS]==0)
  {
    ButtonSub[FlagS].setText(" - ");
    ButtonSub[FlagS].setForeground(Color.RED);
  }
  if(TotalItem==0)
  Page1Total=" ";
  return 0;
}


void PageBill_Memo()
{
  GridBagConstraints P2Bill = new GridBagConstraints();
  P2Bill.insets = new Insets(2, 2, 2, 2);
  ACItemName[15].setFont(new Font("Courier", Font.BOLD , 20));
  ACIteamQy[15].setFont(new Font("Courier", Font.BOLD , 20));
  ACItemTotPric[15].setFont(new Font("Courier", Font.BOLD ,20));
  if(MODE%2==0)
```

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```
{
   ACItemName[15].setForeground(Color.BLACK);
   ACIteamQy[15].setForeground(Color.BLACK);
   ACItemTotPric[15].setForeground(Color.BLACK);
}
else
{
   ACItemName[15].setForeground(Color.BLACK);
   ACIteamQy[15].setForeground(Color.BLACK);
   ACItemTotPric[15].setForeground(Color.BLACK);
}

P2Bill.gridy = 0;

P2Bill.gridx = 0;
P2Bill.ipadx = 20;
P2Bill.ipady = 5;
Panel2BillMemo.add(ACItemName[15],P2Bill);
P2Bill.gridx = 1;
P2Bill.ipadx = 10;
Panel2BillMemo.add(ACIteamQy[15],P2Bill);
P2Bill.gridx = 2;
P2Bill.ipadx = 10;
Panel2BillMemo.add(ACItemTotPric[15],P2Bill);

ACItemName[15].setText(" ITEMS ");//.setText("   ");
ACIteamQy[15].setText("QTY");//.setText("   ");
ACItemTotPric[15].setText("PRICE");
int I;
for( I=0;I<15;I++)
{
   ACItemName[I].setFont(new Font("Arial", Font.ITALIC, 13));
   ACIteamQy[I].setFont(new Font("Arial", Font.ITALIC, 13));
   ACItemTotPric[I].setFont(new Font("Arial", Font.ITALIC, 13));
   if(MODE%2==0)
```

```
            {

               ACItemName[I].setForeground(Color.BLACK);

               ACIteamQy[I].setForeground(Color.BLACK);

               ACItemTotPric[I].setForeground(Color.BLACK);

            }

            else

            {

               ACItemName[I].setForeground(Color.BLACK);

               ACIteamQy[I].setForeground(Color.BLACK);

               ACItemTotPric[I].setForeground(Color.BLACK);

            }


            P2Bill.gridy = I+1;


            P2Bill.gridx = 0;

            P2Bill.ipadx = 15;

            P2Bill.ipady = 5;


            Panel2BillMemo.add(ACItemName[I],P2Bill);

            P2Bill.gridx = 1;

            P2Bill.ipadx = 5;

            Panel2BillMemo.add(ACIteamQy[I],P2Bill);

            P2Bill.gridx = 2;

            P2Bill.ipadx = 10;

            Panel2BillMemo.add(ACItemTotPric[I],P2Bill);

      }


      Test0.setFont(new Font("Arial", Font.BOLD, 25));

      Test1.setFont(new Font("Arial", Font.BOLD, 25));

      Test2.setFont(new Font("Arial", Font.BOLD, 25));

      P2Bill.gridy = I+2;

      P2Bill.gridx = 0;

      P2Bill.ipadx = 50;

      P2Bill.ipady = 50;

      Test0.setText("  ");
```

```java
    Panel2BillMemo.add(Test0,P2Bill);
    P2Bill.gridx = 1;
    Test1.setText(" Total  Amount : ");
    Panel2BillMemo.add(Test1,P2Bill);
    P2Bill.ipadx = 25;
    P2Bill.gridx = 2;
    Test2.setText(" "+PriceTotal);
    Panel2BillMemo.add(Test2,P2Bill);
}
void ModeCanager()
{
    if(MODE%2==0)
    {

        TitleCenter.setBackground(Color.LIGHT_GRAY);
        TitleFront.setBackground(Color.LIGHT_GRAY);
        Title.setBackground(Color.LIGHT_GRAY);
        TitleBack.setBackground(Color.LIGHT_GRAY);
        TitleFront.setForeground(Color.BLACK);
        Title.setForeground(Color.RED);
        TitleBack.setForeground(Color.BLACK);

        panel0.setBackground(Color.LIGHT_GRAY);
        P0.setBackground(Color.LIGHT_GRAY);
        P0_Mode_Panel.setBackground(Color.LIGHT_GRAY);
        for(int I=0;I<10;I++)
        {
            ButtonAdd[I].setBackground(Color.LIGHT_GRAY);
            ButtonSub[I].setBackground(Color.LIGHT_GRAY);
        }
    }
    else
    {
        TitleCenter.setBackground(Color.DARK_GRAY);
        TitleFront.setBackground(Color.DARK_GRAY);
```

```
        Title.setBackground(Color.DARK_GRAY);

        TitleBack.setBackground(Color.DARK_GRAY);

        TitleFront.setForeground(Color.BLUE);

        Title.setForeground(Color.YELLOW);

        TitleBack.setForeground(Color.BLUE);


        panel0.setBackground(Color.DARK_GRAY);

        P0.setBackground(Color.DARK_GRAY);

        P0_Mode_Panel.setBackground(Color.DARK_GRAY);

        for(int I=0;I<10;I++)

        {

           ButtonAdd[I].setBackground(Color.DARK_GRAY);

           ButtonSub[I].setBackground(Color.DARK_GRAY);

        }

    }

}

/*void Print()

{

Document document   = new Document();


    //my interpretation just writes the virtual pdf document to the hdd

    PdfWriter writer    = PdfWriter.getInstance(document, new FileOutputStream("C:/test.pdf"));


    //begin editing the vpdf

    document.open();



    //i wanna do something like this

    //document.add(panel);


    //end editing the vpdf

    document.close();

 }

 */

}
```
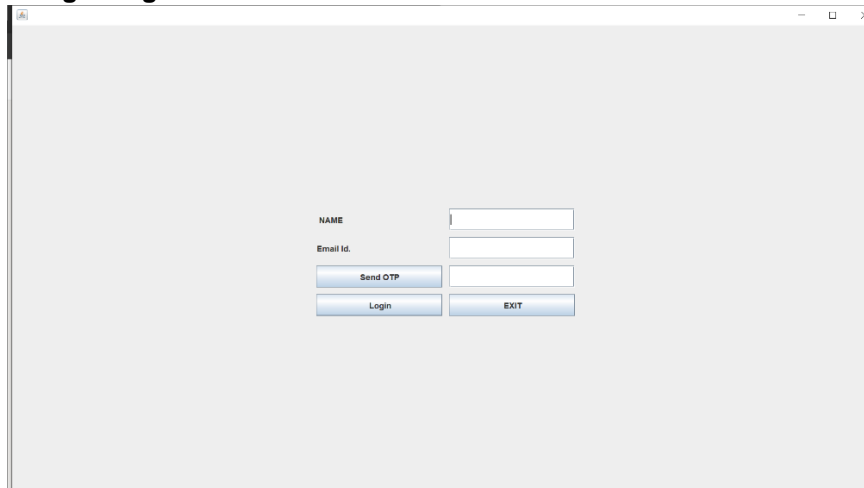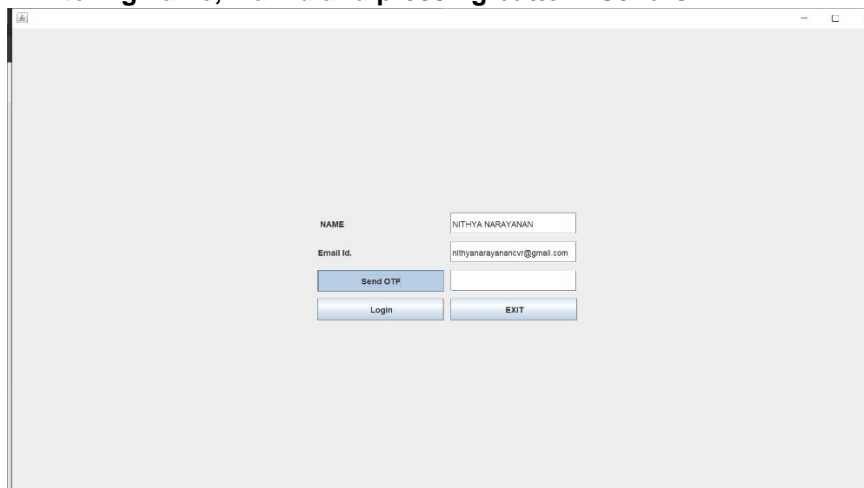
///////////////////////////<CLASS SHOPPING ><Ends>///////////////////////////////

OUTPUT

1.Login Page
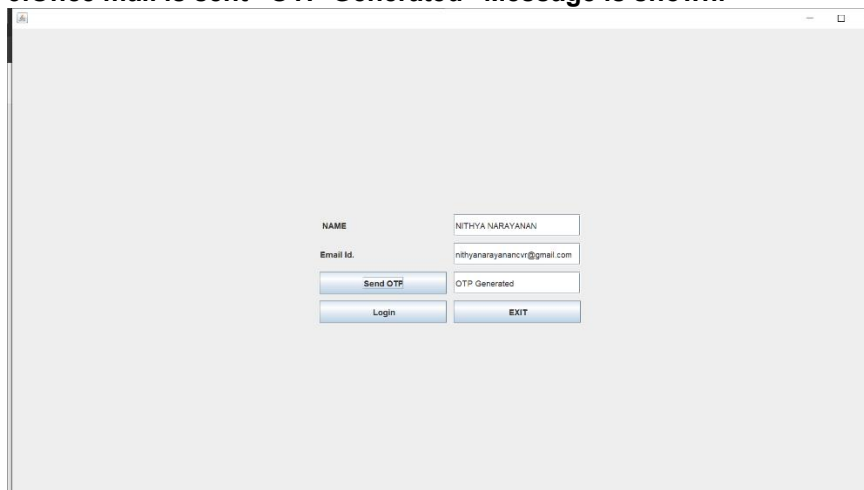
2.Entering name, mail id and pressing button "Send OTP".

3.Once mail is sent "OTP Generated" Message is shown.

4.OTP delivered to specified mail id.
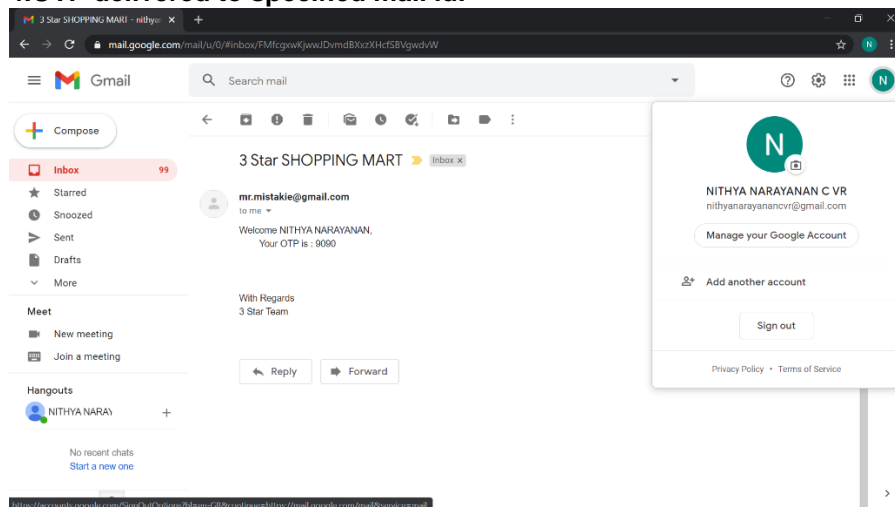
5.Entering OTP and Pressing Login Button.
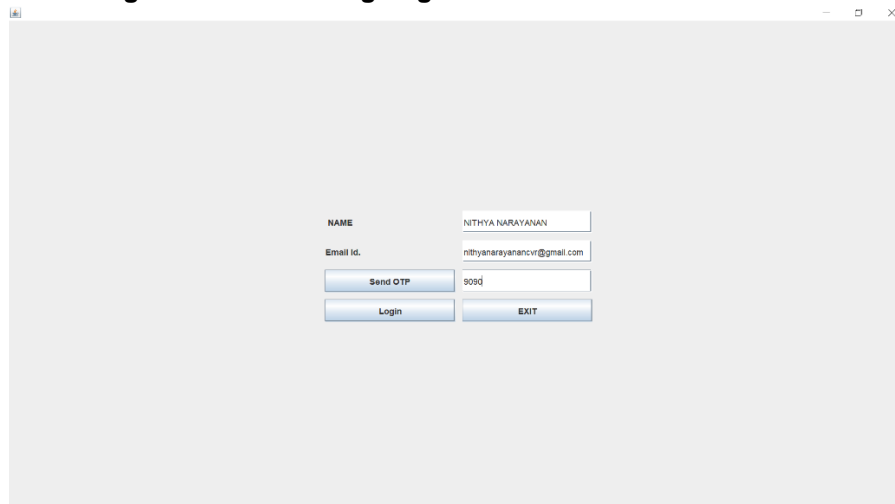
6.Main Menu is Opened
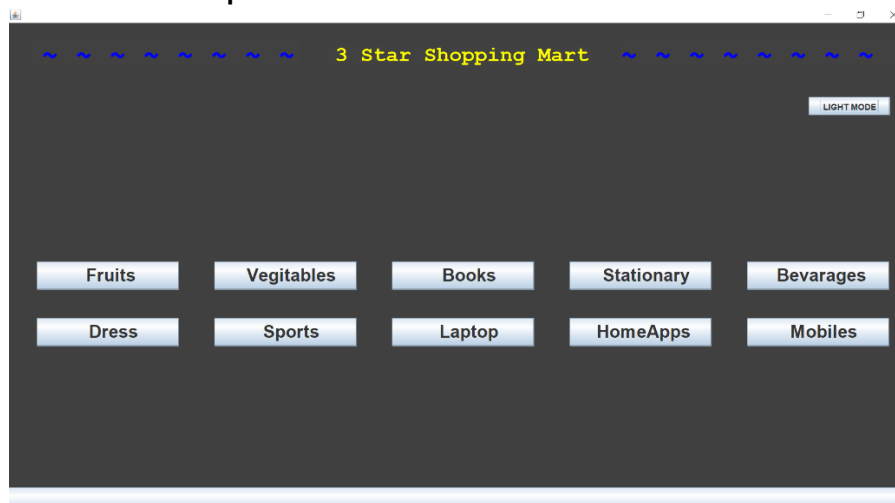
7.Clicking Fruits section

8.Fruits Section Opens and Adding Items to Cart.
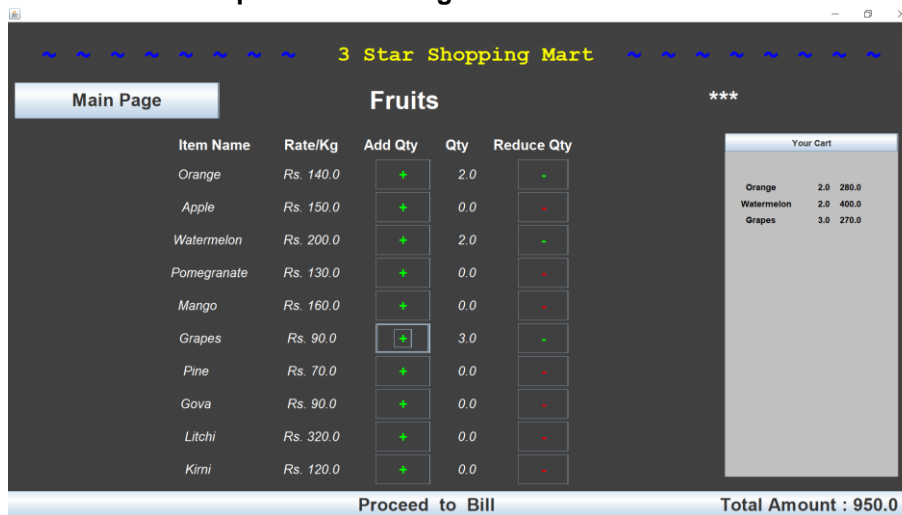
9.Now going to main page and selecting Stationary section and proceeding Shopping.
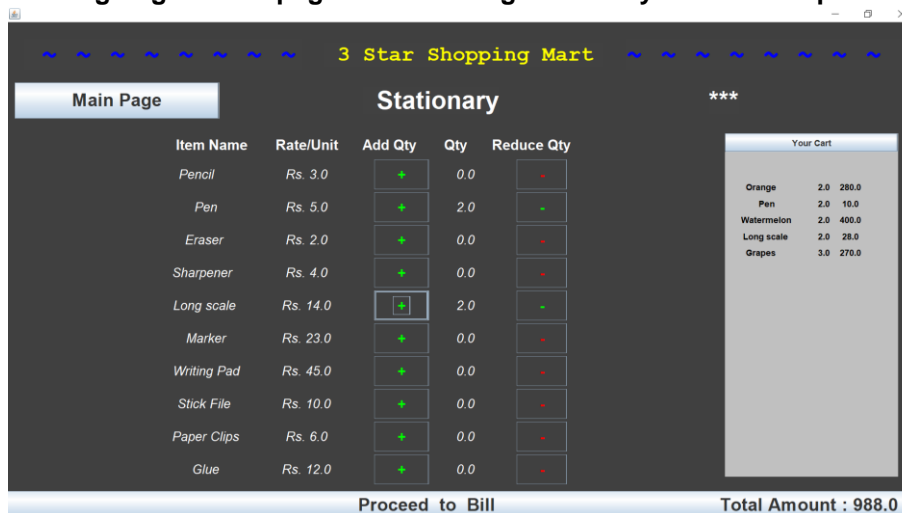
10. Enter into Laptop Section
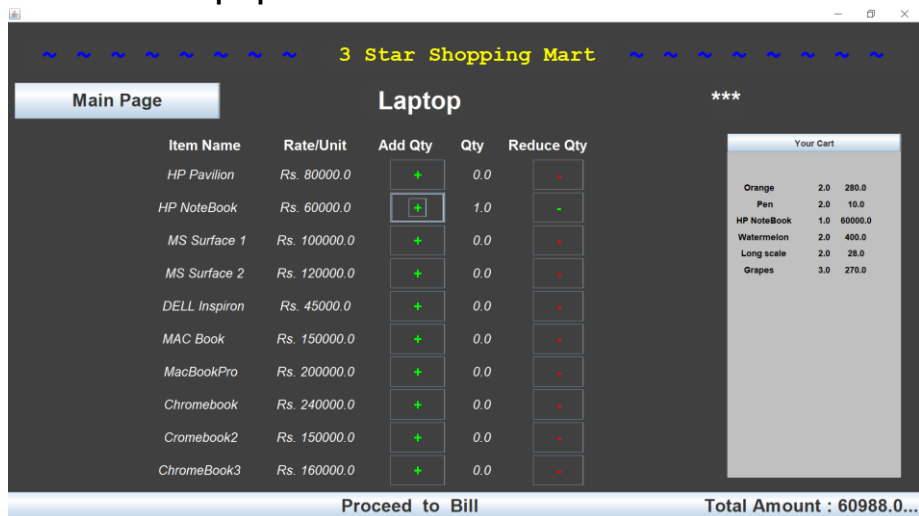
11.getting back to MAIN MENU and changing to Light Mode
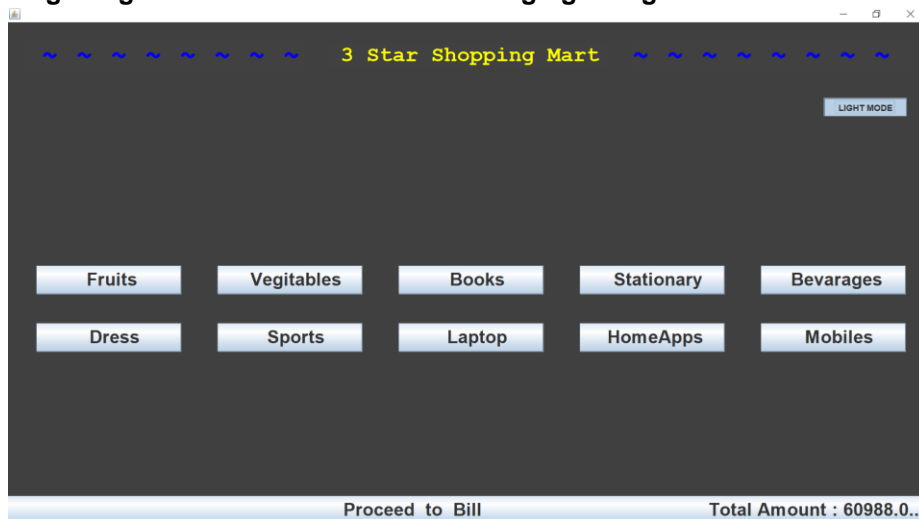
12. Light Mode is enabled.
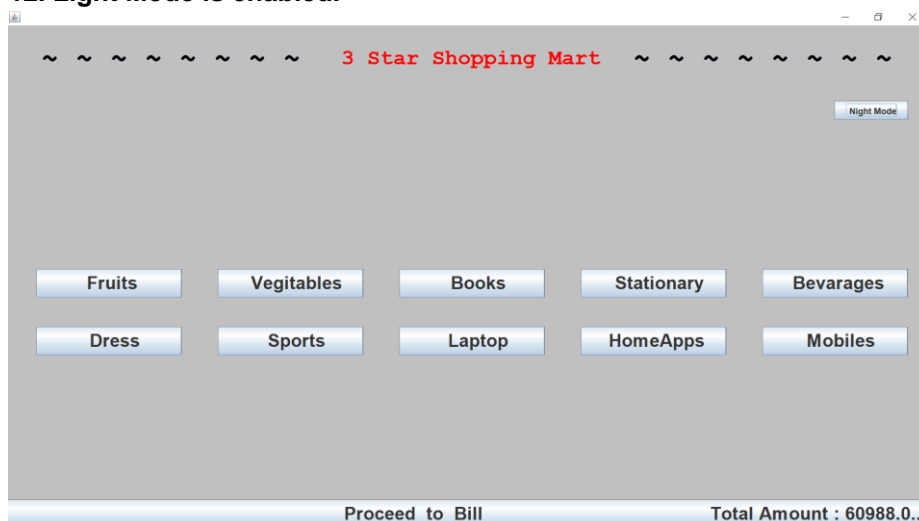
13.Now purchasing in mobile in light mode.

1.   Pressing "Proceed to Bill" we can get to BillPage.
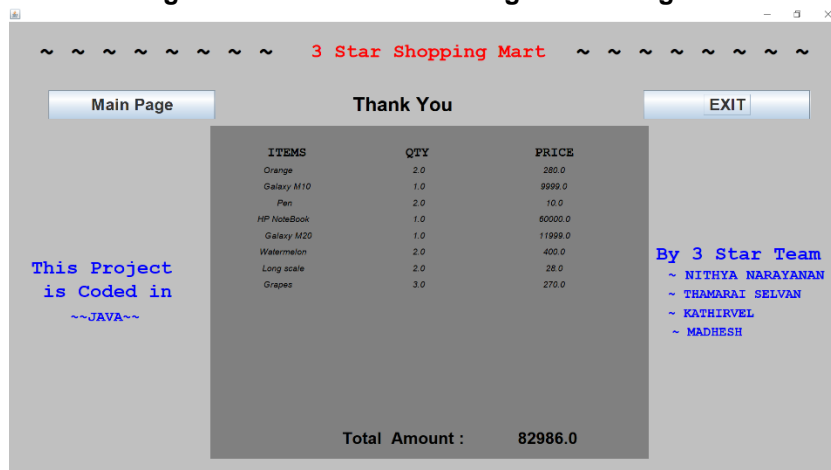
2.   By pressing JAVA we can get this application code from github
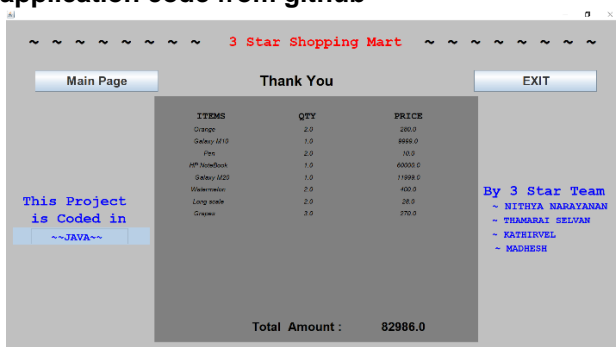
3.   Github page with code is opened
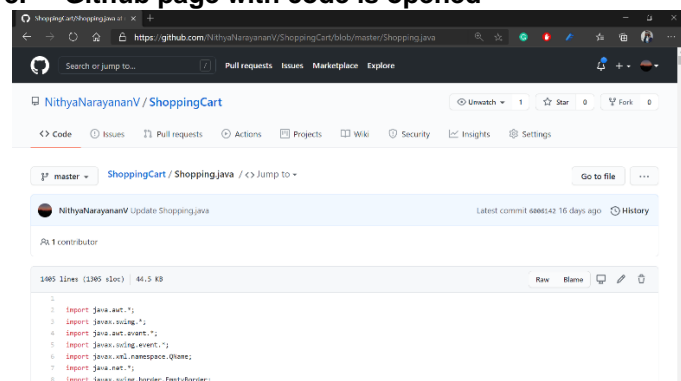
4.   By pressing names we can see the Team Personal GITHUB account. Here Nithya Narayanan
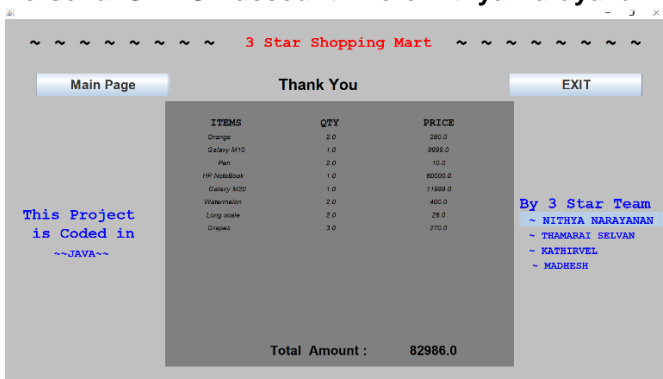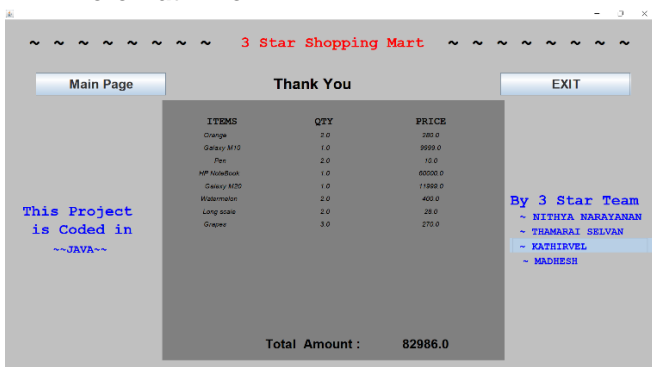

5.   Team leader :Nithya Narayanan
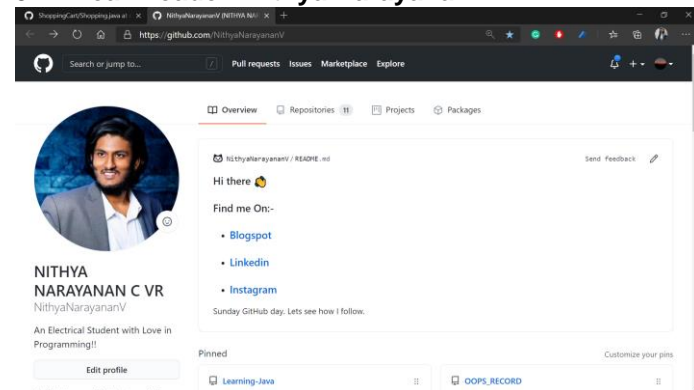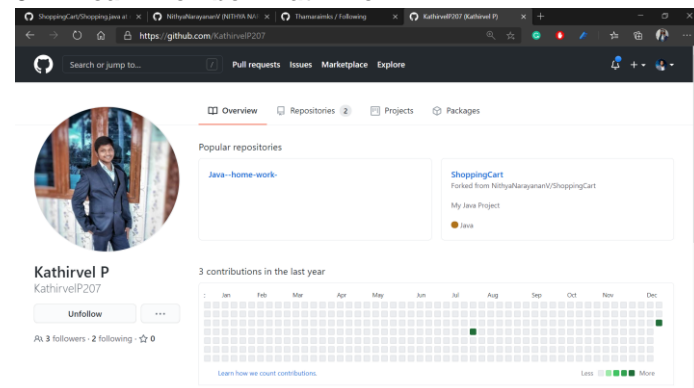

6.   Here Thamarai Selvan
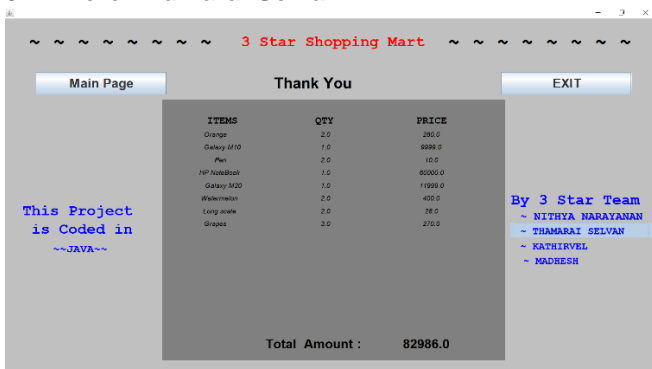
21. Team Member: Thamarai Selvan
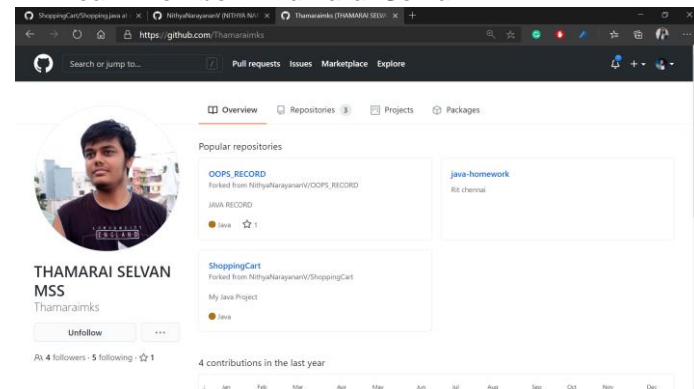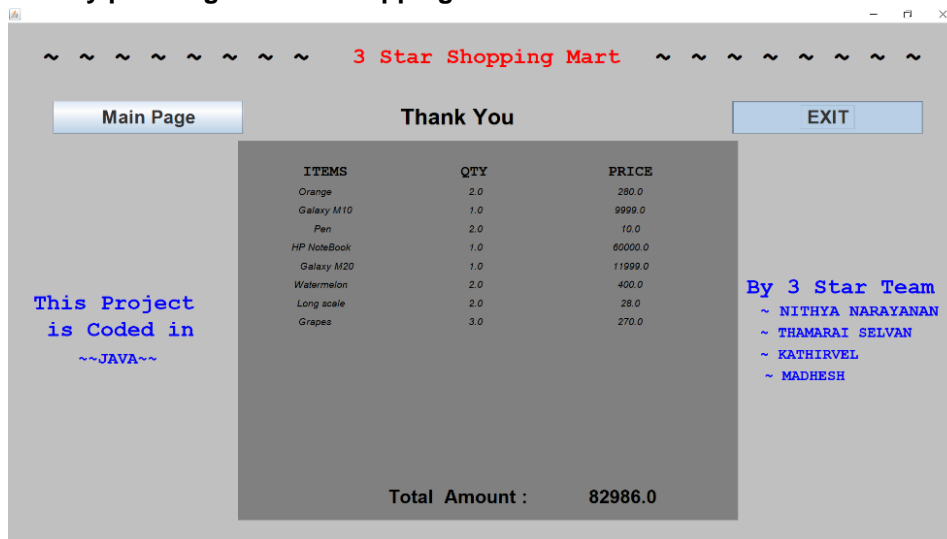

7.   Here Kathirvel
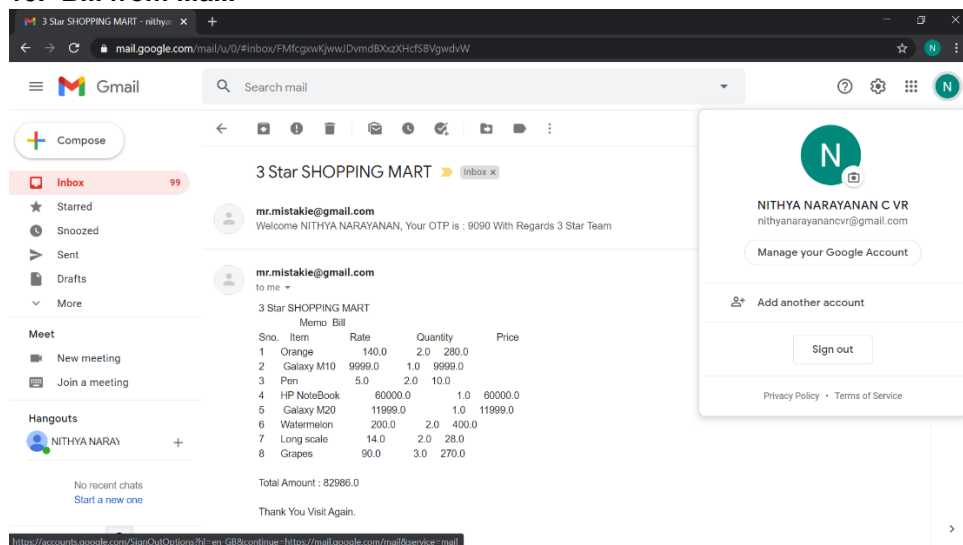

8.   Team Member: Kathirvel

*Team Member Madhesh Does not have a GitHub Account.

9. By pressing Exit the Shopping can be endde and bill will be mailed

10. Bill from Mail.

RESULT

Thus, a java application has been developed for Purchasing and Billing the products with email notification.