

Ex No : 01	AWT Components
Date :	

Aim:

To Write a Program in Java to demonstrate the Use of Following Components:

Text Fields, Buttons, Scroll-bars, Choice, List and Checkbox.

Procedure:

- Step 1 : Start the program
- Step 2 : Import the necessary package of Java awt.*
- Step 3 : Declare the class AWT controls and implements Action Listeners.
- Step 4 : Include their components with Choice,Button ,Text fields, Checkbox.
- Step 5 : Declare the paint functions and display the objects
- Step 6 : Terminate the program.

Source code:

```
import java.awt.*;
import java.applet.*;
import java.awt.event.*;

public class student extends Frame implements ActionListener
{
String msg;

Button b1=new Button("save");

Label l11=new Label("student details",Label.CENTER);

Label l1=new Label("NAME",Label.LEFT);

Label l2=new Label("AGE",Label.LEFT);
```

```

Label l3=new Label("GENDER",Label.LEFT);

Label l4=new Label("ADDRESS",Label.LEFT);

Label l5=new Label("COURSE",Label.LEFT) ;

Label l6=new Label("SEM",Label.LEFT);

Label l7=new Label("",Label.RIGHT);

TextField t1=new TextField ();

Choice c1=new Choice();

CheckboxGroup cbg=new CheckboxGroup();

Checkbox ck1=new Checkbox("male",false,cbg);

Checkbox ck2=new Checkbox("female",false,cbg);

TextArea t2=new TextArea("",180,90,TextArea.SCROLLBARS_VERTICAL_ONLY);

Choice course= new Choice();

Choice sem= new Choice();

Choice age= new Choice();

public student()

{

addWindowListener(new myWindowAdapter());

setBackground(Color.red);

setForeground(Color.black);

setLayout(null);

add(l11);

add(l1);

add(l2);

add(l3);

add(l4);

add(l5);

add(l6);

```

```
add(l7);  
add(t1);  
add(t2);  
add(ck1);  
add(ck2);  
add(course);  
add(sem);  
add(age);  
add(b1);  
b1.addActionListener(this);  
add(b1);  
course.add("BSc cs");  
course.add("MSc cs");  
course.add("Bsc IT");  
course.add("BCA");  
course.add("MCA");  
sem.add("1");  
sem.add("2");  
sem.add("3");  
sem.add("4");  
sem.add("5");  
sem.add("6");  
age.add("17");  
age.add("18");  
age.add("19");  
age.add("20");  
age.add("21");
```

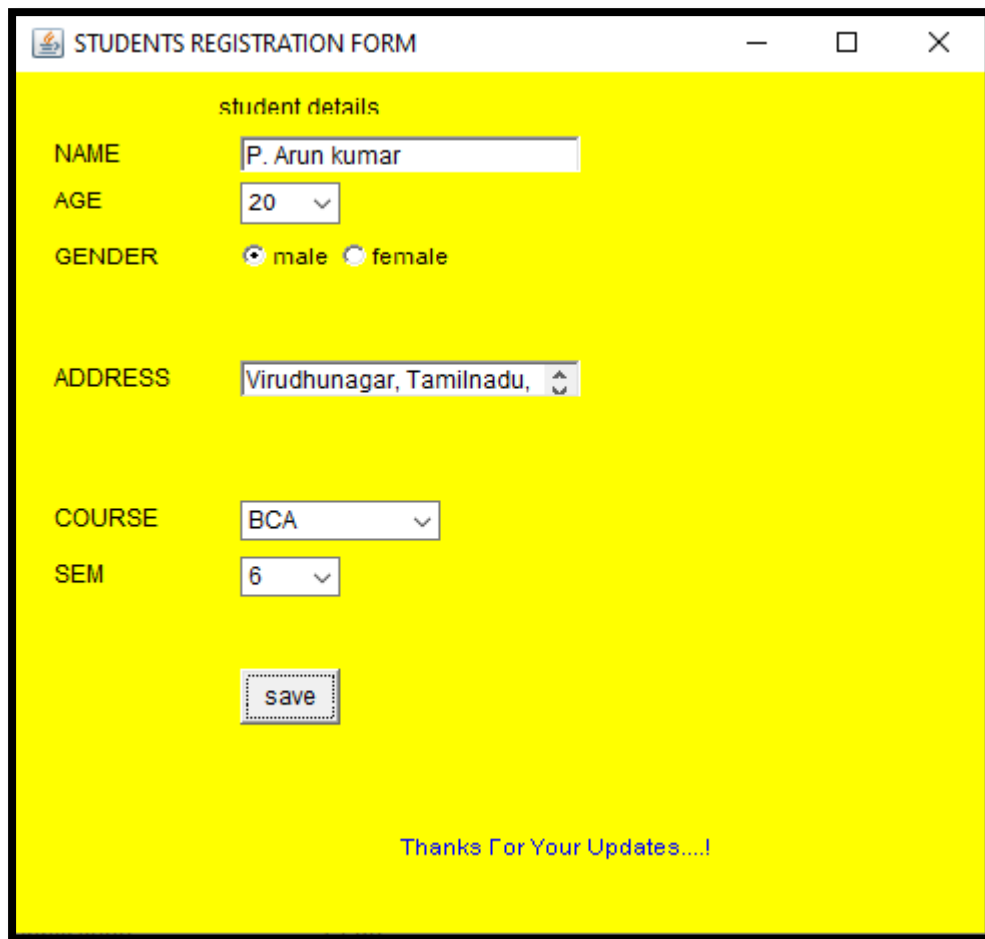
```
l1.setBounds(25,65,90,20);
l2.setBounds(25,90,90,20);
l3.setBounds(25,120,90,20);
l4.setBounds(25,185,90,20);
l5.setBounds(25,260,90,20);
l6.setBounds(25,290,90,20);
l7.setBounds(25,260,90,20);
l11.setBounds(10,40,280,20);
t1.setBounds(120,65,170,20);
t2.setBounds(120,185,170,20);
ck1.setBounds(120,120,50,20);
ck2.setBounds(170,120,60,20);
course.setBounds(120,260,100,20);
sem.setBounds(120,290,50,20);
age.setBounds(120,90,50,20);
b1.setBounds(120,350,50,30);
}

public void paint(Graphics g)
{
    g.drawString(msg,200,450);
}

public void actionPerformed(ActionEvent ae)
{
    if(ae.getActionCommand().equals("save"))
    {
        msg="Thanks For Your Updates....!";
        setForeground(Color.blue);
    }
}
```

```
}  
  
}  
  
public static void main(String args[])  
{  
    student stu = new student();  
    stu.setSize(new Dimension(500,500));  
    stu.setTitle("STUDENTS REGISTRATION FORM");  
    stu.setVisible(true);  
}  
}  
  
class myWindowAdapter extends WindowAdapter  
{  
    public void WindowClosing(WindowEvent we)  
    {  
        System.exit(0);  
    }  
}
```

Output:



STUDENTS REGISTRATION FORM

student details

NAME

AGE

GENDER ☒ male ☐ female

ADDRESS

COURSE

SEM

Thanks For Your Updates....!

Result:

Thus the program to demonstrate the given components was designed and executed successfully.

Ex No : 02	Layouts
Date :	

Aim:

To create a Java program that demonstrate the use of various layouts like Flow layout, Border layout, Grid layout, Card layout with a JFrame

Procedure:

- Step 1 : Start the program.
- Step 2 : Define the main class layout example.
- Step 3 : create a new JFrame with title layout example.
- Step 4 : Set the default close operation to EXIT_ON_CLOSE.
- Step 5 : Create a panel with different layout manager.
- Step 6 : Add panels to the frame.
- Step 7 : To run the source code.
- Step 8 : To stop the program.

Source code:

1. Flow Layout

```
import javax.swing.*;
import java.awt.*;

public class FlowLayoutexample extends Frame
{
    public static void main(String[] args)
    {
```

```

JFrame frame=new JFrame("FlowLayoutexample");

frame.setLayout(new FlowLayout());


//add components

frame.add(new JButton("Button1"));

frame.add(new JButton("Button2"));

frame.add(new JButton("Button3"));


frame.setSize(300,150);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

frame.setVisible(true);

}

}

```

2. Border Layout

```

import javax.swing.*;

import java.awt.*;


public class BorderLayoutexample extends Frame

{

public static void main(String[] args)

{

JFrame frame=new JFrame ("BorderLayoutexample");

frame.setLayout(new BorderLayout());

//Add components

frame.add(new JButton("north"),BorderLayout.NORTH);

frame.add(new JButton("south"),BorderLayout.SOUTH);

frame.add(new JButton("East"),BorderLayout.EAST);

```



```
frame.add(new JButton("west"),BorderLayout.WEST);

frame.add(new JButton("center"),BorderLayout.CENTER);

frame.setSize(300,150);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

frame.setVisible(true);

}

}
```

3. Grid Layout

```
import javax.swing.*;

import java.awt.*;


public class GridLayoutexample extends Frame

{

public static void main(String[] args)

{

JFrame frame=new JFrame("GridLayoutexample");

frame.setLayout(new GridLayout());


//Add components

frame.add(new JButton("Button 1"));

frame.add(new JButton("Button 2"));

frame.add(new JButton("Button 3"));

frame.add(new JButton("Button 4"));


frame.setSize(300,150);

frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

frame.setVisible(true);

}
```

```
}  
}
```

4. Card Layout

```
import javax.swing.*;  
  
import java.awt.*;  
  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
  
public class CardLayoutexample extends Frame  
{  
    public static void main(String[] args)  
    {  
        JFrame frame=new JFrame("CardLayoutexample");  
        CardLayout cardLayout=new CardLayout();  
        JPanel cardPanel=new JPanel(cardLayout);  
        //Add components  
        cardPanel.add(new JButton("Card1"),"Card1");  
        cardPanel.add(new JButton("Card2"),"Card2");  
        cardPanel.add(new JButton("Card3"),"Card3");  
        JButton nextButton=new JButton("Next Card");  
        nextButton.addActionListener(new ActionListener()  
        {  
            public void actionPerformed(ActionEvent e)  
            {  
                cardLayout.next(cardPanel);  
            }  
        });  
        frame.add(cardPanel, BorderLayout.CENTER);  
    }  
}
```

```
frame.add(nextButton, BorderLayout.SOUTH);

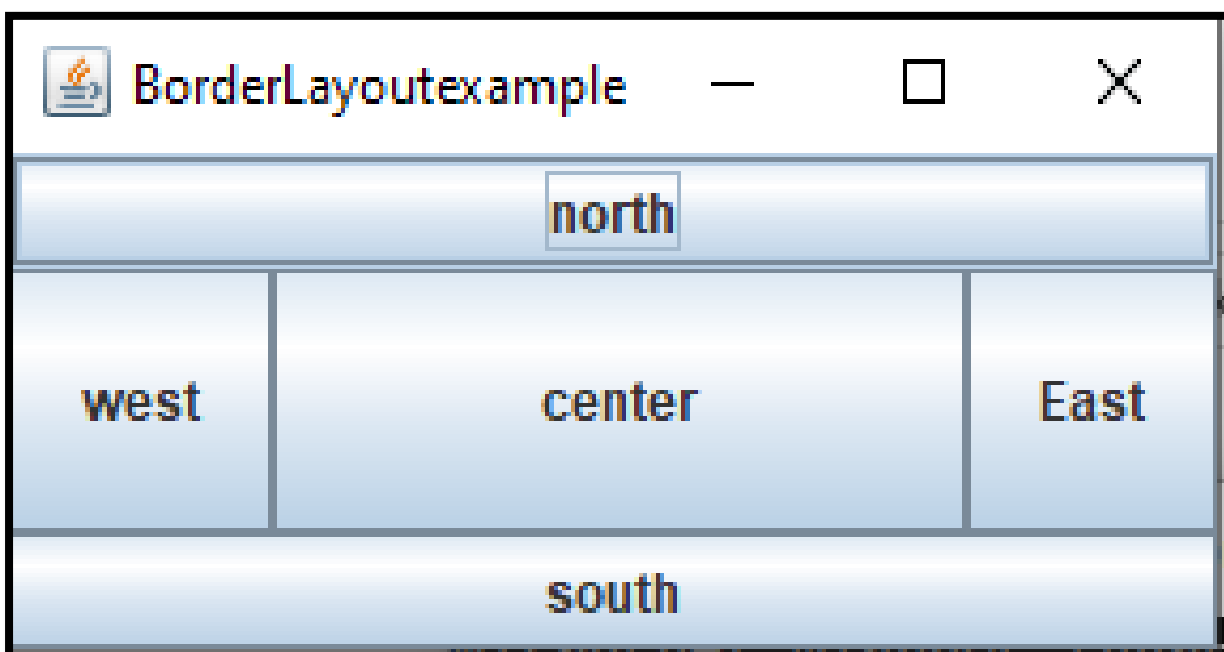
frame.setSize(300,150);

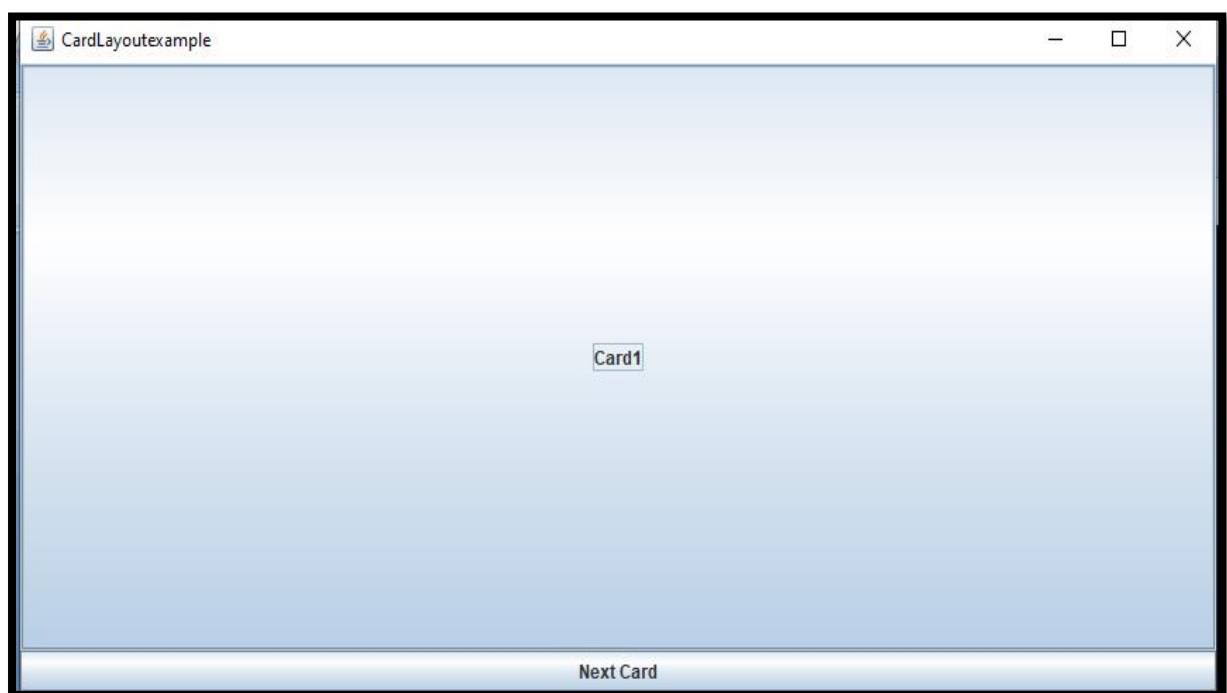
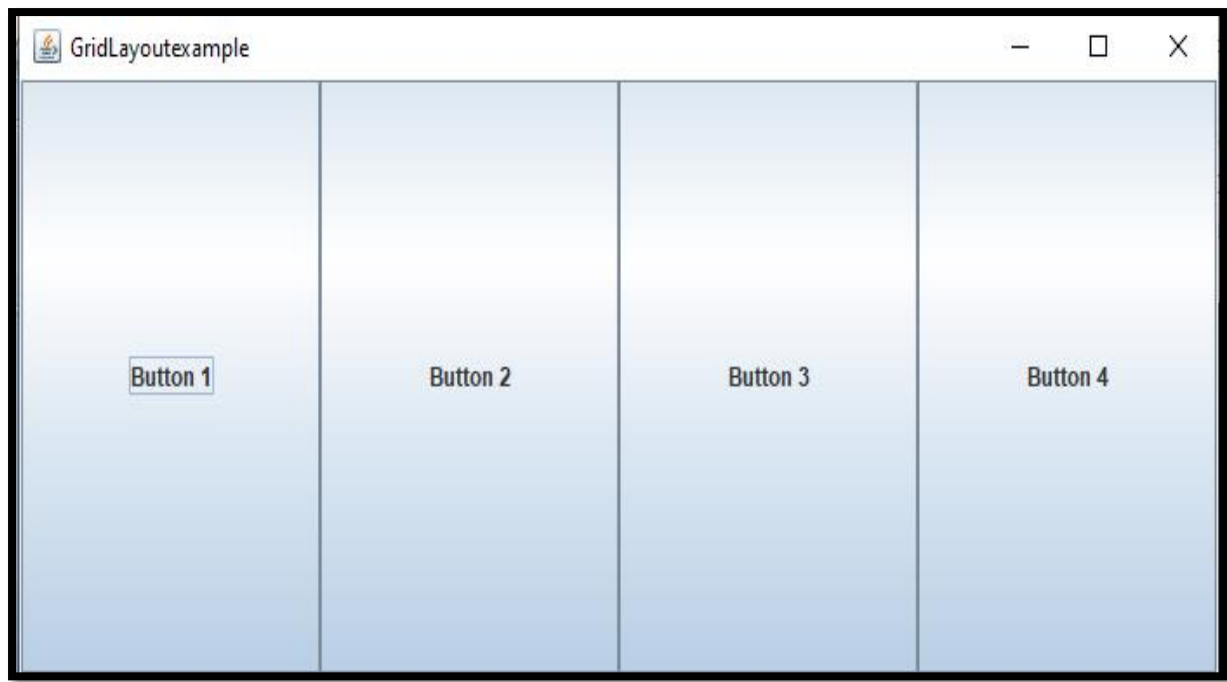
frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
frame.setVisible(true);

}

}
```

Output:





Result:

Thus the program to demonstrate the use of various layouts was designed and displayed successfully

Ex No : 03	Color Palette
Date :	

Aim:

To write programs in Java to create applets incorporating the following features:

- I. Create a color palette with matrix of buttons
- II. Set background and foreground of the control text area by selecting a color from color palette.
- III. In order to select Foreground or background use check box control as radio buttons

Procedure:

- Step 1 : Start the program.
- Step 2 : Define the main class Platte.
- Step 3 : Declare an array of buttons to set colors, two checkboxes for Foreground and background colors
- Step 4 : Declare three panels, buttonpanel, palettepanel and checckpanel
- Step 5 : Create the buttonpanel and set the layout to gridlayout of 3 X 3
- Step 6 : Create a text area and change its font to desired one
- Step 7 : write an empty itemStateChange() method
- Step 8 : In the actionPerformed () Method get action command
- Step 9 : To run the source code.
- Step 10 : To stop the program.

Source code:

```

/* <applet code=palette.class , height=600 , width=600>

</applet> */

import java.awt.*;

import java.awt.event.*;

```

```
import java.applet.*;

public class palette extends Applet implements ActionListener,ItemListener

{
    Button[] colors;

    Checkbox foreground,background;

    TextArea workarea;

    CheckboxGroup cbg;

    Panel buttonpanel,checkpanel,palettepanel;

    String colour;

    public void init()
    {
        buttonpanel=new Panel();

        buttonpanel.setLayout(new GridLayout(3,3));

        colors=new Button[9];

        colors[0]=new Button("RED");

        colors[1]=new Button("GREEN");

        colors[2]=new Button("BLUE");

        colors[3]=new Button("CYAN");

        colors[4]=new Button("ORANGE");

        colors[5]=new Button("WHITE");

        colors[6]=new Button("BLACK");

        colors[7]=new Button("YELLOW");

        colors[8]=new Button("PINK");

        for(int i=0;i<9;i++)
        {

            colors[i].addActionListener(this);

            buttonpanel.add(colors[i]);
```

```

    }

    checkpanel=new Panel();
    checkpanel.setLayout(new FlowLayout());
    cbg=new CheckboxGroup();
    foreground=new Checkbox("ForeGround",cbg,true);
    background=new Checkbox("BackGround",cbg,false);
    foreground.addItemListener(this);
    background.addItemListener(this);
    checkpanel.add(foreground);
    checkpanel.add(background);
    workarea=new TextArea(8,40);
    workarea.setFont(new Font("Garamond",Font.BOLD,20));
    palettepanel=new Panel();
    palettepanel.setLayout(new BorderLayout());
    palettepanel.add(workarea,BorderLayout.CENTER);
    palettepanel.add(checkpanel,BorderLayout.EAST);
    palettepanel.add(buttonpanel,BorderLayout.SOUTH);
    add(palettepanel);
}

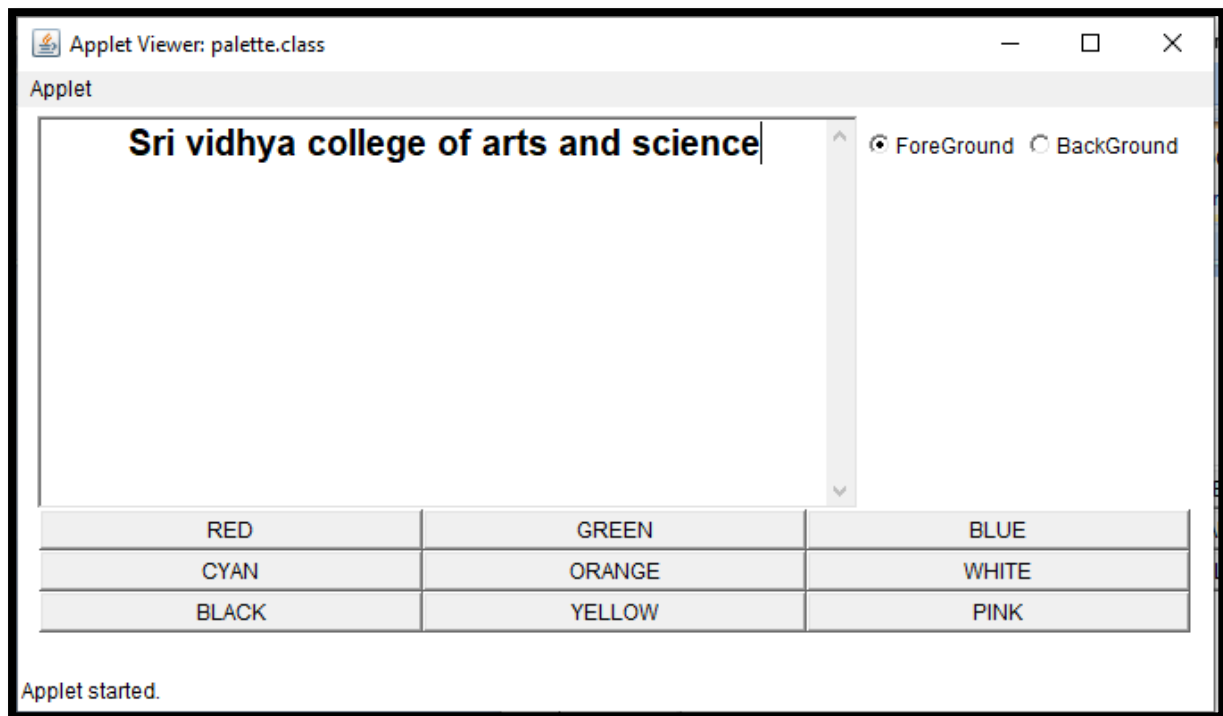
public void itemStateChanged(ItemEventie)
{
}

public void actionPerformed(ActionEventae)
{
    colour=ae.getActionCommand();
    if(foreground.getState()==true)
        workarea.setForeground(getColour());
}

```

```
if(background.getState()==true)
workarea.setBackground(getColour());
}
public Color getColour()
{
Color mycolor=null;
if(colour.equals("RED"))
mycolor=Color.red;
if(colour.equals("GREEN"))
mycolor=Color.green;
if(colour.equals("BLUE"))
mycolor=Color.blue;
if(colour.equals("CYAN"))
mycolor=Color.cyan;
if(colour.equals("ORANGE"))
mycolor=Color.orange;
if(colour.equals("WHITE"))
mycolor=Color.white;
if(colour.equals("BLACK"))
mycolor=Color.black;
if(colour.equals("YELLOW"))
mycolor=Color.yellow;
if(colour.equals("PINK"))
mycolor=Color.pink;
return mycolor;
}
}
```


Output:



Result:

Thus the palette with various color styles using applet was entered and executed successfully.

Ex No : 04	Server Info Downloader
Date :	

Aim:

To write programs in Java to do the following.

- I. Set the URL of another server.
- II. Download the homepage of the server.
- III. Display the contents of homepage with date, content type, and Expiration date.
Last modified and length of the home page.

Procedure:

- | | | |
|--------|---|---|
| Step 1 | : | Start the program. |
| Step 2 | : | Define the main class ServerInfoDownloader. |
| Step 3 | : | Using the URL class locate the server with the help of URL. |
| Step 4 | : | Using the appropriate stream and open the home page of the

Server. |
| Step 5 | : | Display the contents of the homepage in the console. |
| Step 6 | : | Using the method getDate(), getContentType(),

getExpiationDtae(), getLastmodified() and getLength(). |
| Step 7 | : | To run the source code. |
| Step 8 | : | To stop the program. |

Source code:

```
import java.io.*;
import java.net.*;
import java.util.*;
```

```
public class ServerInfoDownloader
{
    public static void main(String[] args)
    {
        try
        {
            // Set the URL of another server
            URL url = new URL("https://www.w3schools.com/java/");

            // Download the homepage of the server
            HttpURLConnection connection = (HttpURLConnection) url.openConnection();
            connection.setRequestMethod("GET");

            // Display the contents of homepage with date, content type, and expiration date
            System.out.println("Date: " + new Date(connection.getDate()));
            System.out.println("Content Type: " + connection.getContentType());
            System.out.println("Expiration Date: " + new Date(connection.getExpiration()));
            System.out.println("Last Modified: " + new Date(connection.getLastModified()));
            System.out.println("Content Length: " + connection.getContentLength());

            // Read and display the content of the homepage
            BufferedReader reader = new BufferedReader(new
                InputStreamReader(connection.getInputStream()));

            String line;
            while ((line = reader.readLine()) != null)
            {
                System.out.println(line);
            }

            reader.close();
            connection.disconnect();
        }
        catch (MalformedURLException e)
```

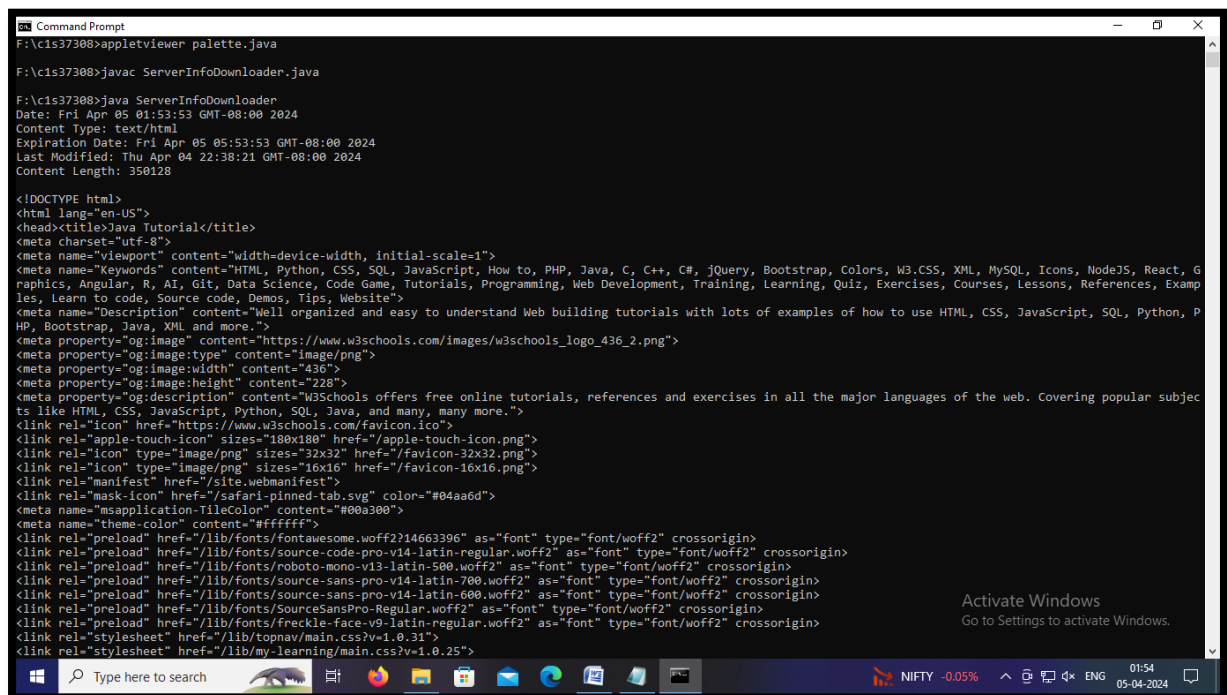
```

{
e.printStackTrace();
}

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

```

Output:



```

C:\Users\user> java ServerInfoDownloader.java

F:\cis37308> java ServerInfoDownloader
Date: Fri Apr 05 01:53:53 GMT-08:00 2024
Content Type: text/html
Expiration Date: Fri Apr 05 05:53:53 GMT-08:00 2024
Last Modified: Thu Apr 04 22:38:21 GMT-08:00 2024
Content Length: 350128

<!DOCTYPE html>
<html lang="en-US">
<head><title>Java Tutorial</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta name="Keywords" content="HTML, Python, CSS, SQL, JavaScript, How to, PHP, Java, C, C++, C#, jQuery, Bootstrap, Colors, W3.CSS, XML, MySQL, Icons, NodeJS, React, G
raphics, Angular, R, AI, Git, Data Science, Code Game, Tutorials, Programming, Web Development, Training, Learning, Quiz, Exercises, Courses, Lessons, References, Examp
les, Learn to code, Source code, Demos, Tips, Website">
<meta name="Description" content="Well organized and easy to understand Web building tutorials with lots of examples of how to use HTML, CSS, JavaScript, SQL, Python, P
HP, Bootstrap, Java, XML and more.">
<meta property="og:image" content="https://www.w3schools.com/images/w3schools_logo_436_2.png">
<meta property="og:image:type" content="image/png">
<meta property="og:image:width" content="436">
<meta property="og:image:height" content="228">
<meta property="og:description" content="W3Schools offers free online tutorials, references and exercises in all the major languages of the web. Covering popular subject
s like HTML, CSS, JavaScript, Python, SQL, Java, and many, many more.">
<link rel="icon" href="https://www.w3schools.com/favicon.ico">
<link rel="apple-touch-icon" sizes="180x180" href="/apple-touch-icon.png">
<link rel="icon" type="image/png" sizes="32x32" href="/favicon-32x32.png">
<link rel="icon" type="image/png" sizes="16x16" href="/favicon-16x16.png">
<link rel="manifest" href="/site.webmanifest">
<link rel="mask-icon" href="/safari-pinned-tab.svg" color="#00a66d">
<meta name="msapplication-tilecolor" content="#00a66d">
<meta name="theme-color" content="#ffffff">
<link rel="preload" href="/lib/fonts/fontawesome.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/source-code-pro-v14-latin-regular.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/roboto-mono-v13-latin-500.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/source-sans-pro-v14-latin-700.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/source-sans-pro-v14-latin-600.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/SourceSansPro-Regular.woff2" as="font" type="font/woff2" crossorigin>
<link rel="preload" href="/lib/fonts/freckle-face-v9-latin-regular.woff2" as="font" type="font/woff2" crossorigin>
<link rel="stylesheet" href="/lib/topnav/main.css?v=1.0.31">
<link rel="stylesheet" href="/lib/my-learning/main.css?v=1.0.25">

```

Result:

Thus the program to show the information about server was entered and executed successfully.

Ex No : 05	Simple Chat Application
Date :	

Aim:

To write a program in Java for creating simple chat application with datagram sockets and datagram packets.

Procedure:

- Step 1 : Start the program.
- Step 2 : Import the package java.net.
- Step 3 : Declare the datagram sockets, datagram packets, buffer reader.
- Step 4 : In the main function using while loop it performed
- Step 5 : Terminate the UDP Client Program.
- Step 6 : Terminate the UDP Server Program.
- Step 7 : To run the source code.
- Step 8 : To stop the program.

Source Code:

Server.Java

```
import java.io.*;
import java.net.*;
public class Server
{
    public static void main(String[] args) throws Exception
```

```

{
    ServerSocket sersock = new ServerSocket(3000);

    System.out.println("Server ready for chatting");

    Socket sock = sersock.accept( );

    BufferedReader keyRead = new BufferedReader(new InputStreamReader(System.in));
    OutputStream ostream = sock.getOutputStream();

    PrintWriter pwrite = new PrintWriter(ostream, true);

    InputStream istream = sock.getInputStream();

    BufferedReader receiveRead = new BufferedReader(new InputStreamReader(istream));

    String receiveMessage, sendMessage;

    while(true)
    {
        if((receiveMessage = receiveRead.readLine()) != null)
        {
            System.out.println(receiveMessage);
        }

        sendMessage = keyRead.readLine();

        pwrite.println(sendMessage);

        pwrite.flush();
    }
}

```

Client.Java

```

import java.io.*;

import java.net.*;

public class Client
{

```

```
public static void main(String[] args) throws Exception
{
    Socket sock = new Socket("127.0.0.1", 3000);
    BufferedReader keyRead = new BufferedReader(new InputStreamReader(System.in));
    OutputStream ostream = sock.getOutputStream();
    PrintWriter pwrite = new PrintWriter(ostream, true);
    InputStream istream = sock.getInputStream();
    BufferedReader receiveRead = new BufferedReader(new InputStreamReader(istream));
    System.out.println("Start the chat, type and press Enter key");
    String receiveMessage, sendMessage;
    while(true)
    {
        sendMessage = keyRead.readLine();
        pwrite.println(sendMessage);
        pwrite.flush();
        if((receiveMessage = receiveRead.readLine()) != null)
        {
            System.out.println(receiveMessage);
        }
    }
}
```

Output:-

```
C:\Windows\System32\cmd.exe - java GossipServer

C:\Users\svcaslab\Desktop\Webpro\Source\5 server>javac GossipServer.java

C:\Users\svcaslab\Desktop\Webpro\Source\5 server>java GossipServer
Server ready for chatting
6
hi
welcome
thankyou
```

```
C:\Windows\System32\cmd.exe - java GossipClient

C:\Users\svcaslab\Desktop\Webpro\Source\5 server>set path=C:\Program Files\Java\j2se-6.0\bin
C:\Users\svcaslab\Desktop\Webpro\Source\5 server>javac GossipClient.java

C:\Users\svcaslab\Desktop\Webpro\Source\5 server>java GossipClient
Start the chat,type and press Enter key
6
hi
welcome
thankyou
```

Result:

Thus the program for creating simple chat application with datagram sockets and datagram packets Entered and executed successfully.

Ex No : 06	Java Using Servlets
Date :	

Aim:

To write programs in Java using Servlets:

- I. To invoke servlets from HTML forms
- II. To invoke servlets from Applets

Procedure:

- Step 1 : Start the program.
- Step 2 : Create the PostParam.html.
- Step 3 : Save the PostParam.Html
- Step 4 : Create java servlet for invoke the html file.
- Step 5 : Open the web browser and type http://localhost:8080.
- Step 6 : Select tomcat manager, Deploy the ware file and run.
- Step 7 : To run the source code.
- Step 8 : To stop the program.

Source Code :

PostParam.Html

```
<html>
<body>
<center>
<FORM name = "postparam" method = "post"
action="http://localhost:8080/PostParam/PostParam">
```

```

<TABLE>
<tr>
<td><B>Employee </B></td>
<td><input type = "textbox" name="ename" size="25"
value=""></td>
</tr>
<tr>
<td><B>Phone </B></td>
<td><input type = "textbox" name="phoneno" size="25"
value=""></td>
</tr>
</TABLE>
<INPUT type = "submit" value="Submit">
</body>
</html>

```

PostParam.java

```

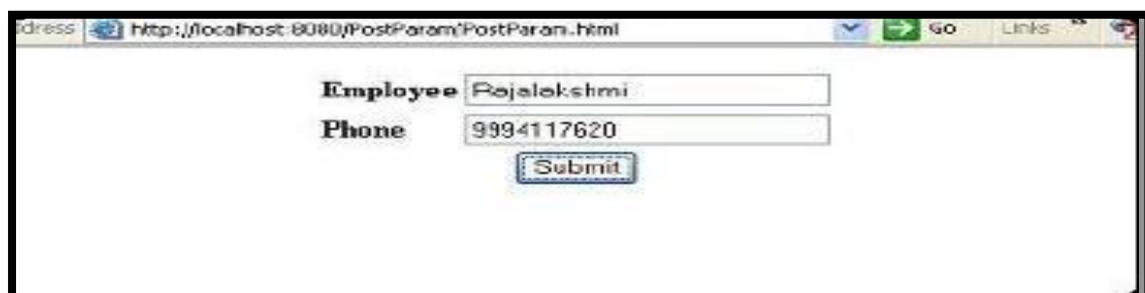
import java.io.*;
import java.util.*;
import javax.servlet.*;

public class PostParam extends GenericServlet
{
    public void service(ServletRequest request, ServletResponse response) throws
        ServletException, IOException
    {
        PrintWriter pw = response.getWriter();
        Enumeration e = request.getParameterNames();
        while(e.hasMoreElements())
        {
            String pname = (String)e.nextElement();
            pw.print(pname + " = ");
            String pvalue = request.getParameter(pname);
            pw.println(pvalue);
        }
    }
}

```

```
pw.close();  
}  
}
```

Output:



Result:

Thus the above program in java using servlets Entered and executed successfully.

Ex No : 07	Three Tier Applications Using Servlet
Date :	

Aim:

To write programs in Java to create three-tier applications using servlets for conducting on-line examination for displaying student mark list. Assume that student information is available in a database which has been stored in a database server.

Procedure:

- Step 1 : Start the program.
- Step 2 : Create the Index.Jsp.
- Step 3 : Save the Index.Jsp.
- Step 4 : The form tag action="http://localhost:8080/example/servlet/exam"..
- Step 5 : Import the necessary packages and declare class, class name in exam.
- Step 6 : Declare the connection, statement and result set object.
- Step 7 : To run the source code.
- Step 8 : To stop the program.

Source Code:

Index.jsp

```

<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>Welcome to Online Examination!!!!</title>
</head>
<body>
Welcome to Online Examination!!!!
<form action="exam" method="get">

```

```

<label><p> Enter Your name Please!!<br/><input type="text" name="name"/>
<br/>
<input type="submit" name="SUBMIT"/>
</p></label>
</form>
</body>
</html>

```

Exam.Java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class exam extends HttpServlet
{
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException{ response.setContentType("text/html");
PrintWriter out=response.getWriter(); Stringname=request.getParameter("name");
out.println("<html>");
out.println("<head>");
out.println("<title>Online Examination</title>"); out.println("</head>");
out.println("<body bgcolor=PINK>");
out.println("<h2 align=center>Online Examination</h2><hr>"); out.println("<h3 align=center>
Welcome Mr."+name+"</h3><hr>"); out.println("<h4><u>Terms and Conditions:</u></h4>");
out.println("<ul type=disc>");
out.println("<li>The Paper consists a set of five questions.</li>"); out.println("<li>Every question
consists of two options.</li>"); out.println("<li>All must be answered</li></ul><hr>");
out.println("<center><h5><u>Your Questions</u></h5></center>"); out.println("<hr>");
out.println("<form method=get action=exam2>");
out.println("<p>1.Operating Systemisa ..... </p>");
out.println("<input type=radio name=q1 value=0>Hardware"); out.println("<br>");
out.println("<input type=radio name=q1 value=1>Software"); out.println("<hr>");
out.println("<p>2.Developer of CLanguageis ..... </p>");
out.println("<br>");
out.println("<input type=radio name=q2 value=0>Dennis Richee"); out.println("<br>");
out.println("<input type=radio name=q2 value=1>James Thompson"); out.println("<hr>");
out.println("<p>3.Which of the following is a multitasking,multiuser,multiprocessing);
out.println("<OS. .... </p>");
out.println("<br>");
out.println("<input type=radio name=q3 value=0>MSDOS"); out.println("<br>");

```

```

out.println("<input type=radio name=q3 value=1>Windows NT"); out.println("<hr>");
out.println("<p>4.Father ofComputersis ..... </p>");
out.println("<br>");
out.println("<input type=radio name=q4 value=1>Charles babbage"); out.println("<br>");
out.println("<input type=radio name=q4 value=0>Charles Dickson"); out.println("<hr>");
out.println("<p>5.What is the current generation of computers?</p>"); out.println("<br>");
out.println("<input type=radio name=q5value=0>Fifth"); out.println("<br>");
out.println("<input type=radio name=q5value=1>Sixth"); out.println("<hr>");
out.println("<input type=submitvalue=Done>"); out.println("</form>");
out.println("</body>"); out.println("</html>");
}
public String getServletInfo() { return "A Servlet of the user";
}
}

```

Exam2.java

```

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
public class exam2 extends HttpServlet
{
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException{ int count=0,j; response.setContentType("text/html");
PrintWriter out=response.getWriter(); String q1=request.getParameter("q1"); String
q2=request.getParameter("q2"); String q3=request.getParameter("q3"); String
q4=request.getParameter("q4"); String q5=request.getParameter("q5"); if(q1.equals("1"))
{
count=count+1;
}
if(q2.equals("1"))
{
count=count+1;
}
if(q3.equals("1"))
{
count=count+1;
}
if(q4.equals("1"))
{

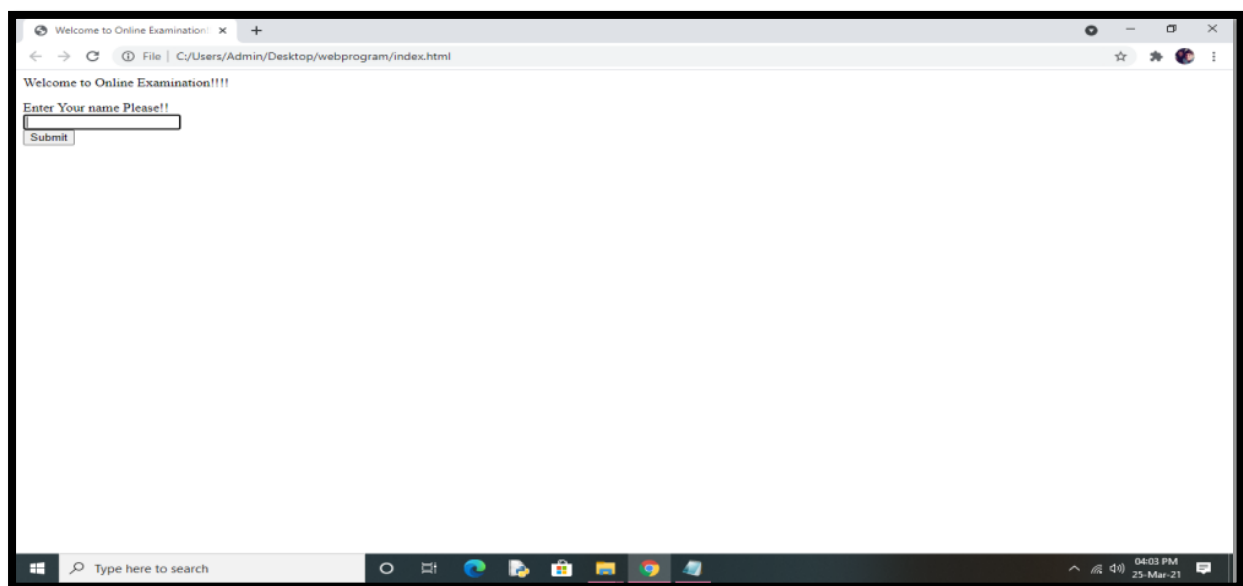
```

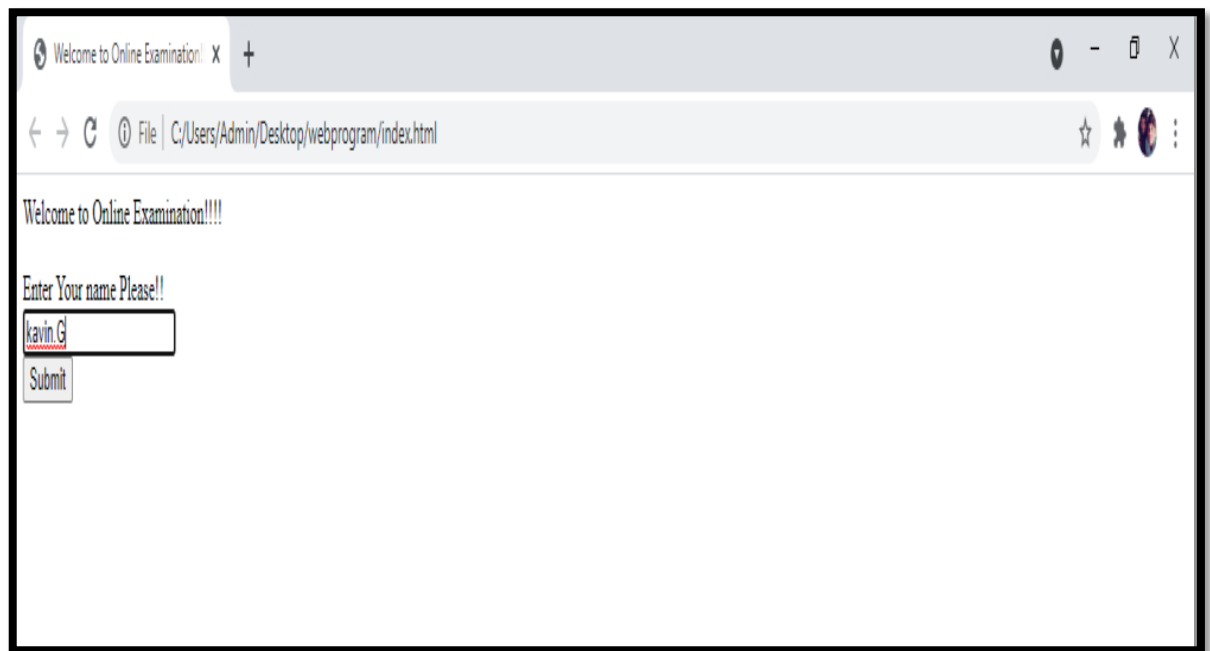
```

count=count+1;
}
if(q5.equals("1"))
{
count=count+1;
}
out.println("<html>");
out.println("<head><title>ExaminationResults</title></head>"); out.println("<body>");
out.println("<h2 align=center>Online Examination</h2><hr>"); out.println("<h3>Number of
Questions answered correctly:</h3>"+count); if(count>=3)
{
out.println("<hr><h3>Congrats!!! You Have Passed!!!</h3><hr>"); out.println("<h4><b>Try
Other Tests!!</b></h4>");
}
else
{
out.println("<hr><h3>Sorry!!! You Have Failed!!!</h3><hr>"); out.println("<h4><b>Try
Again:</b></h4>");
}
out.println("</body>"); out.println("</html>");
}
public String getServletInfo() { return "A Servlet of the User";
}
}

```

Output:



**Result:**

Thus the above program in java to create three-tier applications using servlets for conducting on-line examination Entered and executed successfully.

Ex No : 08	Web Page creation using map fix the hot Spots
Date :	

Aim:

To create a web page with the following using HTML

- I. To embed a map in a web page
- II. To fix the hot spots in that map
- III. Show all the related information when the hot spots are clicked.

Procedure:

- Step 1 : Start the program.
- Step 2 : Create the html file with maptag.
- Step 3 : Set the source attributes of the image tag to the location of the image.
- Step 4 : Specify an area with name, shape and href set of the appropriate Value.
- Step 5 : Repeat step3 as many hot spots you want to put in the map.
- Step 6 : Create html file for each and every hot spots the user will select the Particular location it shows information about it.
- Step 7 : To run the source code.
- Step 8 : To stop the program.

Source Code:

Indiamap.HTML

```
<!DOCTYPE html>

<html>

<body>

<h1>The map and area elements</h1>

<p>Click on the Hotspots to go to a new page and read more about the Places:</p>



<map name="workmap">

<area shape="rect" coords="83,41,57,63" alt="delhi" href="delhi.html">

<area shape="rect" coords="149,129,124,83" alt="calcutta" href="calcutta.html">

<area shape="rect" coords="89,184,56,226" alt="tamilnadu" href="tamilnadu.html">

</map>

</body>

</html>
```

Tamilnadu.HTML

```
<html>

<body bgcolor="cyan">

<font face="Times New Roman" size="10" color="orange">

<center>Chennai is the capital of Tamil Nadu<br> and <br>More IT companies are camped at

Chennai</center>

<a href="Indiamap.html">Home Page</a>

</font>

</body>

</html>
```

Delhi.HTML

```
<html>

<body bgcolor="cyan">

<font face="Times New Roman" size="10" color="orange">

<center>Chennai is the capital of Tamil Nadu<br> and <br>More IT companies are camped at
Chennai</center>

<a href="Indiamap.html">Home Page</a>

</font>

</body>

</html>
```

Calcutta.HTML

```
<html>

<body bgcolor="SKYBLUE">

<font face="Times New Roman" size="10" color="RED">

<center><b><i>Calcutta is the wealthy city in WEST BENGAL<br> and <br>It has Famous
"Sunderbans Forests"</i></b></center>

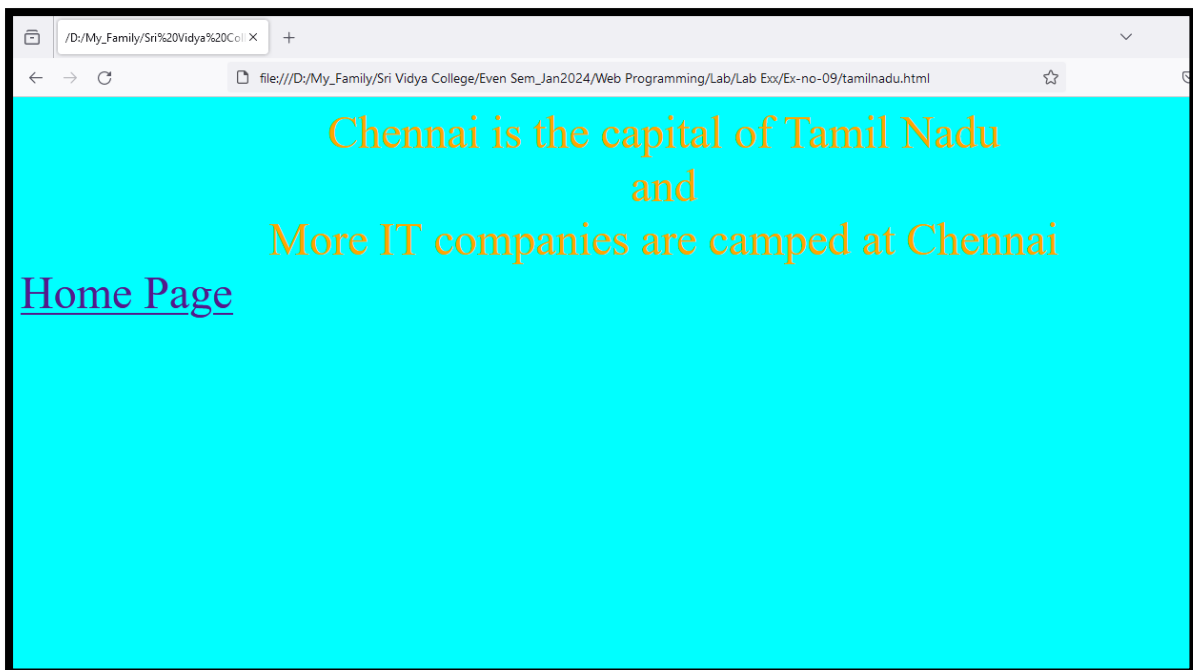
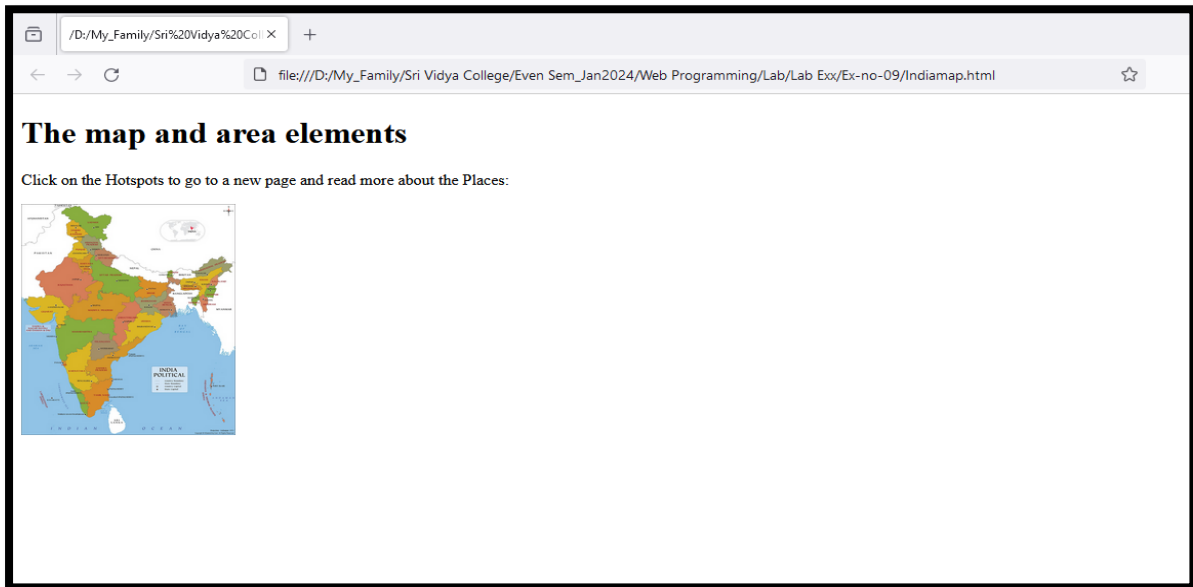
<a href="Indiamap.html">Home Page</a>

</font>

</body>

</html>
```

Output:





Result:

Thus the above web page are created and fix hotspots designed and executed successfully.

Ex No : 09	Web Page creation Using Cascading Style Sheets
Date :	

Aim:

To create a web page with the following.

- I. Cascading style sheets.
- II. Embedded style sheets.
- III. Inline style sheets. Use our college information for the web pages.

Procedure:

- Step 1 : Start the program.
- Step 2 : Create the html document using Style Sheets information
- Step 3 : Create a CSS file which contains the course details and link it to the Document using the <link> tag by applying external style concept.
- Step 4 : Describe the current sem subjects in our own way of following by Applying internal style concept
- Step 5 : To run the source code.
- Step 6 : To stop the program.

Source Code :

Index.html

```
<html>

<frameset rows="40%,*">

<frame src="title.html" name="f1">

<frameset cols="35%,*">

<frame src="link.html" name="f2">
```

```
<frame name="f3">
```

```
</frameset>
```

```
</frameset>
```

```
</html>
```

Title.Html

```
<html>
```

```
<head><title>index</title>
```

```
</head>
```

```
<body bgcolor="magenta">
```

```
<center><h1>SRI VIDHYA COLLEGE OF ARTS & SCIENCE</h1>
```

```
<h2>Affiliated to Madurai Kamaraj University</h2>
```

```
<h3>Virudhunagar-626005</h3>
```

```
</center>
```

```
</body>
```

```
</html>
```

Link.HTML

```
<html>
```

```
<head><title>linking...</title>
```

```
</head>
```

```
<body bgcolor="Yellow">
```

```
<center>
```

```
<h2>DO U WANT TO KNOW...</h2>
```

```
<br>
```

```
<br>
```

```
<a href="dep.html" target="f3">DEPARTMENT</a><br>
```

```
<a href="faci.html" target="f3">FACILITIES</a><br>
<a href="cele.html" target="f3">CELEBRATION</a><br>
<a href="image.html" target="f3">GALLERY</a><br>
<a href="fees.html" target="f3">FEES</a><br>
<a href="add.html" target="f3">ADDRESS</a><br>
<br>
<br>
</body>
</html>
```

Dep.HTML

```
<html>
<head>
<title>Working with Style Sheets</title>
<style type="text/css">
h1
{
font-family:monotypecorsiva
}
h2
{
background-color:gray;background-repeat:repeat-x
}
p { font-size:12pt;font-weight:bold;color:#23238e;border-style:groove }
u1 {list-style-type:lower-roman}
</style>
</head>
<body bgcolor="red">
```


<center>

<h1>WELCOME TO OUR COLLEGE DEPARTMENTS</h1>

<h1><u>UG COURSES</u></h1>

B.Sc(Computer Science)

B.Sc(Physics)

B.Sc(Chemistry)

B.Sc(Maths)

BCA

BA(Tamil)

BA(English)

BA(History)

B.Com CA

B.Com

B.Com (CS)

<h1><u>PG COURSES</u></h1>

M.Sc(Computer Science)

M.Com

FEES

<h1><marquee behaviour="right">Thanks for visiting.....</marquee></h1>

</body>

</html>

FACI.HTML

```
<html>

<head>

<title>external style sheets</title>

<link rel=stylesheet href="external.css">

</head>

<body bgcolor="cyan">

<center><h2>OUR COLLEGE FACILITIES</h2></center>Facilities are.....<br>

<ul type="1" color="blue">

<li>Hostel for Girls & Boys</li>

<li>Canteen</li>

<li>Library</li>

<li>lab Facility</li>

</ul>

</body>

</html>
```

Cele.HTML

```
<html>

<head>

<title>Working with style sheets</title>

<style type="text/css">

h2 { font-family:Playbill;background-color:red}

ul { list-style-type:lower-roman}

</style>

</head>

<body bgcolor="orange">

<center><h2>Our College Celebrations.....</h2></center>
```

```
<br> Celebrations are....<br>

<ul>

<li>Associations</li>

<li>Festivals</li>

<li>Cerificate Course</li>

<li>Talent Show</li>

</ul>

<br><br><br>

<h2><marquee behaviour="right">Thank You....</marquee></h2>

</body>

</html>
```

Image.HTML

```
<html>

<head>

<title>external style sheets</title>

<link rel=stylesheet href="external.css">

</head>

<body>

<center><h2>....IMAGES....</h2><center>

<br>

<center>Our College Lab....</center>

<br><br><br>



<center>Our Library....</center>

<br><br><br>



<center>Our ClassRoom....</center>
```

```
<br><br><br>

</body>
</html>
```

Fees.HTML

```
<html>
<head>
<title>fees</title>
<h1 style-color="cyan" font size=10% font family="Small Fonts"></h1>
</head>
<body bgcolor="brown">
<center><h1>COLLEGE FEES</h1></center>
<table border=5 align="center" BORDERCOLOR="#ac6d07" bgcolor="gray"
width="50%" height="50%">
<h2><tr><th align="center" bgcolor="red">DEGREE</h2>
<h2><th align="center" bgcolor="blue">FEES</h2>

<center><tr><td>B.Sc CS</td><td>13500</td></tr></center>
<center><tr><td>B.Sc Physics</td><td>12500</td></tr></center>
<center><tr><td>B.Sc Chemistry</td><td>14500</td></tr></center>
<center><tr><td>B.Sc Maths</td><td>11500</td></tr></center>
<center><tr><td>BCA</td><td>14500</td></tr></center>
<center><tr><td>BA(Tamil)</td><td>11000</td></tr></center>
<center><tr><td>BA(English)</td><td>11000</td></tr></center>
<center><tr><td>BA(History)</td><td>11000</td></tr></center>
<center><tr><td>B.Com CA</td><td>14500</td></tr></center>
<center><tr><td>B.Com</td><td>10500</td></tr></center>
```

```
<center><tr><td>B.Com (CS)</td><td>11500</td></tr></center>
```

```
<center><tr><td>M.Sc CS</td><td>16000</td></tr></center>
```

```
<center><tr><td>M.Com</td><td>13500</td></tr></center>
```

```
</table>
```

```
</body>
```

```
</html>
```

Add.HTML

```
<html>
```

```
<head>
```

```
<title>working wid style sheet</title>
```

```
<style type="text/css">
```

```
h1 { font-family:RockWell;background-color:red}
```

```
</style>
```

```
</head>
```

```
<body bgcolor="pink">
```

```
<center><h1>Our Colege Address.....</h1></center>
```

```
<br>
```

```
<h1><u>Address.....</u></h1><br>
```

```
Sri Vidhya College of Arts & Science,<br>
```

```
Kumarlingapuram,<br>
```

```
Virudhunagar 626 005<br>
```

```
Ph:7094465623, 8870882201<br>
```

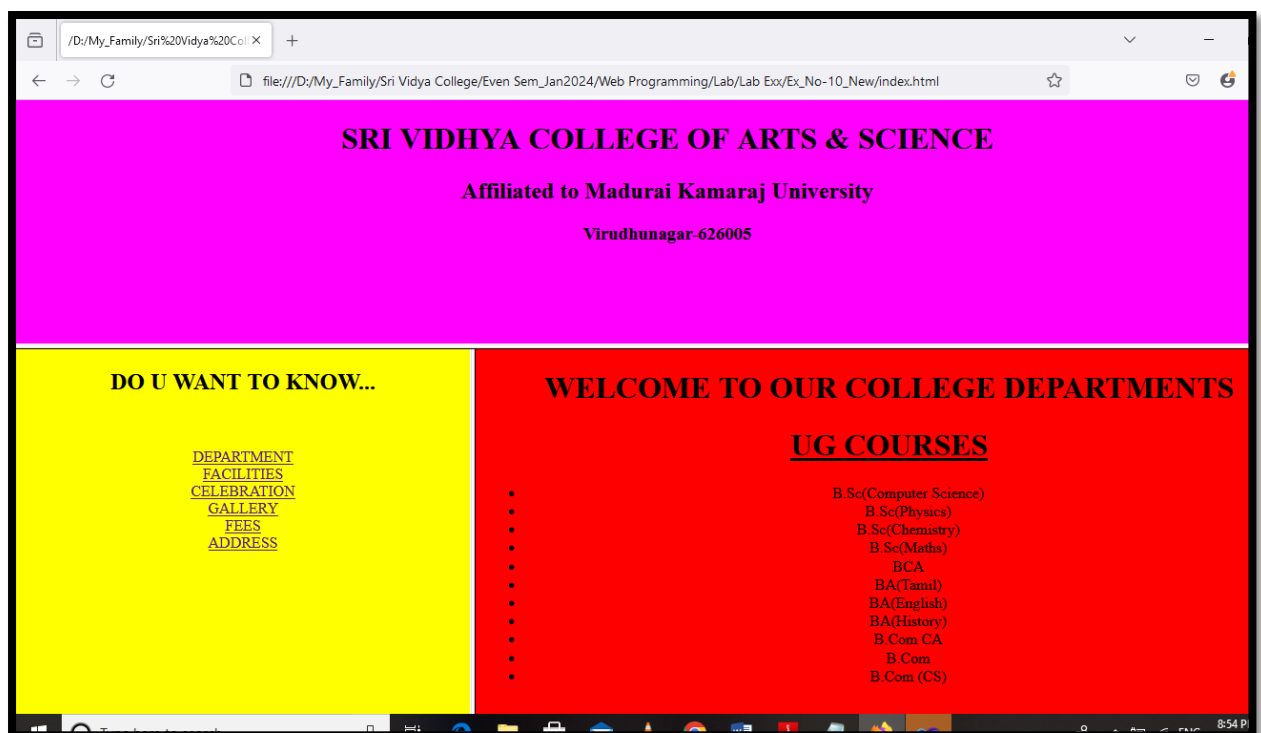
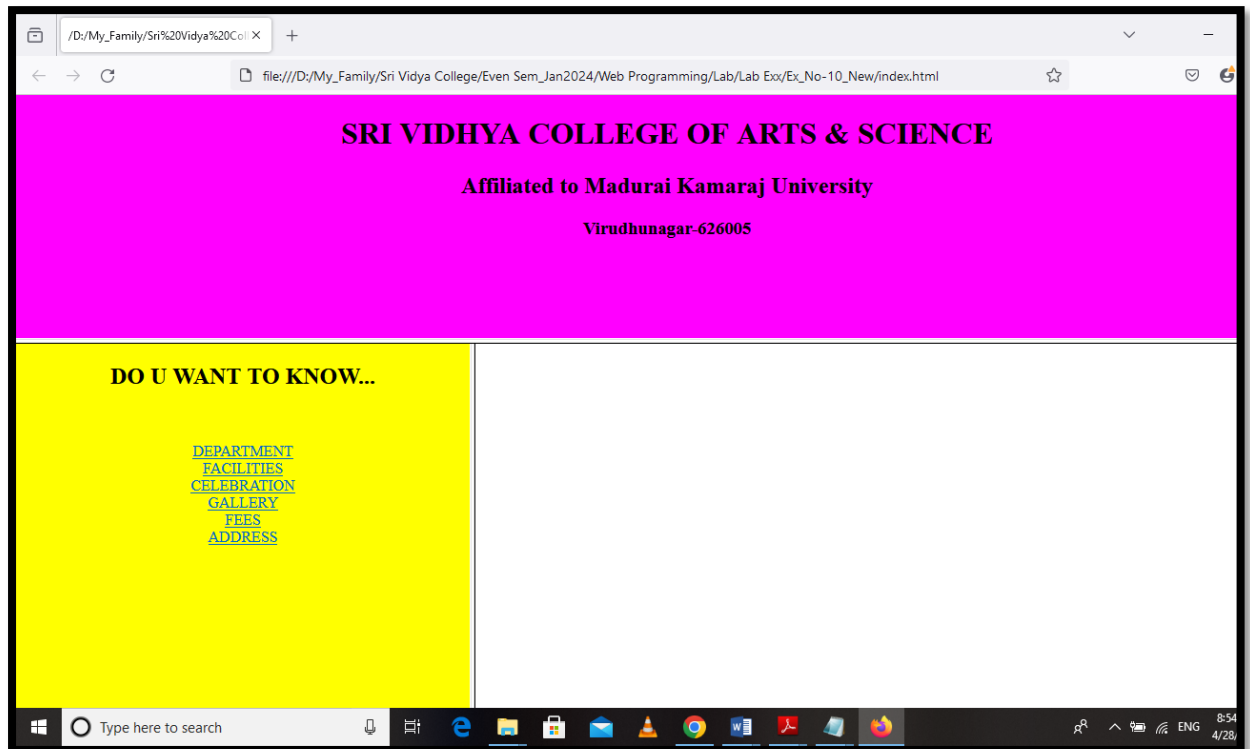
```
email id:srividhyaartssci@gmail.com
```

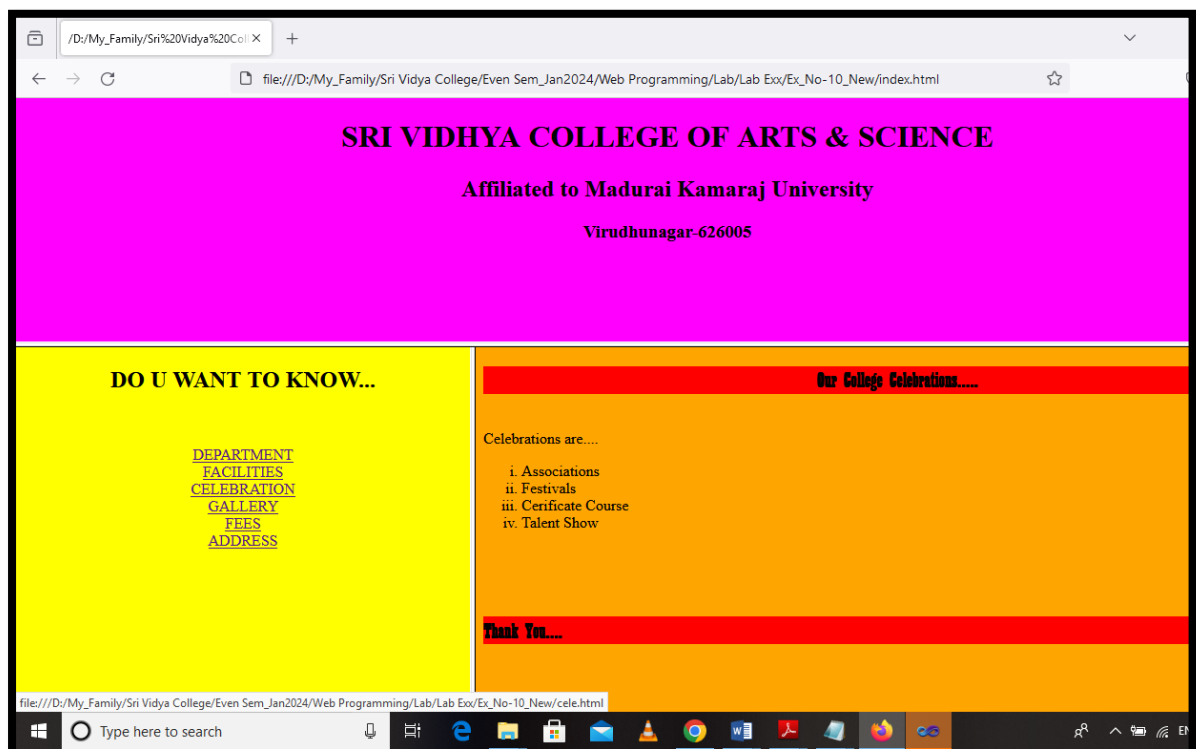
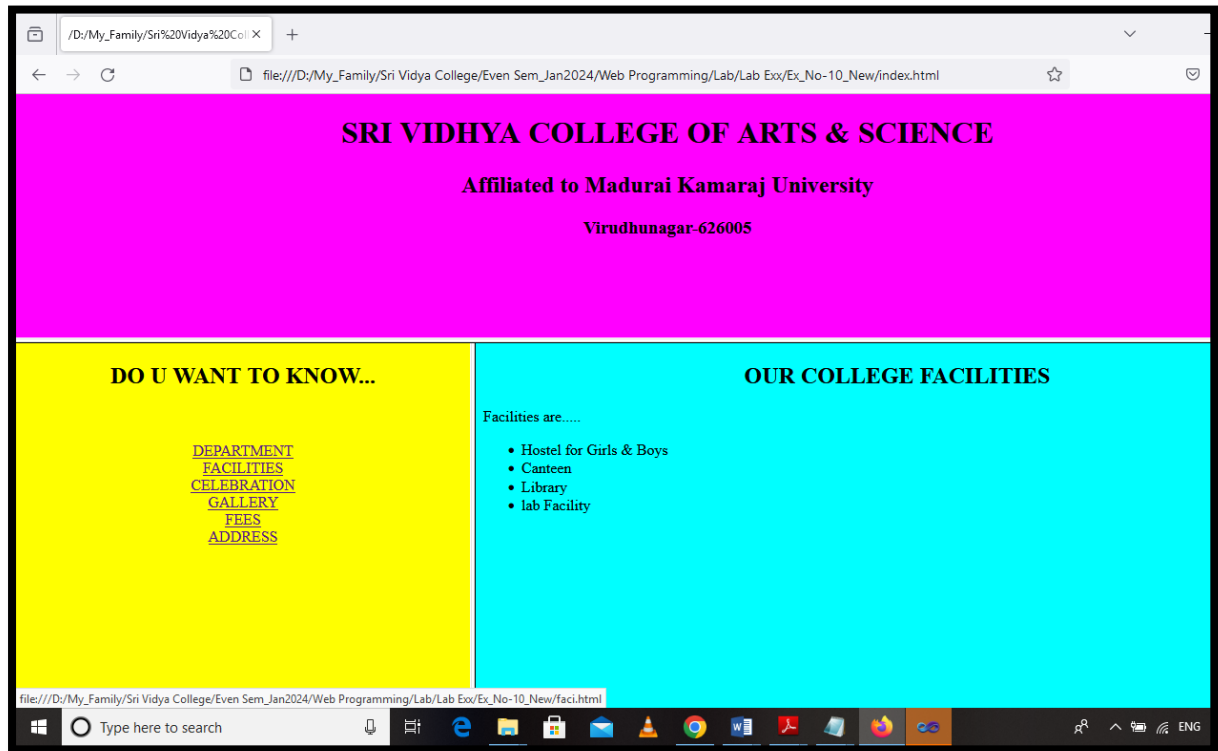
```
<h1><marquee behaviour="right">Thanking You.....</marquee></h1>
```

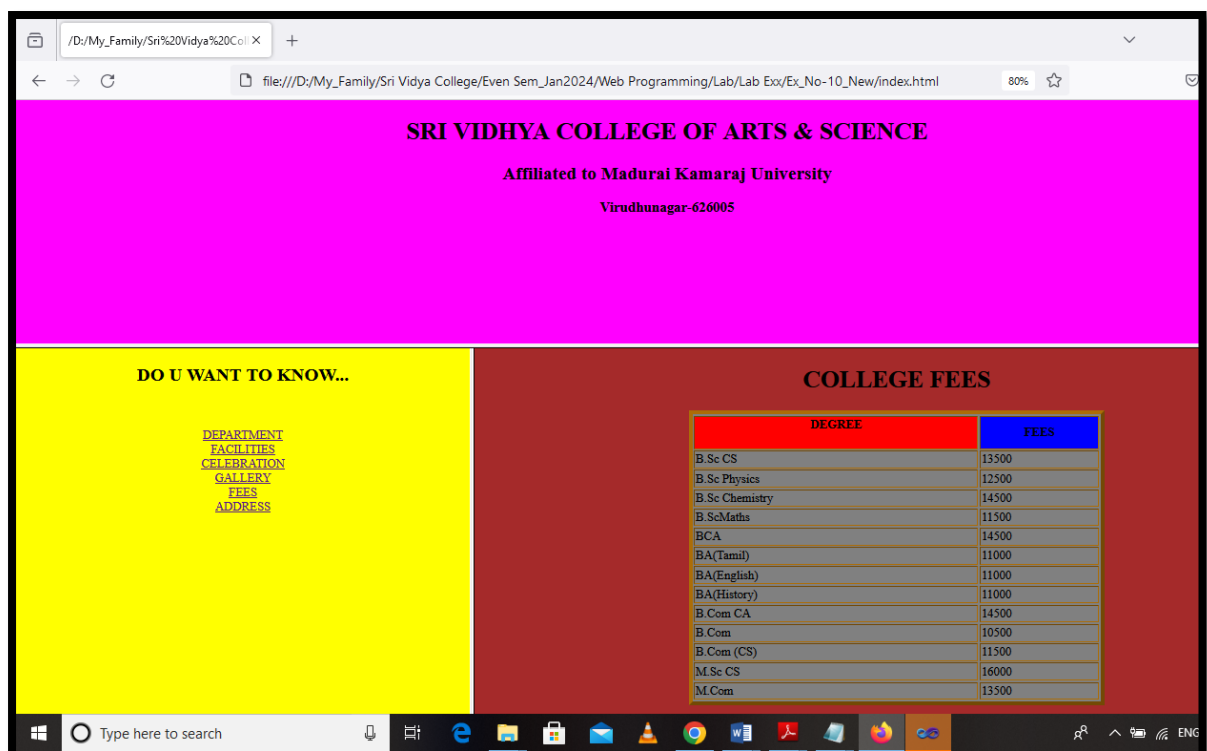
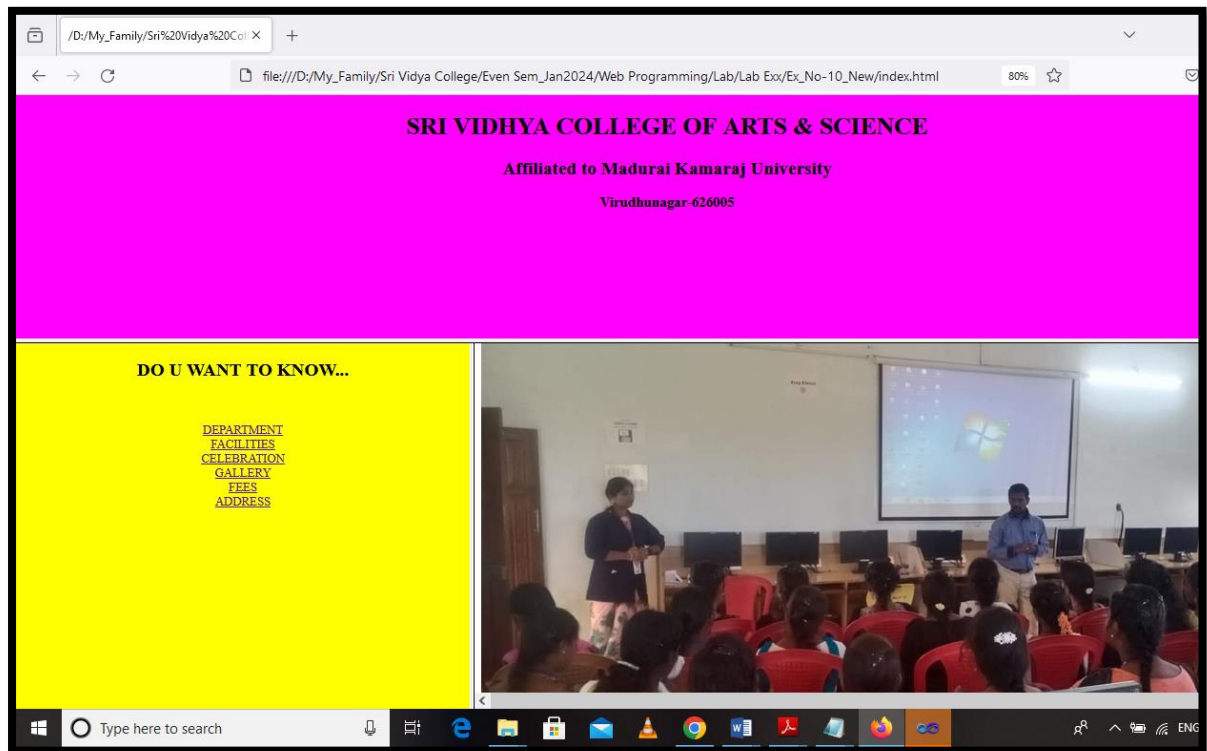
```
</body>
```

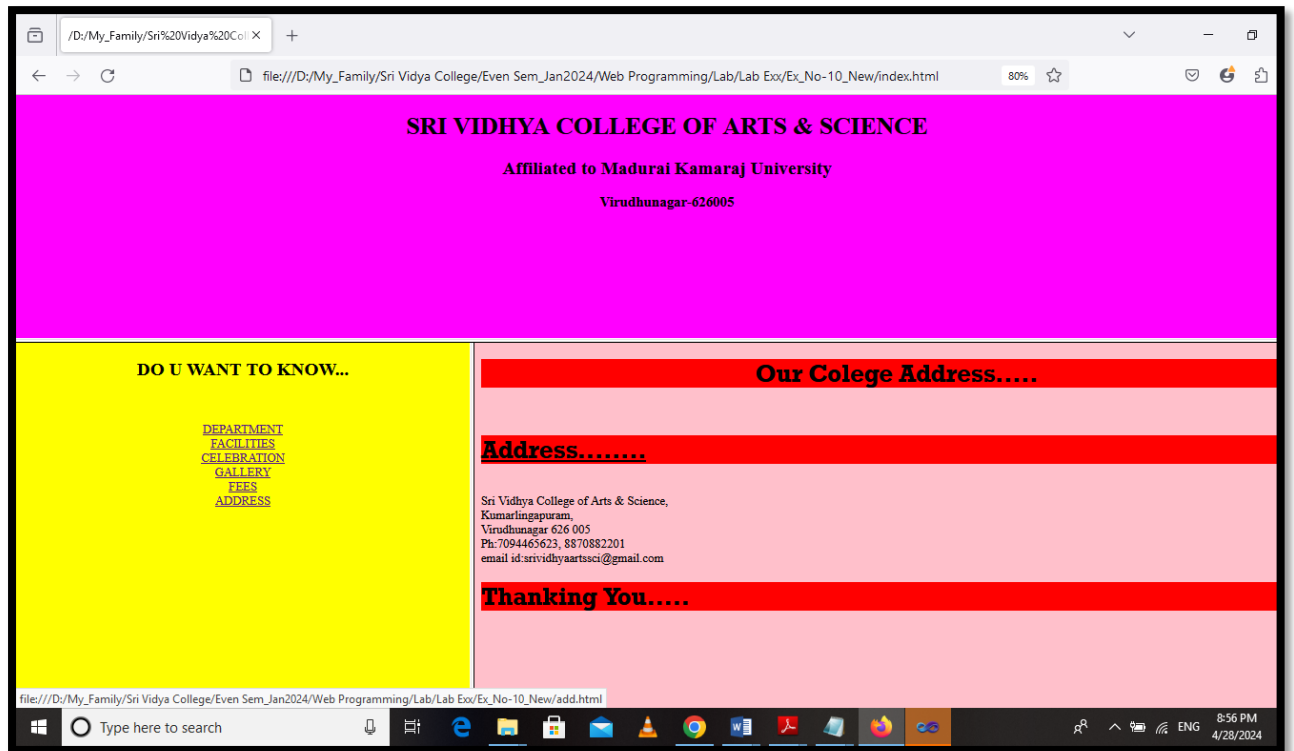
```
</html>
```

Output:









Result:

Thus the above web page are created and Inline, Embedded CSS File designed and executed successfully.