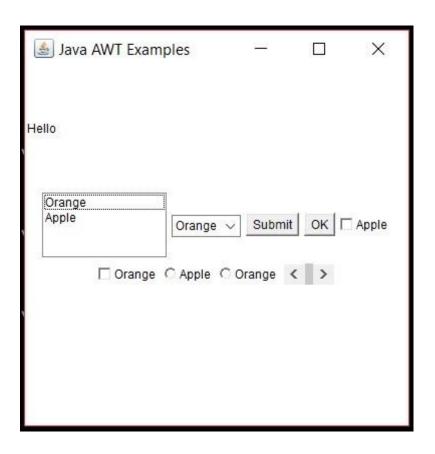
AWT Controls:

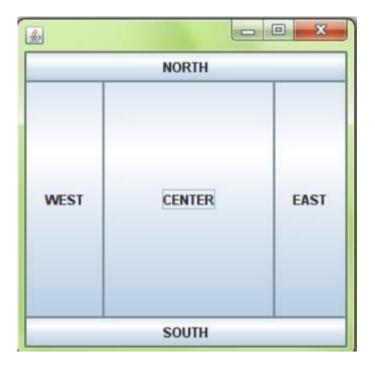
```
import java.awt.*;
import java.awt.event.*;
public class AwtControlDemo {
public static void main(String[] args)
   Frame mainFrame = new Frame("Java AWT Examples");
   mainFrame.setSize(400,400);
   mainFrame.setLayout(new GridLayout(3, 1));
        mainFrame.addWindowListener(new WindowAdapter() {
        public void windowClosing(WindowEvent windowEvent)
        System.exit(0);
        }});
        Label headerLabel = new Label();
        headerLabel.setText("Hello");
        Panel controlpanel= new Panel();
        controlpanel.setLayout(new FlowLayout());
        List fruit = new List();
        fruit.add("Orange");
        fruit.add("Apple");
        Choice fruit1 = new Choice();
        fruit1.add("Orange");
        fruit1.add("Apple");
                CheckboxGroup cbg1=new CheckboxGroup();
     CheckboxGroup cbg2=new CheckboxGroup();
```

```
Checkbox ch1=new Checkbox("Apple");
       Checkbox ch2=new Checkbox("Orange");
       Checkbox ch11=new Checkbox("Apple",cbg1,false);
       Checkbox ch21=new Checkbox("Orange",cbg2,false);
       Button b1 =new Button("Submit");
       Button b2=new Button("OK");
       Scrollbar scroll = new Scrollbar(Scrollbar.HORIZONTAL);
scroll.setMinimum(1);
scroll.setMaximum(100);
controlpanel.add(fruit);
controlpanel.add(fruit1);
controlpanel.add(b1);
controlpanel.add(b2);
controlpanel.add(ch1);
controlpanel.add(ch2);
controlpanel.add(ch11);
controlpanel.add(ch21);
controlpanel.add(scroll);
mainFrame.add(headerLabel);
mainFrame.add(controlpanel);
mainFrame.setVisible(true);
```



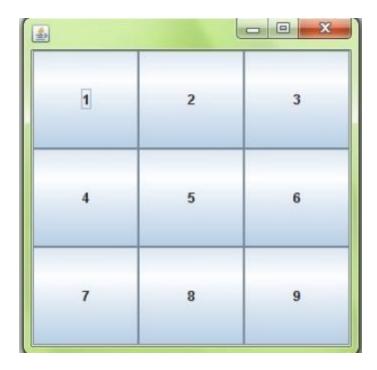
Border layout Program:

```
import java.awt.*;
import javax.swing.*;
public class Border {
JFrame f;
Border(){
f=new JFrame();
  JButton b1=new JButton("NORTH");;
  JButton b2=new JButton("SOUTH");;
  JButton b3=new JButton("EAST");;
  JButton b4=new JButton("WEST");;
  JButton b5=new JButton("CENTER");;
  f.add(b1,BorderLayout.NORTH);
  f.add(b2,BorderLayout.SOUTH);
  f.add(b3,BorderLayout.EAST);
  f.add(b4,BorderLayout.WEST);
  f.add(b5,BorderLayout.CENTER);
  f.setSize(300,300);
  f.setVisible(true); }
public static void main(String[] args) {
new Border();
}
```



Grid Layout

```
import java.awt.*;
import javax.swing.*;
public class MyGridLayout{
JFrame f;
MyGridLayout(){
f=new JFrame();
  JButton b1=new JButton("1");
  JButton b2=new JButton("2");
  JButton b3=new JButton("3");
  JButton b4=new JButton("4");
  JButton b5=new JButton("5");
    JButton b6=new JButton("6");
    JButton b7=new JButton("7");
  JButton b8=new JButton("8");
    JButton b9=new JButton("9");
  f.add(b1);f.add(b2);f.add(b3);f.add(b4);f.add(b5);
  f.add(b6);f.add(b7);f.add(b8);f.add(b9);
  f.setLayout(new GridLayout(3,3));
  //setting grid layout of 3 rows and 3 columns
  f.setSize(300,300);
  f.setVisible(true); }
public static void main(String[] args) {
  new MyGridLayout();
```



```
Flow layout
import java.awt.*;
import javax.swing.*;
public class MyFlowLayout{
JFrame f;
MyFlowLayout(){
f=new JFrame();
JButton b1=new JButton("1");
JButton b2=new JButton("2");
JButton b3=new JButton("3");
JButton b4=new JButton("4");
JButton b5=new JButton("5");
f.add(b1); f.add(b2); f.add(b3); f.add(b4); f.add(b5);
f.setLayout(new FlowLayout(FlowLayout.RIGHT));
f.setSize(300,300);
f.setVisible(true);
}
public static void main (String[]args) {
new MyFlowLayout();
}
}
```

Flow Layout

```
import java.awt.*;
import javax.swing.*;
public class MyFlowLayout{
JFrame f;
MyFlowLayout(){
  f=new JFrame();
  JButton b1=new JButton("1");
  JButton b2=new JButton("2");
  JButton b3=new JButton("3");
  JButton b4=new JButton("4");
  JButton b5=new JButton("5");
  f.add(b1);f.add(b2);f.add(b3);f.add(b4);f.add(b5);
  f.setLayout(new FlowLayout(FlowLayout.RIGHT));
  //setting flow layout of right alignment
  f.setSize(300,300);
  f.setVisible(true);
public static void main(String[] args) {
  new MyFlowLayout();
```



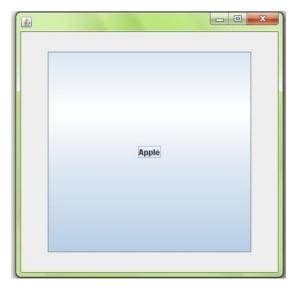
Grid Bag Layout:

```
import java.awt.Button;
import java.awt.GridBagConstraints;
import java.awt.GridBagLayout;
import javax.swing.*;
public class GridBagLayoutExample extends JFrame{
  public static void main(String[] args) {
       GridBagLayoutExample a = new GridBagLayoutExample();
    public GridBagLayoutExample() {
GridBagLayoutgrid = new GridBagLayout();
       GridBagConstraints gbc = new GridBagConstraints();
setLayout(grid);
       setTitle("GridBag Layout Example");
       GridBagLayout layout = new GridBagLayout();
this.setLayout(layout);
  gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.gridx = 0;
                 gbc.gridy = 0;
  this.add(new Button("Button One"), gbc);
gbc.gridx = 1;
                 gbc.gridy = 0;
  this.add(new Button("Button two"), gbc);
gbc.fill = GridBagConstraints.HORIZONTAL;
                  gbc.gridx = 0;
gbc.ipady = 20;
                                    gbc.gridy
= 1;
  this.add(new Button("Button Three"), gbc);
gbc.gridx = 1;
  gbc.gridy = 1;
  this.add(new Button("Button Four"), gbc);
  gbc.gridx = 0;
gbc.gridy = 2;
  gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.gridwidth = 2;
  this.add(new Button("Button Five"), gbc);
       setSize(300, 300);
setPreferredSize(getSize());
                                  setVisible(true);
       setDefaultCloseOperation(EXIT ON CLOSE);
    }
}
```



Card Layout:

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
public class CardLayoutExample extends JFrame implements ActionListener{
CardLayout card;
JButton b1,b2,b3;
Container c;
CardLayoutExample(){
c=getContentPane(); card=new
CardLayout(40,30);
//create CardLayout object with 40 hor space and 30 ver space c.setLayout(card);
b1=new JButton("Apple");
b2=new JButton("Boy"); b3=new
JButton("Cat");
b1.addActionListener(this);
b2.addActionListener(this);
b3.addActionListener(this);
c.add("a",b1);c.add("b",b2);c.add("c",b3);
}
public void actionPerformed(ActionEvent e) {
card.next(c);
}
public static void main(String[] args) {
CardLayoutExample cl=new CardLayoutExample();
cl.setSize(400,400); cl.setVisible(true);
DefaultCloseOperation(EXIT_ON_CLOSE);
}}
```



PROGRAM TO SET URL, DOWNLOAD THE HOME PAGE & DISPLAY THE CONTENTS OF THE PAGE

```
import java.net.*;
import java.io.*;
import java.util.Date;
class URLDemo
{ public static void main(String[] arg) throws Exception
 int c;
   URL yahoo = new URL("http://www.msn.com");
   URLConnection yahoocon = yahoo.openConnection();
   System.out.println("Date: " + new Date(yahoocon.getDate()));
   System.out.println("Content-Type: " + yahoocon.getContentType());
   System.out.println("Expires: " + yahoocon.getExpiration());
   System.out.println("LastModified: " + new Date(yahoocon.getLastModified()));
   int len = yahoocon.getContentLength();
   System.out.println("Content-Length: " + len);
   if(len>0)
     System.out.println("+++++++ CONTENT +++++++");
     InputStream input= yahoocon.getInputStream();
     int i = len;
     while(((c = input.read()) != -1) && (--i > 0))
       System.out.print((char) c);
     input.close();
   else
     System.out.println("No Content Available"); } }
```

C:\WINDOWS\system32\cmd.exe

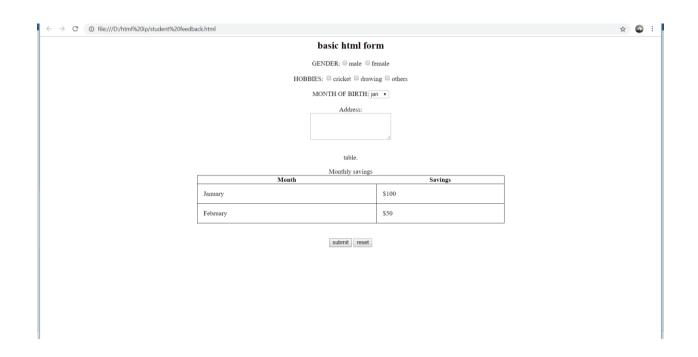
```
Basic html
Program:
<html>
<head>
<style>
table,td {
border: 1px solid black;
border-collapse: collapse;
td{
 padding: 15px;
</style>
</head>
<body>
<center>
 <h2><center><b> basic html form </b></center></h2>
 <form>
 GENDER:<input type="radio" name="gen "value="male">male
    <input type="radio" name="gen" value="female">female <br> </br>
 HOBBIES:
     <input type="checkbox" name="hob">cricket
     <input type="checkbox"name="hob">drawing
      <input type="checkbox"name="hob">others<br></br>
```

```
Coffee
  Tea
  Milk

    type="1">

  Coffee
  Tea
  Milk
MONTH OF BIRTH:<select>
 <option value="jan">jan</option>
<option value="feb">feb</option>
<option value="mar">mar</option>
<option value="apr">apr</option>
<option value="may">may</option>
<option value="jun">jun</option>
<option value="jul">jul</option>
<option value="aug">aug</option>
</select><br></br>
                           Address:<br/>textarea
                           name="address"cols="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"name="address"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"rows="4"></textarea><br/>>cls="25"ro
table.
<caption>Monthly savings</caption>
   Month
      Savings
   January
      $100
   February
      $50
  <br></br>
<input type="submit" value="submit">
<input type="reset" value="reset">
</form>
```

	—
(Jenter)	
ynum>	
Output	
Output:	



frames

Program

Index.html

```
<html>
<head>
<title> welcome </title>
<link rel="shortcut icon" href="image/1.png">
</head>
<frameset cols="60%,40%" >
   <frame src="doc1.html">
 <frameset rows="40%,40%">
        <frame src="doc2.html">
        <frame src="doc3.html">
</frameset>
</html>
Doc1
<html>
<head>
<link rel="stylesheet" href="./css/style.css">
</head>
<body>
  <section id="showcase">
   <div class="container">
       <h1 style="font-family:verdana; color:#b9f442";> Teaching Academy</h1>
```

Coaching is a form of development in which a person called a coach supports a learner or client in achieving a specific personal or professional goal by providing training and guidance. The learner is sometimes called a coachee. Occasionally, coaching may mean an informal relationship between two people, of whom one has more experience and expertise than the other and offers advice and guidance as the latter learns but coaching differs from mentoring in focusing on specific tasks or objectives, as opposed to more general goals or overall development.

```
</div>
</section>
<section id="newsletter">
<div class="container">
```

```
<h1>Subscribe for more updates</h1>
  <form>
  <input type="email" placeholder="Enter Email...">
  <button type="submit" class="button_1">Subscribe</button>
 </form>
 </div>
</section>
<style>
 table {
  width:100%;
 }
 table, th, td {
   border: 1px solid black;
  border-collapse: collapse;
 }
 th, td {
 padding: 15px;
 text-align: left;
}
</style>
</head>
<body bgcolor="powderblue">
<h1><center>Teaching timings</center></h1>
courses
 timings
 cost
```

```
Html
 9am to 10am
 1000rs
 css
 10am to 11am
 500rs
 java script
 11am to 12pm
 1000rs
 <br>
 <footer>
 2018 © Teaching Academy
 </footer>
</body>
</html>
Doc2
<html>
<head>
<title> doc2 </title>
<style>
#boxes{
```

```
margin-top: 20px;
}
 #boxes .box{
  float: left;
  text-align: center;
  width: 30%;
  padding: 5px;
 #boxes .box image{
  width: 80px;
}
</style>
</head>
<body bgcolor="#42d4f4">
<h1>Teaching Academy</h1>
<center> <span> courses we offer </span></center> </P>
 <section id="boxes">
  <div class="container">
  <div class="box">
<img src="./image/logo.png" height="30%" width="30%">
    <h3>Html Markup</h3>
     this is html used to create website
   </div>
     <div class="box">
    <img src="./image/css.png" height="30%" width="30%">
     <h3>css styling</h3>
```

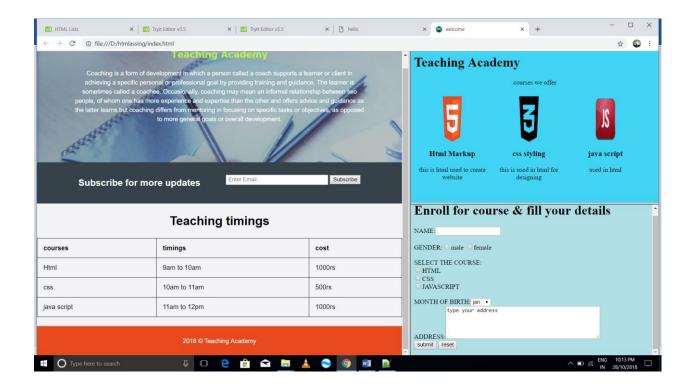
```
 this is used in html for designing 
    </div>
    <div class="box">
    <img src="./image/js.png" height="30%" width="30%">
    <h3>java script</h3>
     used in html 
    </div>
   </div>
  </section>
</body>
</html>
Doc3
<html>
<head>
<style>
</style>
</head>
<body bgcolor="powderblue">
<h1> Enroll for course & fill your details</h1>
<form>
 NAME:<input type="text"name="fn"value=""><BR><BR>
 GENDER:<input type="radio"name="gen"value="male">male
    <input type="radio"name="gen"value="female">female<br><BR>
    SELECT THE COURSE:
 <br/><input type="checkbox"name="hob">HTML<br/>
     <input type="checkbox"name="hob">CSS<br>
      <input type="checkbox"name="hob">JAVASCRIPT<br><br>
 MONTH OF BIRTH:<select name ="mob"><option value="jan">jan</option>
```

```
<option value="jan">jan</option>
<option value="feb">feb</option>
<option value="mar">mar</option>
<option value="apr">apr</option>
<option value="may">may</option>
<option value="jun">jun</option>
<option value="jul">jul</option>
<option value="aug">aug</option>
</select><br>
ADDRESS:<textarea name="addr"rows="5"cols="50">
type your address
</textarea><br>
<input type="submit" value="submit">
<input type="reset" value="reset">
</form>
</body>
</html>
Css
body{
font: 15px/1.5 Arial, Helvetica, sans-serif;
padding:0;
 margin:0;
background-color: #f4f3f5;
}
#showcase{
  min-height: 300px;
```

```
background:url('../image/showcase.jpg') no-repeat 0 -250px;
 text-align: center;
 color:#ffffff;
}
.container{
 width:80%;
 margin:auto;
 overflow:hidden;
}
#newsletter{
  padding:15px;
  color: #ffffff;
  background: #35424a;
 }
 #newsletter h1{
  float: left;
 }
 #newsletter form{
  float: right;
  margin-top: 15px;
 }
 #newsletter input[type="email"]{
  padding: 4px;
  height: 25px;
```

```
width: 250px;
}

footer{
padding: 10px;
margin-top: 0px;
color: #ffffff;
background-color: #e8491d;
text-align: center;
}
```



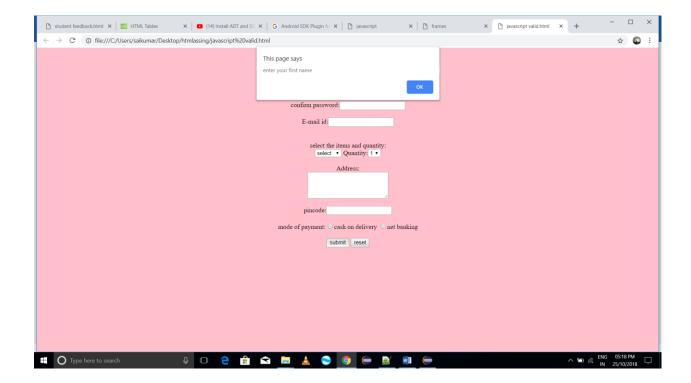
```
Program
<html>
<head>
</head>
<body>
<script>
                    function form(){
                    var name=document.myform.name.value;
                    var password=document.myform.password.value;
                    var cpassword=document.myform.cpassword.value;
                    var Iname=document.myform.Iname.value;
                    var x=document.myform.pin.value;
                    var mail=document.myform.mail.value;
                    var address=document.myform.address.value;
                    var chocolates=document.myform.chocolates.value;
                    if(chocolates.selectedIndex==0)
                       alert(" select chocolates");
                       return false;
                       }
                    if(name==null || name=="")
                    {
                     alert("enter your first name");
```

```
return false;
  }
   if(Iname==null | | Iname=="")
{
 alert("enter your last name");
  return false;
  }
  if (address=="")
  {
   alert("fill the address");
   }
  if(password.length<6){
   alert("password must be at least 6 char");
  return false;
   }
   if(password!=cpassword)
   {
    alert("password mismatch");
          return false;
   }
   if(mail=="")
```

```
window.alert("please enter email");
                                return false;
                                }
                                if(mail.indexOf("@",0)<0)
                                 window.alert("please enter a valid email");
                                 return false;
                                 }
                                 if(mail.indexOf(".",0)<0)
                                 {
                                 window.alert("please enter a valid email");
                                 return false;
                                 }
                                 if(isNaN(x)|| x=="")
                                  alert("enter valid pincode in numbers");
                                        return false;
                                        }
((myform.pay[0].checked==false)&&(myform.pay[1].checked==false))
                                        alert("please chosse the mode of payment");
                                         return false;
                                         }
                                         }
                                </script>
```

```
<body bgcolor="pink">
 <form name="myform" method="post" action="index.html" onsubmit="return form()">
 <center>
  name:<input type="text" name="name"><br/><br/>
                  last name:<input type="text" name="lname"><br/><br/>
                  password:<input type="password" name="password"><br/><br/>
  confirm password:<input type="password" name="cpassword"><br/><br/>
                  E-mail id:<input type="text" name="mail"><br/>><br/>>
                  select the items and quantity:<br> <select name="chocolates">
                  <br><option selected>select
                  <option>bourne</option>
                  <option>dairy </option>
                  <option>kit kat
                  <option>munch
                  <option>snick
                  </select>
                  Quantity:<select name="1">
                  <br><option selected="selected">1
                  <option>2</option>
                  <option>3</option>
                  <option>4</option>
                  </select><br/>
                  <select name="chocolates">
                  <br><option selected>select<option>bourne</option><option>dairy </option>
                  <option>kit kat</option><option>munch</option><option>snick</option></select>
                  Quantity:<select name="1"> <br><option selected="selected">1<option>2</option>
```

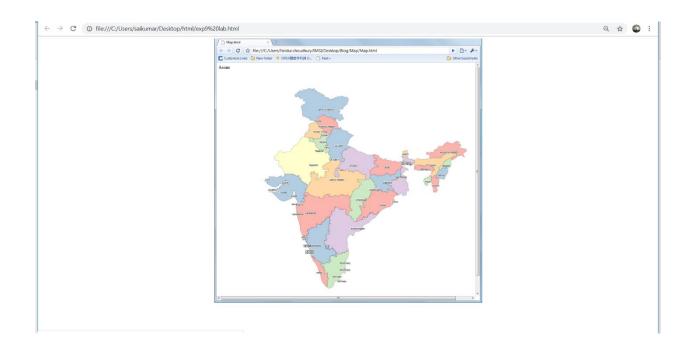
```
<option>3</option><option>4</option></select><br>>>
                   Address:<br><textarea
                   name="address"cols="25"rows="4"name="address"></textarea><br/>
                   pincode:<input type="text"name="pin"><br><br/>>
                   mode of payment:<input type="radio"name="pay" value="cash">cash on delivery
                           <input type="radio" name="pay" value="net">net banking<br><br/>>
                   <input type="submit"value="submit">
                   <input type="reset" value="reset"></center>
                   </form>
</body>
</html>
```



Program

<html>

```
<head>
<title> image mapping</title>
<body>
<center><img src="imagemap4.jpg" usemap="#menu"></center>
<map name="menu">
<area shape="rect" coords="440,636,530,781" alt="Sun" href="doc1.html">
<area shape="circle" coords="290,370,100" alt="Mercury" href="doc2.html">
<area shape="poly" coords="383,534,383,614,440,469,492,618,494,530,492" alt="Mercury" href="doc3.html">
</map>
</body>
</head>
</html>
```



```
<html>
 <head>
 k rel="stylesheet" type="text/css" href="style.css">
 <style>
 h1{
 color:green;
 font-family: verdana;
 font-size: 300%;
 text-align:center;
 }
</style>
 </head>
<body><br/>style="background-color:powderblue;"></br>
<h1><center><b> kalasalingam university</b></center></h1>
 <a href=" file:///D:/html%20ip/HOME.html"><mark>HOME</mark></a>&nbsp
  <a href="https://www.enangering.com/"></a>. Started as Arulmigu Kalasalingam College of Engineering in 1984 by Kalasalingam and Anandam
Ammal Charities.
UGC Approval under section 2(f) and 12(b).
Accredited by National Board of Accreditation.
Located in the most backward rural area providing technical knowledge to the downtrodden people as
pointed out by our Hon'ble Prime Minister of India.
```

Received Deemed to be University status in October 2006 and Kalasalingam Academy of Research and Education (KARE) started functioning from the academic year 2007-08.

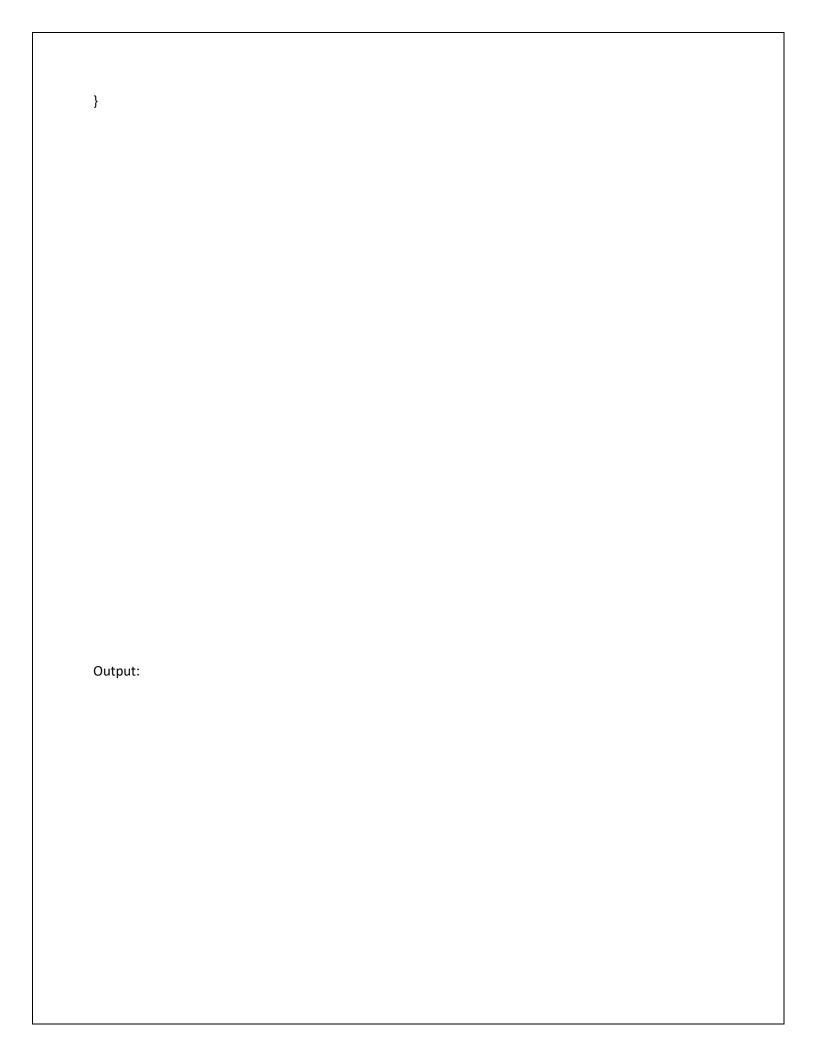
Research H index of University is 52 in 2018.

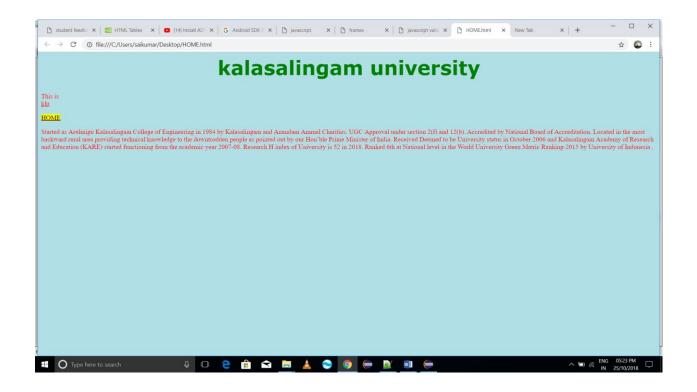
Ranked 6th at National level in the World University Green Matric Ranking-2015 by University of Indonesia .</h3>

```
</body>
</html>
```

```
Style.css
h3
{
 color:powderblue;
 font-family: verdana;
 font-size: 50px;
 text-align:center;
}
Inline
<html>
<head>
</head>
<body>
<h1 style="color:blue; font-family:verdana; background-color:black; font-size:300%; border:1px solid
powderblue; padding:30px; margin:100px; text-align:center">welcome to ip</h1>
<h1> hai hello</h1>
 this is a paragraph
</body>
</html>
Internal
<!DOCTYPE html>
<html>
<head>
<style>
h1{
 color:blue;
 font-family: verdana;
```

```
font-size: 300%;
 text-align:center;
}
Ρ{
 color:red;
font-family: courier;
font-size: 160%;
}
</style>
</head>
<body>
<h1> this is a heading</h1>
 this is a paragraph
</body>
</html>
External
h1
color:powderblue;
font-family: verdana;
font-size: 50px;
 text-align:center;
}
 color:powderblue;
font-family: verdana;
font-size: 50px;
 text-align:center;
```





```
Exp no 4
import java.net.*;
import java.io.*;
import java.util.Date;
public class URLDemo {
public static void main(String[] arg) throws Exception
{
int c;
URL yahoo = new URL("http://www.msn.com");
URLConnection yahoocon = yahoo.openConnection();
System.out.println("Date: " + new Date(yahoocon.getDate()));
System.out.println("Content-Type: " + yahoocon.getContentType());
System.out.println("Expires: " + yahoocon.getExpiration()); System.out.println("LastModified: " + new
Date(yahoocon.getLastModified()));
int len = yahoocon.getContentLength();
System.out.println("Content-Length: " + len);
if(len>0)
System.out.println("+++++++ CONTENT +++++++");
InputStream input= yahoocon.getInputStream(); int i = len;
while(((c = input.read()) != -1) && (--i > 0))
System.out.print((char) c);
}
input.close();
```

```
}
else
System.out.println("No Content Available");
 }
        }
```