ASSIGNMENT- 7 [SERVLET PROGRAM]

1. Write a servlet program to show the details of 5 students with marks of 5 subjects and compute the GPA

student.html:

```
<html>
<body style="margin: 10%; font-family: Segoe Print; background-color: darkblue">
<h1 style="border:thick dotted white;margin:10px 100px 10px
100px;padding:10px"><font color="#ff0000"><center><big>Students
Details</br></font></center></h1>
<form action="Test" method="get">
<fieldset style="background-color: #B233FF">
<legend><b><i>Enter Student Details 1:</i><b></legend> Enter Roll
     No <input type="text" name="txtsno"><br><br>
Enter Name <input type="text" name="txtnm"><br><br>Enter
class <input type="text" name="txtclass"><br><br>
<fieldset style="background-color:#FF33B2">
<legend><b><i>Enter Student Marks Details :</i><b></legend>
     Subject 1 <input type="text" name="txtsub1"><br><br>
     Subject 2 <input type="text" name="txtsub2"><br><br>
     Subject 3 <input type="text" name="txtsub3"><br><br>
     Subject 4 <input type="text" name="txtsub4"><br><br>
     Subject 5 <input type="text" name="txtsub5"><br><br>
</fieldset>
</fieldset>
<fieldset style="background-color: #B233FF">
<legend><b><i>Enter Student Details 2:</i><b></legend>
     Enter Roll No <input type="text" name="2txtsno"><br><br><br><br/>Enter
Name <input type="text" name="2txtnm"><br><br>
```

```
Enter class <input type="text" name="2txtclass"><br><br>
<fieldset style="background-color:#FF33B2">
<legend><b><i>Enter Student Marks Details :</i><b></legend>
    Subject 1 <input type="text" name="2txtsub1"><br><br>
Subject 2 <input type="text" name="2txtsub2"><br><br>
Subject 3 <input type="text" name="2txtsub3"><br><br>
Subject 5 <input type="text" name="2txtsub5"><br><br>
</fieldset>
</fieldset>
<fieldset style="background-color: #B233FF">
<le>elegend><b><i>Enter Student Details 3:</i><b></legend>
    Enter Roll No <input type="text" name="3txtsno"><br><br>Enter
Name <input type="text" name="3txtnm"><br><br>
Enter class <input type="text" name="3txtclass"><br><br>
<fieldset style="background-color:#FF33B2">
<legend><b><i>Enter Student Marks Details :</i><b></legend>
    Subject 1 <input type="text" name="3txtsub1"><br><br>
Subject 2 <input type="text" name="3txtsub2"><br><br>
Subject 3 <input type="text" name="3txtsub3"><br><br><br>
Subject 4 <input type="text" name="3txtsub4"><br><br>
Subject 5 <input type="text" name="3txtsub5"><br><br>
</fieldset>
</fieldset>
<fieldset style="background-color: #B233FF">
<legend><b><i>Enter Student Details 4:</i><b></legend>
    Enter Roll No <input type="text" name="4txtsno"><br><br>Enter
Name <input type="text" name="4txtnm"><br><br>>
Enter class <input type="text" name="4txtclass"><br><br>
<fieldset style="background-color:#FF33B2">
<legend><b><i>Enter Student Marks Details :</i><le>/i><b></legend>
    Subject 1 <input type="text" name="4txtsub1"><br><br>
Subject 2 <input type="text" name="4txtsub2"><br><br>
Subject 3 <input type="text" name="4txtsub3"><br><br>
Subject 4 <input type="text" name="4txtsub4"><br><br>
```

```
Subject 5 <input type="text" name="4txtsub5"><br><br>
 </fieldset>
 </fieldset>
 <fieldset style="background-color: #B233FF">
 <legend><b><i>Enter Student Details 5:</i><b></legend>
      Enter Roll No <input type="text"name="5txtsno"><br><br>Enter
 Name <input type="text" name="5txtnm"><br><br>
 Enter class <input type="text" name="5txtclass"><br><br>
 <fieldset style="background-color:#FF33B2">
 <legend><b><i>Enter Student Marks Details :</i><b></legend>
      Subject 1 <input type="text" name="5txtsub1"><br><br>
 Subject 2 <input type="text" name="5txtsub2"><br><br>
 Subject 3 <input type="text" name="5txtsub3"><br><br>
 Subject 4 <input type="text" name="5txtsub4"><br><br>
 Subject 5 <input type="text" name="5txtsub5"><br><br>
 </fieldset>
 </fieldset>
 <div align=center>
 <input type="submit" value="Result">
 </div>
 </form>
 </body>
 </html>
student.java:
 import java.io.*;
      import javax.servlet.*;
      import javax.servlet.http.*;
 public class student extends HttpServlet
   public void doGet(HttpServletRequest req,HttpServletResponse res)throws
 IOException, ServletException
      int sno,s1,s2,s3,total,sno2,s12,s22,s32,total2, sno3,s13,s23,s33,total3,
 sno4,s14,s24,s34,total4, sno5,s15,s25,s35,total5;
```

int s4,s5,s44,s54,s43,s53,s42,s52,s45,s55;

```
String snm, sclass, snm2, sclass2, snm3, sclass3, snm4, sclass4, snm5, sclass5; float
 per, per5,per2,per3,per4;
res.setContentType("text/html");
 PrintWriter out=res.getWriter();
 sno=Integer.parseInt(req.getParameter("txtsno"));
 snm=req.getParameter("txtnm");
 sclass=req.getParameter("txtclass");
 s1=Integer.parseInt(req.getParameter("txtsub1"));
 s2=Integer.parseInt(req.getParameter("txtsub2"));
 s3=Integer.parseInt(req.getParameter("txtsub3"));
 s4=Integer.parseInt(req.getParameter("txtsub4"));
 s5=Integer.parseInt(req.getParameter("txtsub5"));
 total=s1+s2+s3+s4+s5;
 per=(total/50);
 out.println("<html><body>");
 out.print("<h2>Result of student</h2><br>");
 out.println("<b><i>Roll No :</b>/i>"+sno+"<br>");
 out.println("<b><i>Name :</b>/i>"+snm+"<br>");
 out.println("<b><i>Class :</b></i>"+sclass+"<br>");
 out.println("<b><i>Subject1:</b></i>"+s1+"<br>");
 out.println("<b><i>Subject2:</b></i>"+s2+"<br>");
 out.println("<b><i>Subject3:</b></i>"+s3+"<br>");
 out.println("<b><i>Subject4:</b></i>"+s4+"<br>");
 out.println("<b><i>Subject5:</b></i>"+s5+"<br>");
 out.println("<b><i>Total :</b>/i>"+total+"<br>");
 out.println("<b><i>GPA :</b>-/i>"+per+"<br>");
 if(per < 5)
    out.println("<h1><i>Pass Class</i></h1>");
 else if(per<5.5 && per>5)
    out.println("<h1><i>Second class</i></h1>");
 else if(per>=5.5)
    out.println("<h1><i>Higher class</i></h1>");
 sno2=Integer.parseInt(req.getParameter("2txtsno"));
 snm2=req.getParameter("2txtnm");
```

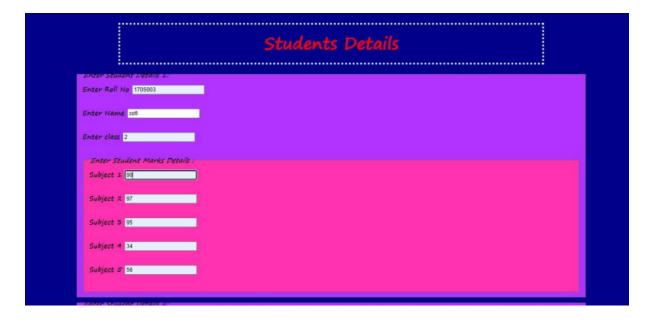
```
sclass2=req.getParameter("2txtclass");
     s12=Integer.parseInt(req.getParameter("2txtsub1"));
     s22=Integer.parseInt(req.getParameter("2txtsub2"));
     s32=Integer.parseInt(req.getParameter("2txtsub3"));
     s42=Integer.parseInt(req.getParameter("2txtsub4"));
     s52=Integer.parseInt(req.getParameter("2txtsub5"));
     total2=s12+s22+s32+s42+s52;
     per2=(total2/50); out.println("<html><body>");
     out.print("<h2>Result of student</h2><br>");
     out.println("<b><i>Roll No:</b></i>"+sno2+"<br>");
     out.println("<b><i>Name :</b>/i>"+snm2+"<br>");
     out.println("<b><i>Class :</b>/i>"+sclass2+"<br>");
     out.println("<b><i>Subject1:</b>/i>"+s12+"<br>");
     out.println("<b><i>Subject2:</b></i>"+s22+"<br>");
     out.println("<b><i>Subject3:</b></i>"+s32+"<br>");
out.println("<b><i>Subject4:</b></i>"+s42+"<br>");
     out.println("<b><i>Subject5:</b></i>"+s52+"<br>");
     out.println("<b><i>Total :</b>/i>"+total2+"<br>");
     out.println("<b><i>GPA :</b>-/i>"+per2+"<br>");
     if(per2 < 5)
       out.println("<h1><i>Pass Class</i></h1>");
     else if(per2<5.5 && per2>5)
       out.println("<h1><i>Second class</i></h1>");
     else if(per2 > = 5.5)
       out.println("<h1><i>Higher class</i></h1>");
     sno3=Integer.parseInt(req.getParameter("3txtsno"));
     snm3=req.getParameter("3txtnm");
     sclass3=req.getParameter("3txtclass");
     s13=Integer.parseInt(req.getParameter("3txtsub1"));
     s23=Integer.parseInt(req.getParameter("3txtsub2"));
     s33=Integer.parseInt(req.getParameter("3txtsub3"));
     s43=Integer.parseInt(req.getParameter("3txtsub4"));
     s53=Integer.parseInt(req.getParameter("3txtsub5"));
```

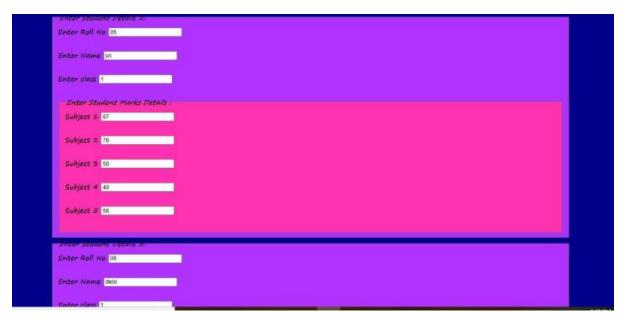
```
total3=s13+s23+s33+s43+s53; per3=(total3/50);
out.println("<html><body>");
out.print("<h2>Result of student</h2><br>");
out.println("<b><i>Roll No :</b></i>"+sno3+"<br>");
out.println("<b><i>Name :</b>/i>"+snm3+"<br>");
out.println("<b><i>Class :</b>/i>"+sclass3+"<br>");
out.println("<b><i>Subject1:</b></i>"+s13+"<br>");
out.println("<b><i>Subject2:</b></i>"+s23+"<br>");
out.println("<b><i>Subject3:</b>/i>"+s33+"<br>");
out.println("<b><i>Subject4:</b></i>"+s43+"<br>");
out.println("<b><i>Subject5:</b></i>"+s53+"<br>");
out.println("<b><i>Total :</b></i>"+total3+"<br>");
out.println("<b><i>GPA :</b>-/i>"+per3+"<br>");
if(per3 < 5)
  out.println("<h1><i>Pass Class</i></h1>");
else if(per3<5.5 && per3>5)
  out.println("<h1><i>Second class</i></h1>");
else if(per3 > = 5.5)
  out.println("<h1><i>Higher class</i></h1>");
sno4=Integer.parseInt(req.getParameter("4txtsno"));
snm4=req.getParameter("4txtnm");
sclass4=req.getParameter("4txtclass");
s14=Integer.parseInt(req.getParameter("4txtsub1"));
s24=Integer.parseInt(req.getParameter("4txtsub2"));
s34=Integer.parseInt(req.getParameter("4txtsub3"));
s44=Integer.parseInt(req.getParameter("4txtsub4"));
s54=Integer.parseInt(req.getParameter("4txtsub5"));
total4=s14+s24+s34+s44+s54;
per4=(total4/50); out.println("<html><body>");
out.print("<h2>Result of student</h2><br>");
out.println("<b><i>Roll No :</b></i>"+sno4+"<br>");
out.println("<b><i>Name :</b>/i>"+snm4+"<br>");
out.println("<b><i>Class :</b>/i>"+sclass4+"<br>");
out.println("<b><i>Subject1:</b></i>"+s14+"<br>");
out.println("<b><i>Subject2:</b></i>"+s24+"<br>");
out.println("<b><i>Subject3:</b></i>"+s34+"<br>");
out.println("<b><i>Subject4:</b></i>"+s44+"<br>");
out.println("<b><i>Subject5:</b></i>"+s54+"<br>");
out.println("<b><i>Total :</b>/i>"+total4+"<br>");
out.println("<b><i>GPA :</b></i>"+per4+"<br>");
if(per4<50)
  out.println("<h1><i>Pass Class</i></h1>");
```

```
else if(per4<55 && per4>50)
out.println("<h1><i>Second class</i></h1>"); else
if(per4>=55)
        out.println("<h1><i>Higher class</i></h1>");
      sno5=Integer.parseInt(req.getParameter("5txtsno"));
      snm5=req.getParameter("5txtnm");
      sclass5=req.getParameter("5txtclass");
      s15=Integer.parseInt(req.getParameter("5txtsub1"));
      s25=Integer.parseInt(req.getParameter("5txtsub2"));
      s35=Integer.parseInt(req.getParameter("5txtsub3"));
      s45=Integer.parseInt(req.getParameter("5txtsub4"));
      s55=Integer.parseInt(req.getParameter("5txtsub5"));
      total5=s15+s25+s35+s45+s55; per5=(total5/50);
      out.println("<html><body>");
      out.print("<h2>Result of student</h2><br>");
      out.println("<b><i>Roll No :</b></i>"+sno5+"<br>");
      out.println("<b><i>Name :</b>/i>"+snm5+"<br>");
      out.println("<b><i>Class :</b>-/i>"+sclass5+"<br>");
      out.println("<b><i>Subject1:</b></i>"+s15+"<br>");
      out.println("<b><i>Subject2:</b></i>"+s25+"<br>");
      out.println("<b><i>Subject3:</b></i>"+s35+"<br>");
      out.println("<b><i>Subject4:</b></i>"+s45+"<br>");
      out.println("<b><i>Subject5:</b></i>"+s55+"<br>");
      out.println("<b><i>Total :</b></i>"+total5+"<br>");
      out.println("<b><i>GPA :</b>-/i>"+per5+"<br>");
      if(per5<50)
        out.println("<h1><i>Pass Class</i></h1>");
      else if(per5<55 && per5>50)
        out.println("<h1><i>Second class</i></h1>");
      else if(per5>=55)
        out.println("<h1><i>Higher class</i></h1>");
 out.close();
      }}
Web.xml:
 <?xml version="1.0" encoding="ISO-8859-1"?>
 <web-app>
 <servlet>
 <servlet-name>student</servlet-name>
 <servlet-class>student</servlet-class>
```

```
</servlet>
<servlet-mapping>
<servlet-name>student</servlet-name>
<url-pattern>/Test</url-pattern>
</servlet-mapping>
</web-app>
```

Output:





Result of student

Roll No :9 Name :ziva Class :3 Subject1:98 Subject3:89 Subject3:89 Subject4:98 Subject5:97 Total :449 GP4 :8.0

Pass Class

Result of student

Roll No :21 Name :jack Class :1 Subject1:76 Subject2:54 Subject3:67 Subject3:65 Subject3:55 Total :317 GPA :6.0

Pass Class

Result of student

Roll No :1705003 Name :sofi Class :2 Subject1:90 Subject2:97 Subject3:95 Subject4:34 Subject5:56 Total :372

Higher class

Result of student

Roll No :5 Name :sri Class :1 Subject1:67 Subject2:76 Subject3:50 Subject4:40 Subject5:56 Total :289 GPA :5.0

Result of student

2. Write a html page (form) that asks for a hobby and a name and Write a servlet that collects the name and hobby and returns a list of other people with the same hobby.

index.html:

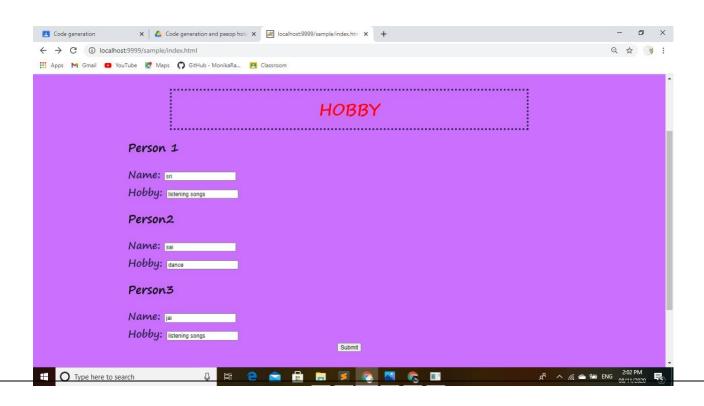
```
<html>
<body style="margin: 15%;font-family:Segoe Print;background-color: #CB6FFF">
<h1 style="border:thick dotted #232247;margin:10px 100px 10px 100px;padding:10px"><font 100px;padding:10px"><font 100px;padding:10px"><font 100px;padding:10px"></font 100px;padding:10px</font 100px</for 100px</fr>
```

```
<label><font color="#232247" size="5"><b>Hobby: <input type="text" value=""</pre>
 name="hobby"/></b></font></label><br
 <h1 style="font-size:20pt;color:black">Person2</h1>
 <label><font color="#232247" size="5"><b>Name: <input type="text" value=""</pre>
 name="name1"/></b></font></label><br
 <label><font color="#232247" size="5"><b>Hobby: <input type="text" value=""</pre>
 name="hobby1"/></b></font></label><br
 <h1 style="font-size:20pt;color:black">Person3</h1>
 <label><font color="#232247" size="5"><b>Name: <input type="text" value=""</pre>
 name="name2"/></b></font></label><br
 <label><font color="#232247" size="5"><b>Hobby: <input type="text" value=""</pre>
 name="hobby2"/></b></font></label><br
 <center><input type="submit" value="Submit"/></center>
 </form>
 </body>
 </html>
DemoServ.java:
 import javax.servlet.http.*;
 import javax.servlet.*;
 import java.io.*;
 public class DemoServ extends HttpServlet{
 public void doGet(HttpServletRequest req,HttpServletResponse res)throws
 ServletException, IOException
 res.setContentType("text/html");
 PrintWriter pw=res.getWriter();
 String name=req.getParameter("name");
 String hobby=req.getParameter("hobby");
 pw.println("<html><body>");
 pw.println("Welcome "+name+" Your Hobby is "+hobby+"<br/>');
 String name1=req.getParameter("name1");
 String hobby1=req.getParameter("hobby1");
 pw.println("Welcome "+name1+" Your Hobby is "+hobby1+"<br>");
 String name2=req.getParameter("name2");
 String hobby2=req.getParameter("hobby2");
 pw.println("Welcome "+name2+" Your Hobby is "+hobby2+"<br/>br>");
 if(hobby.equals(hobby1)==true)
 pw.println("<h1><i>Hello "+name+" Your Hobby matches with
```

"+name1+"
<h1><i>");

```
if(hobby1.equals(hobby2)==true)
pw.println("Hello "+name1+" Your Hobby matches with "+name2+"<br/>br><h1><i>");
if(hobby.equals(hobby2)==true)
pw.println("Hello "+name+" Your Hobby matches with "+name2+" <br/>br><h1><i>");
}}
web.xml:
<web-app>
<servlet>
<servlet-name>sample</servlet-name>
<servlet-class>DemoServ</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>sample/servlet-name>
<url-pattern>/Test</url-pattern>
</servlet-mapping>
</web-app>
```

Output:





Welcome sri Your Hobby is listening songs Welcome sai Your Hobby is dance Welcome jai Your Hobby is listening songs Hello sri Your Hobby matches with jai



RESULT

Thus, the implementation Servlets programs executed success.

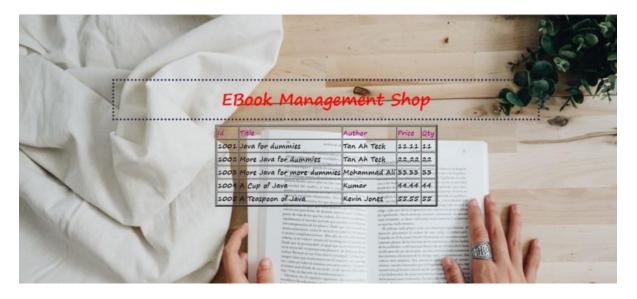
ASSIGNMENT – 8 [JSP PROGRAMS]

1. Write a JSP program to store the e-bookshop management and display it.

<u>book.jsp:</u>

```
<html>
<head>
<title> EBook Management Shop</title>
</head>
<body style="margin: 10%; font-family:calibri
Print;background-image:url(p1.jpg);
background-size:100%150%;
background-repeat:no-r epeat">
<h1 style="border:thick dotted #232247;margin:10px 100px 10px 100px;padding:10px"> <font
color="#ff0000"><center><big>EBook Management Shop</big></font></center></h1>
<%
 double i=111.1;
 int q=1;
%>
 Style="color:#B20097"><b>Title</b><td
Style="color:#B20097"><b>Author</b><td
Style="color:#B20097"><b>Price</b><td
Style="color:#B20097"><b>Qty</b>
 <b><%=1001%></b><b>Java for dummies</b><b>Tan Ah
Teck</b><b><%=i%></b><b><%=q%></b>
    <b><%=1002%></b>><b>More Java for
dummies</b><b>Tan Ah
Teck</b><b<(i*2)%></b><b<(q*2)%></b>
    <b><%=1003%></b>>b>More Java for more
dummies</b>Mohammad
Ali</b><b<(i*3)%></b><b<(q*3)%></b>
```

OUTPUT:



2. Write a JSP program to generate a set of random numbers based on the user's input. The user is requested to enter the maximum number and the minimum number along with the number of trails. A set of random numbers are generated and the percentage of their appearance is calculated and displayed.

random.html:

```
<html>
<style>
.btn {
 background-color: #232247;
 border: none;
 color: white; padding:
 16px 32px; text-align:
 center; font-size:
 16px; margin: 4px
```

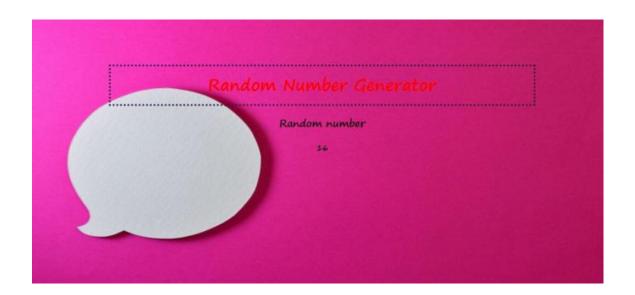
```
2px; transition: 0.3s;
 .btn:hover {
  background-color: #9199FF;
  color: brown;
 }
 </style>
 <body style="margin: 10%;font-family:Segoe
 Print; background-image:url(bg.jpg); background-size: 100% 150%; background-repeat: no-r epeat">
 <h1 style="border:thick dotted #232247;margin:10px 100px 10px 100px;padding:10px"><font
 color="#ff0000"><center><big>Random Number Generator</big></font></center></h1>
 <form action="random.jsp">
 <br><br><br>>
 <label style="color:rgb(77, 51, 25);font-size:30px;margin-left: 100px">Maximum number :
 </label><input type="text" name="val"><br><br><br>
 <label style="color:rgb(77, 51, 25);font-size:30px;margin-left: 100px">Minimum
 number: </label><input type="text" name="val1"><br><br><br>
 <center><button class="btn"><font size="+2"><input type="submit"</pre>
 value="Submit"></font></button></center>
 </form>
 </body>
 </html>
 random.jsp:
 <% @page import= "java.util.Random" %>
 <%@page contentType="text/html" pageEncoding="UTF-8"%>
 <!DOCTYPE html>
 <html>
 <head><title>Random Number Generator</title></head>
 <body style="margin: 10%;font-family:Segoe
 Print; background-image:url(bg.jpg); background-size: 100% 150%; background-repeat: no-r epeat">
        <h1 style="border:thick dotted #232247;margin:10px 100px 10px
 100px;padding:10px"><font color="#ff0000"><center><big>Random Number
 Generator</big></font></center></h1>
  <%
  String str; long
max,min,i;
   str = request.getParameter("val");
   max = Long.parseLong(str);
   str= request.getParameter("val1");
   min = Long.parseLong(str);
   i = min + (long)(Math.random() * ((max - min) + 1));
```

```
%> <center><h2>Random number</h2></center><center><big><b><%= i
%></b></big></center>
</body>
</html>
```

Output:







Result:

Thus, the implementation Servlets programs executed success.