Q-1	Factorial

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	<head>
	<meta charset="ISO-8859-1">
	<title>Insert title here</title>
	</head>
	<body>
	
	<form action="factorial">
	Enter a number<input type="text" name ="n1"/>
	
	<input type="submit" value="Submit"/>
	
	</form>
	
	</body>
	</html>
	``

Code	**Java File**
	
	``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;
	
	/**
	 * Servlet implementation class factorial
	 */
	@WebServlet("/factorial")
	public class factorial extends HttpServlet {
	        private static final long serialVersionUID = 1L;
	``

```java
/**
 * @see HttpServlet#HttpServlet()
 */
public factorial() {
    super();
    // TODO Auto-generated constructor stub
}

    /**
     * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            //response.getWriter().append("Served at:
").append(request.getContextPath());

            response.setContentType("text/html");
            PrintWriter pw = response.getWriter();
            int fact = 1;

            String s = request.getParameter("n1");
            int i = Integer.parseInt(s);

            for(int f=1; f<=i; f++) {

                    fact  = fact *f;
            }

            pw.println("Factorial is :="+fact);

    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
     */
    protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
            // TODO Auto-generated method stub
            doGet(request, response);
    }

}
```
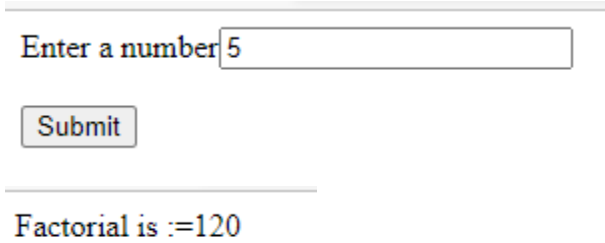
SnapShot	Enter a number 5 Submit Factorial is :=120
Q-2	**Odd-Even**
Code	**Html File** ``` <!DOCTYPE html> <html> <head> <meta charset="ISO-8859-1"> <title>Insert title here</title> </head> <body> <form action="oe"> Enter Number:<input type="text" name="n1" /> <input type="submit" value="OK" /> </form> </body> </html> ```
Code	**Java File** ``` import java.io.IOException; import java.io.PrintWriter; import javax.servlet.ServletException; import javax.servlet.annotation.WebServlet; import javax.servlet.http.HttpServlet; ```

```java
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class Second
 */
@WebServlet("/oe")
public class oe extends HttpServlet {
	private static final long serialVersionUID = 1L;

   /**
    * @see HttpServlet#HttpServlet()
    */
   public oe() {
      super();
      // TODO Auto-generated constructor stub
   }

	/**
	 * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		response.setContentType("text/html");
		PrintWriter pw=response.getWriter();
		String b=request.getParameter("n1");
		int c=Integer.parseInt(b);
		if(c%2==0)
		{
			pw.println("Number inputed is even");
		}
		else
		{
			pw.println("Number inputted is odd");
		}
	}

	/**
	 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		// TODO Auto-generated method stub
		doGet(request, response);
```
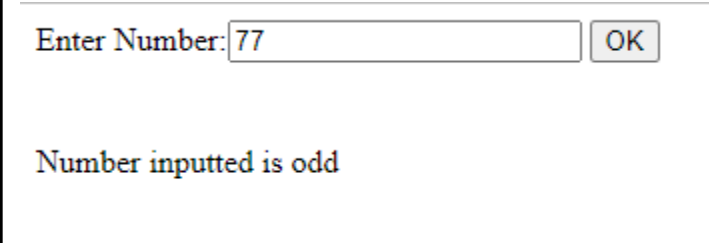
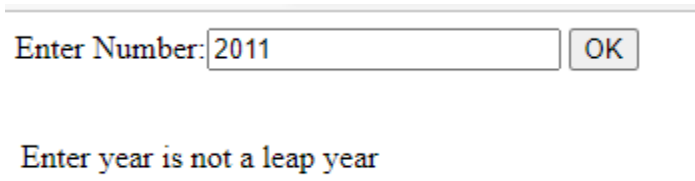|	
	} }
SnapShot	Enter Number: `77` OK Number inputted is odd
Q-3	**Leap Year**

Code	**Html File**
	
	`<!DOCTYPE html>`
	`<html>`
	`<head>`
	`<meta charset="ISO-8859-1">`
	`<title>Insert title here</title>`
	`</head>`
	`<body>`
	    `<form action="ly">`
	    `Enter Number:<input type="text" name="n1" />`
	    `<input type="submit" value="OK" />`
	    `</form>`
	`</body>`
	`</html>`

Code	**Java File**
	
	`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;`

```java
/**
 * Servlet implementation class Factorial
 */
@WebServlet("/ly")
public class ly extends HttpServlet {
        private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public ly() {
        super();
        // TODO Auto-generated constructor stub
    }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                response.setContentType("text/html");
                PrintWriter pw=response.getWriter();
                String b=request.getParameter("n1");
                int c=Integer.parseInt(b);
                if(c%4==0)
                {
                        pw.println("Enter year is leap year");
                }
                else
                {
                        pw.println("Enter year is not a leap year");
                }
        }

        /**
         * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                doGet(request, response);
        }
```

	}
SnapShot	Enter Number: 2011 OK Enter year is not a leap year
Q-4	**Fibonacci Series**

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	<head>
	<meta charset="ISO-8859-1">
	<title>Insert title here</title>
	</head>
	<body>
	
	<form action="fs">
	Enter a number<input type="text" name ="n1"/>
	
	<input type="submit" value="Submit"/>
	
	</form>
	
	</body>
	</html>
	``

Code	**Java File**
	
	``java
	import java.io.IOException;
	import java.io.PrintWriter;
	``

```java
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class fs
 */
@WebServlet("/fs")
public class fs extends HttpServlet {
        private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public fs() {
       super();
       // TODO Auto-generated constructor stub
    }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                //response.getWriter().append("Served at:
").append(request.getContextPath());
                response.setContentType("text/html");
                PrintWriter pw = response.getWriter();


                String s1 = request.getParameter("n1");
                try {
                int num = Integer.parseInt(s1);
                int n1=0,n2=1,n3;

                for(int i =2; i<=num; i++) {

                        n3 = n1+n2;
                        pw.println(""+n3);
                        n1=n2;
                        n2=n3;
```
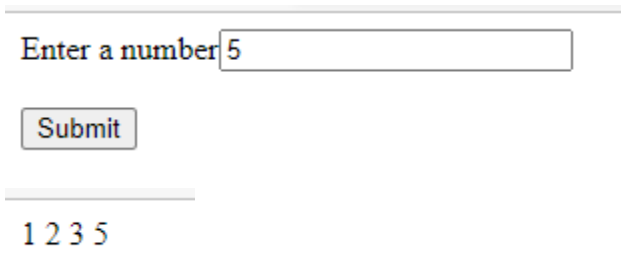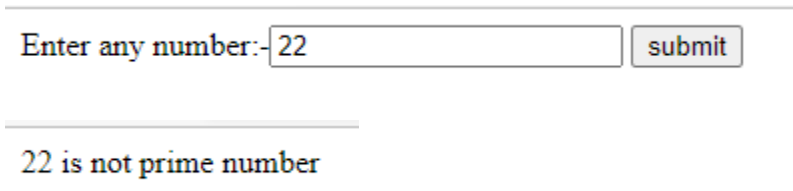
```
				}


				}

				catch(Exception e ) {

						pw.println(e);
				}

		}

	/**
	 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
			// TODO Auto-generated method stub
			doGet(request, response);
		}

}
```

SnapShot	Enter a number 5 Submit 1 2 3 5
Q-5	**Prime or Not**
Code	**Html File** <!DOCTYPE html> <html>

| | ```html
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<form action="prime">
Enter any number:-<input type="text" name="n1"/>
<input type="submit" value="submit"/>
</form>
</html>
``` |
| **Code** | **Java File**<br><br>```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;
/**
* Servlet implementation class prime
*/
@WebServlet("/prime")
public class prime extends HttpServlet {
private static final long serialVersionUID = 1L;

 /**
 * @see HttpServlet#HttpServlet()
 */
 public prime() {
 super();
 // TODO Auto-generated constructor stub
 }
/**
* @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException {
response.setContentType("text/html");
PrintWriter pw = response.getWriter();
int i,m=0,flag=0;
 int n=Integer.parseInt(request.getParameter("n1"));
``` |

| | ```
m=n/2;
if(n==0||n==1){
pw.println(n+" is not prime number");
}else{
for(i=2;i<=m;i++){
if(n%i==0){
pw.println(n+" is not prime number");
flag=1;
break;
}
}
if(flag==0) { pw.println(n+" is prime number"); }
}
}
/**
* @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException {
// TODO Auto-generated method stub
doGet(request, response);
}
}
``` |
SnapShot	Enter any number:- 22 submit 22 is not prime number
Q-6	**Program to Create Servlet Without html File and Print Your Name**
Code	**Java File** import java.io.IOException; import java.io.PrintWriter;

```java
import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest; import
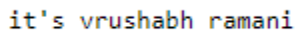javax.servlet.http.HttpServletResponse;

/**
* Servlet implementation class t1
*/ @WebServlet("/t1")
public class t1 extends HttpServlet {
private static final long serialVersionUID = 1L;

/**
* @see HttpServlet#HttpServlet()

        */
public t1() { super();
// TODO Auto-generated constructor stub
}

/**
*       @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub
//response.getWriter().append("Served at:
").append(request.getContextPath());

PrintWriter pw =response.getWriter(); pw.println("it's vrushabh ramani");

}




/**
*       @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub doGet(request, response);
```

| | ```
}

}
``` |
SnapShot	it's vrushabh ramani
Q-7	**Create a snipped where a one html file,label,textbox and submit button Fetch data from html**
| **Code** | **Html File**<br><br>```html
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Insert title here</title>
</head>
<body>
<form action="P2">


Enter Name <input type="text" name = "n1" />

<br><br>
<input type="submit" value="Submit">

</form>

</body>
</html>
``` |
| **Code** | **Java File**<br><br>```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;
``` |

```java
/**
 *      Servlet implementation class P2
 */ @WebServlet("/P2")
public class p2 extends HttpServlet {
private static final long serialVersionUID = 1L;

/**
 *      @see HttpServlet#HttpServlet()
 */
public p2() { super();
// TODO Auto-generated constructor stub
}

/**
 *      @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
 */
protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub


//response.getWriter().append("Served at:
").append(request.getContextPath());

response.setContentType("text/html"); PrintWriter pw =
response.getWriter(); String s = request.getParameter("n1");
pw.println("Name is :" +s);

}

/**
 *      @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
 */

        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException
{
// TODO Auto-generated method stub doGet(request, response);
}

}
```

SnapShot	Enter Name VRUSHABH RAMANI Submit Name is :VRUSHABH RAMANI
Q-8	**Write a program to servlet rollno,name and percentage**

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	<head>
	<meta charset="UTF-8">
	<title>Insert title here</title>
	</head>
	<body>
	<form action="t3">
	
	Enter Roll No :<input type="text" name = "n1"/>
	
	Enter Name : <input type="text" name = "n2"/>
	
	Enter Percentage :<input type="text" name = "n3"/>
	
	<input type="submit" value="Submit">
	
	</form>
	</body>
	</html>
	``

Code	**Java File** 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

```java
javax.servlet.http.HttpServletResponse;

    /**
* Servlet implementation class P3
*/ @WebServlet("/t3")
public class t3 extends HttpServlet {
private static final long serialVersionUID = 1L;

/**
* @see HttpServlet#HttpServlet()
*/
public t3() { super();
// TODO Auto-generated constructor stub
}

/**
* @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub

//response.getWriter().append("Served at:
").append(request.getContextPath());

response.setContentType("text/html"); PrintWriter pw =
response.getWriter(); String s1 = request.getParameter("n1"); String s2 =
request.getParameter("n2"); String s3 = request.getParameter("n3");

float f1 = Float.parseFloat(s3); pw.println("Roll No :"+s1);
pw.println("<br><br><br>Name is :"+s2);
pw.println("<br><br><br>Percentage is:"+f1);

    }

/**
* @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub doGet(request, response);
}
```
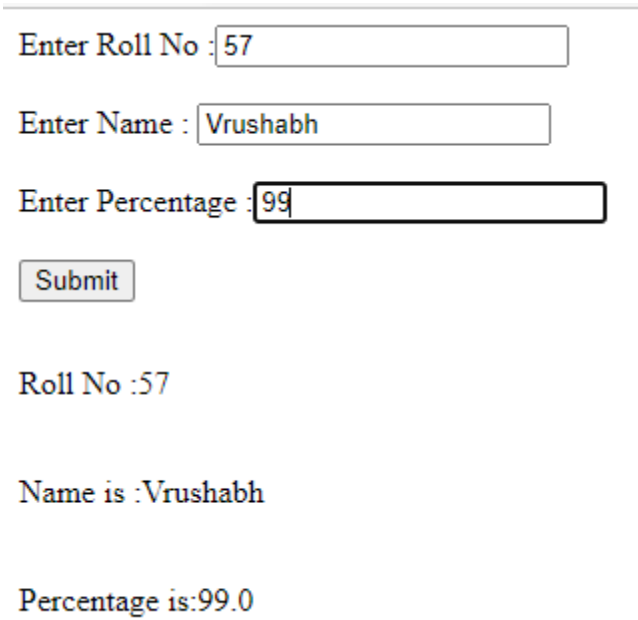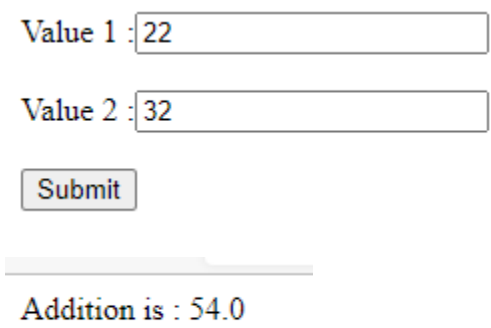
	}
SnapShot	Enter Roll No :57 Enter Name : Vrushabh Enter Percentage :99 Submit Roll No :57 Name is :Vrushabh Percentage is:99.0
Q-9	**Take two textbox and perform addition operation use float or double**
Code	**Html File** `<!DOCTYPE html>` `<html>` `<head>` `<meta charset="UTF-8">` `<title>Insert title here</title>` `</head>` `<body>` `<form action="p4">` `Value 1 :<input type = "text" name = "n1" />` `  ` `Value 2 :<input type = "text" name = "n2" />` `  ` `<input type="submit" value ="Submit" >`

| | ```
</form>
</body>
</html>
``` |
| **Code** | **Java File**

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;

/**
* Servlet implementation class p4
*/ @WebServlet("/p4")
public class p4 extends HttpServlet {
private static final long serialVersionUID = 1L;

/**
* @see HttpServlet#HttpServlet()
*/
public p4() { super();
// TODO Auto-generated constructor stub
}

/**
* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
{
// TODO Auto-generated method stub
//response.getWriter().append("Served at: ").append(request.getContextPath());
response.setContentType("text/html");

PrintWriter pw = response.getWriter(); String s1 = request.getParameter("n1"); String s2 = request.getParameter("n2");

float f1 = Float.parseFloat(s1); float f2 = Float.parseFloat(s2);

float sum = f1 + f2; pw.println("Addition is : "+sum); |

| | ```
}

/**
 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
 */
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub doGet(request, response);
}

}
``` |
SnapShot	Value 1 : 22 Value 2 : 32 Submit Addition is : 54.0
Q-10	**Prepare mini calculator**
| **Code** | **Html File**<br><br>```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="P5">
Number 1 -  <input type="text" name="n1"/><br><br>
Number 2 -  <input type="text" name="n2"/><br><br><br>
``` |

	Operator <select name="op"> <option value="Addition">Addition</option> <option value="Subtraction">Subtraction</option> <option value="multiplication">multiplication</option> <option value="division">division</option> </select> <input type="submit" value="Calculate"/> </form> </body> </html>

Code	**Java File**
	
	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;
	
	/**
	* Servlet implementation class Q4
	*/ @WebServlet("/P5")
	public class P5 extends HttpServlet {
	private static final long serialVersionUID = 1L;
	
	/**
	* @see HttpServlet#HttpServlet()
	*/
	public P5() { super();
	// TODO Auto-generated constructor stub
	}
	
	/**
	* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
	*/
	protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException
	{
	// TODO Auto-generated method stub

```java
//response.getWriter().append("Served at:
").append(request.getContextPath());
PrintWriter out = response.getWriter();

        String num1 = request.getParameter("n1"); String num2 =
request.getParameter("n2"); String op = request.getParameter("op"); switch
(op) {
case "Addition":
out.println("Answer = "+(Double.parseDouble(num1) +
Double.parseDouble(num2)));
break;
case "Subtraction":
out.println("Answer = "+(Double.parseDouble(num1) -
Double.parseDouble(num2)));
break;
case "multiplication":
out.println("Answer = "+(Double.parseDouble(num1) *
Double.parseDouble(num2)));
break; default:
out.println("Answer = "+(Double.parseDouble(num1) /
Double.parseDouble(num2)));
break;
}

}


/**
* @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException
{
// TODO Auto-generated method stub doGet(request, response);
}

}
```

SnapShot	Number 1 - `54`
	
	Number 2 - `63`
	
	Operator `Addition ⌄` `Calculate`
	
	`Answer = 117.0`
	
	--- 	
	
	Number 1 - `63`
	
	Number 2 - `54`
	
	Operator `Subtraction ⌄` `Calculate`
	
	`Answer = 9.0`
	
	Number 1 - `16`
	
	Number 2 - `2`
	
	Operator `multiplication ⌄` `Calculate`
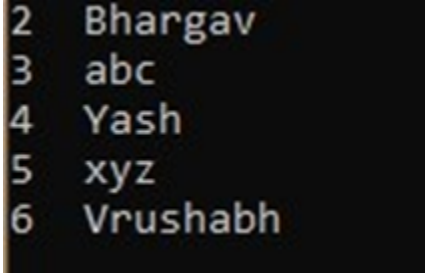	
	`Answer = 32.0`

	Number 1 - 512 Number 2 - 8 Operator division ✔ Calculate Answer = 64.0
Q-11	**Create a Database with emp and fields are empid, empname, leave,salary.** **Perform the operation using JDBC . Use Create Statement and show all the** **records in the Command prompt . At least 5 records need to be displayed.**
| **Code** | **Java File**<br><br>```java
import java.sql.*;
class J57
{
        public static void main(String[] args)
        {
                try
                {
                  Class.forName("com.mysql.jdbc.Driver");
                Connection con=DriverManager.getConnection
("jdbc:mysql://localhost:3306/test","root","");
                Statement stat=con.createStatement();
                ResultSet rs=stat.executeQuery("Select * from emp1");
                while(rs.next())
                {
                  System.out.println("Empid is :"+rs.getInt(1));
System.out.println("EmpName is :"+rs.getString(2));
System.out.println("leave is :"+rs.getInt(3));
System.out.println("salary is :"+rs.getInt(4)); System.out.println("\n");
``` |

| | ```
                }
            }

                catch(Exception e)
                {
                        System.out.println(e);
                }
        }
}
``` |
| **SnapShot** | ```
2    Bhargav
3    abc
4    Yash
5    xyz
6    Vrushabh
``` |
Q-12	**Perform JDBC operation using prepared statement and perform different cases like**
| **Code** | **Java File [Insert]**<br><br>```java
import java.sql.*;
import java.util.*;
import java.util.regex.*;

public class v_insert
{
        public static boolean chkMail(String email)
        {
                String regex = "^(.+)@(.+)$";
                Pattern ptrn = Pattern.compile(regex);

                if(email==null)
                {
                        return false;
                }
``` |

```java
                return ptrn.matcher(email).matches();
        }

        public static void main(String[] args)
        {
          try
          {
                Scanner s1 = new Scanner(System.in);
                System.out.print("\nInsert Record\n");
                System.out.print("\nEnter RollNo. : "); int rollno =
s1.nextInt();
                System.out.print("\nEnter Name : "); String name = s1.next();
                System.out.print("\nEnter Mobile No. : "); Long mobile_no =
s1.nextLong();
                String mno = String.valueOf(mobile_no);

                if(mno.length()>10 || mno.length()<10)
                {
                        System.out.println("\nMobile Number is invallid ");
System.exit(0);
                }


                Scanner s2 = new Scanner(System.in);
System.out.print("\nEnter Email : ");
                String email_id = s2.nextLine();

                if(chkMail(email_id)==false)
                {
                        System.out.println("\nEmail Address is not valid");
System.exit(0);
                }

                System.out.print("\nEnter Percentage : "); double percentage
= s1.nextDouble();
                Class.forName("com.mysql.jdbc.Driver");
                Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");
                String sql = "insert into
student(rollno,name,mobile_no,email_id,percentage) values(?,?,?,?,?)";
                PreparedStatement ps = con.prepareStatement(sql);
                ps.setInt(1,rollno);
                ps.setString(2,name);
                ps.setLong(3,mobile_no);
                ps.setString(4,email_id);
                ps.setDouble(5,percentage);
```

```
                int rowsInserted = ps.executeUpdate();

                if(rowsInserted == 1)
                {
                        System.out.println("\nRecord Inserted");
                }
        }
                catch(Exception e)
                {
                        e.printStackTrace();
                }
        }
}
```

Snapshot				

rollno	name	mobile_no	email_id	percentage
1	vrushabh	9313609273	vramani111@gmail.com	90
2	darshan	8140703510	dgabu@gmail.com	70
3	om	8511603510	ogohel123@gmail.com	50
4	jigo	6353351850	jigo@gmail.com	80
5	vivek	9998181217	vivek@gmail.com	77
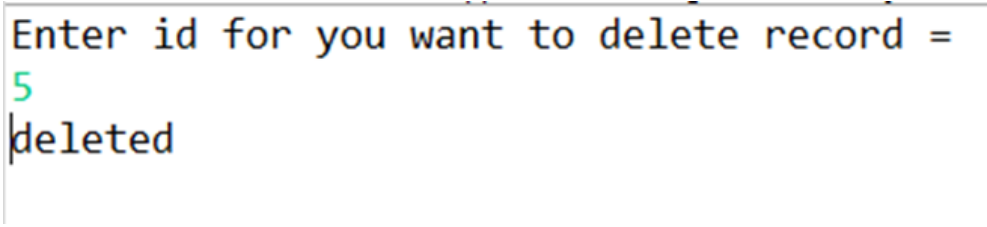
```
Insert Record
Enter RollNo. : 1
Enter Name : bhavik
Enter Mobile No. : 999888

Mobile Number is invallid
```

```
Insert Record
Enter RollNo. : 1
Enter Name : bhargav
Enter Mobile No. : 9586295002

Enter Email : bvekariyagmail.com

Email Address is not valid
```

Code	**Java File [Delete]**
| | ```java
import java.sql.*;
import java.util.Scanner;


class delete_scanner
{
        public static void main(String arg[])
        {
                Scanner sc = new Scanner(System.in);


                System.out.println("Enter id for you want to
                delete record = "); int rollno=sc.nextInt();
``` |

	String q = "delete from student where rollno="+rollno+" ";
	
	        try
	        {
	            Class.forName("com.mysql.jdbc.Driver");
	
	Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");
	            PreparedStatement st = con.prepareStatement(q);
	
	            st.executeUpdate();
	
	            System.out.println("deleted ");
	
	        }
	        catch(Exception e)
	        {
	            System.out.println(e);
	        }
	    }
	}
| **SnapShot** | ```
Enter id for you want to delete record =
5
deleted
``` |

rollno	name	mobile_no	email_id	percentage
1	vrushabh	9313609273	vramani111@gmail.com	90
2	darshan	8140703510	dgabu@gmail.com	70
3	om	8511603510	ogohel123@gmail.com	50
4	jigo	6353351850	jigo@gmail.com	80

Code	**Java File [Update]**

Java File [Update]

```java
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;


public class update
{

        public static void main(String[] args)
        {
                String dbURL = "jdbc:mysql://localhost:3306/test";
                String username = "root";
                String password = "";

                try (Connection conn =
DriverManager.getConnection(dbURL, username, password))
                {

                        String sql = "UPDATE student SET rollno=?,
name=?, mobile_no=? where rollno=3";

                        PreparedStatement statement =
conn.prepareStatement(sql);
                        statement.setInt(1,33);
                        statement.setString(2, "uday");
                        statement.setString(3,"9099111213");

                        int rowsUpdated = statement.executeUpdate();
                        if (rowsUpdated > 0)
                        {
```
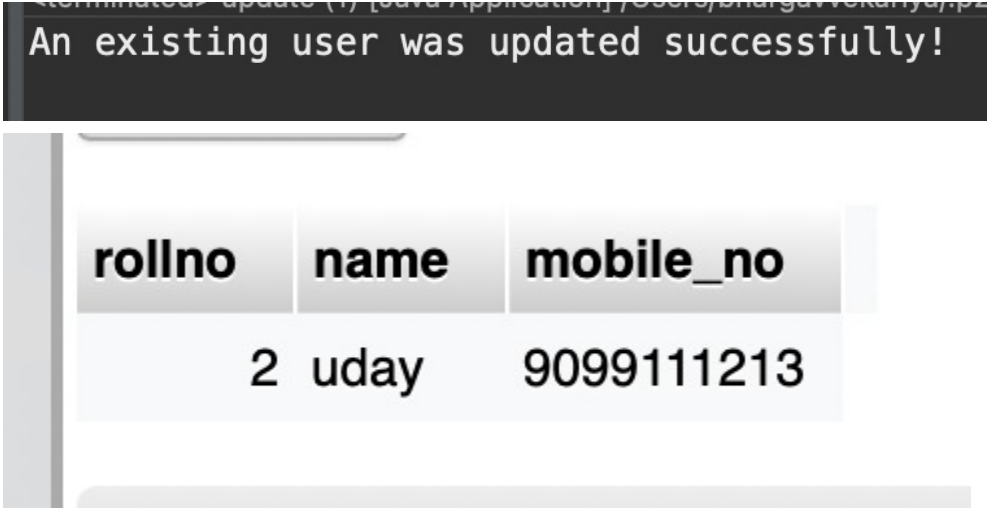
	System.out.println("An existing user was updated successfully!");
	        }
	
	    } catch (SQLException ex) {
	        ex.printStackTrace();
	    }
	  }
	}

SnapShot	An existing user was updated successfully! | rollno	name	mobile_no | |---|---|---| | 2 | uday | 9099111213 |
Q-13	**write a program which have 3 radio button and user click 1st radio button screen should be colorful .**

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	
	<body >
	<form action="background">
	``

| | ```
<input type="submit" name="red" value="Red">
<input type="submit" name="green" value="Green">
<input type="submit" name="blue" value="Blue">
</form>
</body>
</html>
``` |
| **Code** | **Java File**

```
import
java.io.I
OExcept
ion;
import
java.io.P
rintWrite
r;


import
javax.servlet.ServletExcept
ion; import
javax.servlet.annotation.W
ebServlet; import
javax.servlet.http.HttpServl
et;
import
javax.servlet.http.HttpServlet
Request; import
javax.servlet.http.HttpServlet
Response;


/**

 * Servlet implementation class background
 */
@WebServlet
("/backgroun
``` |

```
d")
        public class background
        extends HttpServlet { private
        static final long
        serialVersionUID = 1L;


    /**

     * @see HttpServlet#HttpServlet()
     */
        p
            u
            b
            l
            i
            c
            b
            a
            c
            k
            g
            r
            o
            u
            n
            d
            (
            )
            {
            s
            u
            p
            e
            r
            (
            )
            ;
        // TODO Auto-generated constructor stub
```

```java
    }


        /**

        * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)

        */

        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {


                //response.getWriter().ap
pend("Served at:
").append(request.getContextPath());
                response.setContentT
                ype("text/html");
                PrintWriter pw =
                response.getWriter();


                String red =
                request.getParameter("red");
                String green =
                request.getParameter("green")
                ; String blue =
                request.getParameter("blue");


                if(red != null)

                {
                        pw.print("<body style='background-color:red;'/>");
                }
                else if(blue != null)
                {



                }
```

```
                        else
                        {


                        }


    pw.print("<body style='background-color:blue;'/>");






    pw.print("<body style='background-color:green;'/>");






        }


        /**

         * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)

         */

        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {

                // TODO
                Auto-generated
                method stub
                doGet(request,
                response);

        }
```
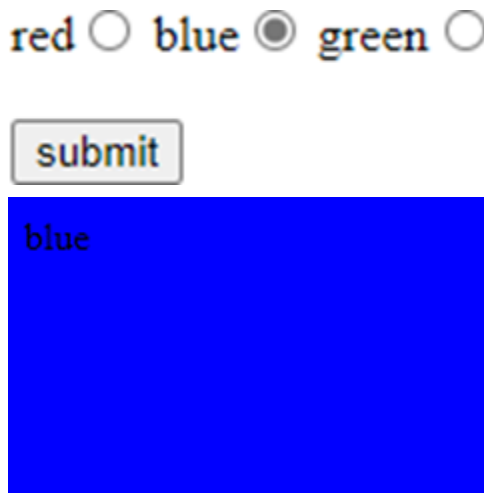
	}
SnapShot	Red Green Blue

Q-14	write a program which have 3 radio button and user click 1st radio button screen should be colorful .
Code	**Html File**
| | ```html
<!DOCTYPE html>

<html>
<head>
<meta charset="ISO-8859-1">
<title>Background changing website</title>
</head>
<body>
	<form action="C1">
	Name<input type="text" /><br><br>
	red<input type="radio" name="col"
	value="red" /> blue<input
	type="radio" name="col"
	value="blue" />

	green<input type="radio" name="col" value="green" /><br><br>

	<input type="submit" value="submit" />
	</form>
</body>
``` |
| Code | **Java File** |
| | ```java
import
java.io.I
OExcept
ion;
import
java.io.P
rintWrite
r;


import
javax.servlet.ServletExcept
``` |

```java
ion; import
javax.servlet.annotation.W
ebServlet; import
javax.servlet.http.HttpServl
et;
import
javax.servlet.http.HttpServlet
Request; import
javax.servlet.http.HttpServlet
Response;


/**

 * Servlet implementation class C1
 *
/
@
W
e
b
S
er
vl
et
("
/
C
1
")
public class C1 extends HttpServlet {

        private static final long serialVersionUID = 1L;


    /**

     * @see HttpServlet#HttpServlet()
     */
        p
```

```
ublic Cl(){super();
        // TODO Auto-generated constructor stub

    }


        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)

         */

        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {

                // TODO Auto-generated method stub
                response.setContentType("text/html");


                PrintWriter
                pw=response.getWri
                ter(); String
                a=request.getParame
```

```
ter("col"); String
b="red";
String c="blue"; pw.println(a); if(a.equa
```

```java
        l
        s
        (
        b
        )
        )

        {
                        pw.println("<body style='background-color:red;'>");
        }
        else if(a.equals(c))
        {


        }
        else {


        }
                        }
pw.println("<body style='background-color:blue;'>");



pw.println("<body style='background-color:green;'>");



    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
     */
    protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
```

	// TODO Auto-generated method stub doGet(request, response);
	
	}
	
	}

SnapShot	red ○ blue ● green ○ submit blue
Q-15	**write a program to display image on browser**
Code	**Java File** import java.io.BufferedInputStream; import java.io.BufferedOutputStream; import java.io.FileInputStream; import java.io.IOException;

```java
import
javax.servlet.ServletExcept
ion; import
javax.servlet.ServletOutput
Stream; import
javax.servlet.annotation.W
ebServlet; import
javax.servlet.http.HttpServl
et;
import
javax.servlet.http.HttpServlet
Request; import
javax.servlet.http.HttpServlet
Response;


/**

 * Servlet implementation class image
 */
@Web
Servlet
("/imag
e")

public class image extends HttpServlet {

        private static final long serialVersionUID = 1L;


    /**
     * @see HttpServlet#HttpServlet()
     */
      p
         u
         b
         l
         i
         c
         i
```

m
a
g
e
(
)
{
s
u
p
e
r
(
)
;

// TODO Auto-generated constructor stub

}

/**

* @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)

*/

protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
// TODO Auto-generated method stub

response.setContentType
("image/jpeg");
ServletOutputStream os;
os = response.getOutputStream();

FileInputStream f1 = new FileInputStream("E:\\logo.png");

```java
BufferedInputStream bf1 = new BufferedInputStream(f1);
BufferedOutputStream bo = new
BufferedOutputStream(os);


int c = 0 ;
        while((c = bf1.read()) != -1) {
        bo.write(c);
        }


bf1.close();

f1.close();
bo.close();
os.close();


//response.getWriter().ap
```

	pend("Served at: ").append(request.getContextPath());
	
	    }
	
	    /**
	     * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)
	     */
	    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
	        // TODO Auto-generated method stub doGet(request, response);
	
	    }
	
	}

SnapShot	

Q-15	write a program to generate a student form the fields are rlno,name,mobile no., email-id,gender and city and submit button ,database connectivity

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	
	<html>
	<head>
	<meta charset="ISO-8859-1">
	<title>Insert title here</title>
	</head>
	<body>
	<form action="First">
	Roll No:<input name="roll"
	type="number"/>
	
	Name:<input name="name"
	type="text" />
	
	 Mobile
	No:<input name="mno"
	type="text"/>
	
	Email-Id:<input name="email"
	type="email" />
	
	 Gender: Male<input name="ge" type="radio"
	  value="male" /> Female<input name="ge"
	  type="radio" value="female" />
	
	  City:<input name="city" type="text"/>
	
	 <input type="submit" value="Submit" />
	
	</form>
	</body>
	</html>
	``

Code	**Java File**
	
	``java
	import
	java.io.I
	OExcept
	ion;
	``

```java
import
java.sql.
*;
import
javax.servlet.ServletExcept
ion; import
javax.servlet.annotation.W
ebServlet; import
javax.servlet.http.HttpServl
et;

import javax.servlet.http.HttpServletRequest;

import
javax.servlet.http.HttpServlet
Response; import
java.io.PrintWriter;

@WebServlet("/First")

public class First extends HttpServlet {
        private static final long serialVersionUID = 1L;


    p
       u
       b
       l
       i
       c
       F
       i
       r
       s
       t
       (
       )
       {
       s
```

```java
        u
        p
        e
        r
        (
        )
        ;

    }


        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {

            response.setContentT
        ype("text/html"); String
        id=request.getParameter("r
        oll");

        int i=Integer.parseInt(id);

        String
        n=request.getParameter
        ("name"); String
        m=request.getParamete
        r("mno"); String
        e=request.getParameter
        ("email"); String
        g=request.getParameter
        ("ge"); String
        c=request.getParameter
        ("city");
            PrintWriter
            pw=response.getWr
            iter(); try

            {

                Class.forName("com.mysql.jdbc.Driver");
                Connection
```

```
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");
				PreparedStatement
ps=con.prepareStatement("insert into
emp(rollno,name,mobileno,email,gender,city) values
(?,?,?,?,?,?)");
p
s
.
s
e
t
I
n
t
(
1
,
i
)
;
p
s
.
s
e
t
S
t
r
i
n
g
(
2
,
n
)
;
p
```

```
s.setString(3,m);ps.setString(4,e);ps.se
```

```
tString(5,g);
ps.setString(6,c);
int aa=ps.executeUpdate();
if(aa>0)
{
    pw.println("Your data is inserted
```

```
                                    successfully");
                                }


                        }
                        catch(Exception ee)
                        {
                                pw.println("Error is "+ee);
                        }
                }
        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {

                doGet(request, response);


        }


}
```

SnapShot	
	Roll No: `1`
	Name: `jigo`
	Mobile No: `852096374`
	Email-Id: `jigo@gmail.com`
	Gender: Male ◉ Female ○
	City: `rajkot`
	[Submit]
	Your data is inserted successfully

Q-16	**Life Cycle**
Code	**Java File** import java.io.IOException; import java.io.PrintWriter; import javax.servlet.ServletConfig; import javax.servlet.ServletException; import javax.servlet.annotation.WebServlet; import javax.servlet.http.HttpServlet; import javax.servlet.http.HttpServletRequest; import

```java
javax.servlet.http.HttpServlet
Response;


/**

 * Servlet implementation class Life_cycle
 */
@WebServ
let("/Life_
cycle")

public class Life_cycle extends HttpServlet {

        private static final long serialVersionUID = 1L;


    /**

     * @see HttpServlet#HttpServlet()
     */
      p
        u
        b
        l
        i
        c
        L
        i
        f
        e
        _
        c
        y
        c
        l
        e
        (
        )
        {
        s
```

```
			u
			p
			e
			r
			(
			)
			;

		// TODO Auto-generated constructor stub


	}


		/**
		 * @see Servlet#init(ServletConfig)
		 */
		public void init(ServletConfig config) throws ServletException {


				System.out.println("init method");
		}




		/**
		 * @see Servlet#destroy()
		 */
		public void destroy() {


				System.out.println("destroy method");
		}

		/**
		 * @see HttpServlet#service(HttpServletRequest request,
HttpServletResponse response)

		 */

		protected void service(HttpServletRequest request,
```
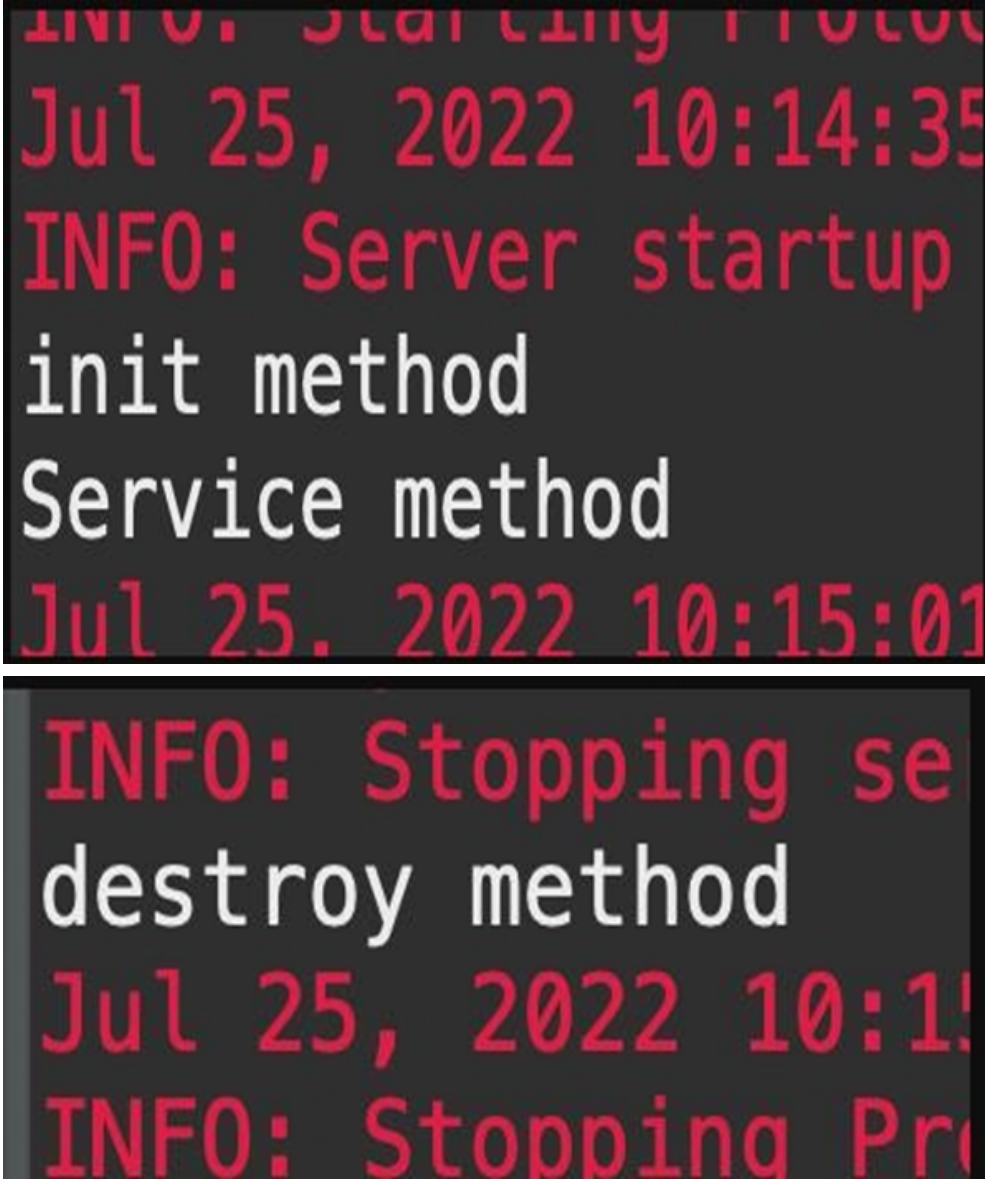
```
        HttpServletResponse response) throws ServletException, IOException {


                System.out.println("Service method");
        }


        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {


                response.setContentT
                ype("text/html");
                PrintWriter
                pw=response.getWrite
                r();
                pw.println("service");

        }



}
```

SnapShot	INFO: Starting Protoc Jul 25, 2022 10:14:35 INFO: Server startup init method Service method Jul 25. 2022 10:15:01 INFO: Stopping se destroy method Jul 25, 2022 10:1! INFO: Stopping Pro
Q-17	**Connectivity**
Code	**Html File** \<!DOCTYPE html> \<html> \<head> \<meta charset="ISO-8859-1">

| | ```html
<title>First using the Radio button</title>
</head>
<body>
        <form action="First">
        Insert<input type="radio" name="q" value="i"/>
        Update<input type="radio" name="q" value="u"/>
        Delete<input type="radio" name="q" value="d"/>
        Select<input type="radio" name="q" value="s"/><br><br>
        <input type="submit" value="submit" />
        </form>
</body>
</html>
``` |
| **Code** | **Web.XML File**<br><br>```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd" id="WebApp_ID"
version="3.1">
  <display-name>servlet</display-name>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
    <welcome-file>index.jsp</welcome-file>
    <welcome-file>index.htm</welcome-file>
    <welcome-file>default.html</welcome-file>
    <welcome-file>default.jsp</welcome-file>
    <welcome-file>default.htm</welcome-file>
  </welcome-file-list>
 <servlet>
<servlet-name>First</servlet-name>
<servlet-class>First</servlet-class>
</servlet>

<servlet-mapping>
<servlet-name>First</servlet-name>
<url-pattern>/First</url-pattern>
</servlet-mapping>
</web-app>
``` |
| **Code** | **Java File**<br><br>```java
import java.io.IOException;
import java.io.PrintWriter;
``` |

```java
import java.sql.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


@WebServlet("/First")
public class First extends HttpServlet {
	private static final long serialVersionUID = 1L;

  /**
   * @see HttpServlet#HttpServlet()
   */
  public First() {
    super();
    // TODO Auto-generated constructor stub
  }
	protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		// TODO Auto-generated method stub
		response.setContentType("text/html");
		PrintWriter pw=response.getWriter();
		String a=request.getParameter("q");
		if(a!=null)
		{
			if(a.equals("i"))
			{
				pw.println("<h1>Insert form</h1>");
				pw.println("<form action='First'>");
				pw.println("Id:<input type='text'
name='id'/><br><br>");
				pw.println("Name:<input type='text'
name='name'/><br><br>");
				pw.println("<input type='submit' name='sub'
value='submit'/><br><br>");
				String ia=request.getParameter("sub");
			}
			else if(a.equals("u"))
			{
				pw.println("<h1>Update form</h1>");
				pw.println("<form action='First'>");
				pw.println("Id:<input type='text'
name='id'/><br><br>");
				pw.println("Name:<input type='text'
```

```java
                name='name'/><br><br>");
                                pw.println("<input type='submit' name='sub'
value='usubmit'/><br><br>");
                        }
                        else if(a.equals("d"))
                        {
                                pw.println("<h1>Delete form</h1>");
                                pw.println("<form action='First'>");
                                pw.println("Enter Id for delete:<input
type='text' name='id'/><br><br>");
                                pw.println("<input type='submit' name='sub'
value='dsubmit'/><br><br>");
                        }
                        else if(a.equals("s"))
                        {
                                try
                                {

Class.forName("com.mysql.jdbc.Driver");
                                        Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root
","");
                                        Statement stat = con.createStatement();
                                        ResultSet rs =
stat.executeQuery("Select * from test");
                                        while(rs.next())
                                        {
                                                pw.println("<table
border='2px'>");

                                                pw.println("<th>");
                                                pw.println("ID");
                                                pw.println("Name");
                                                pw.println("</th>");
                                                pw.println("<tbody>");
                                                pw.println("<tr>");
                                                pw.println("<td>");
                                                pw.println(rs.getString(1));
                                                pw.println("</td>");
                                                pw.println("<td>");
                                                pw.println(rs.getString(2));
                                                pw.println("</td>");
                                                pw.println("</tr>");
                                                pw.println("</tbody>");
                                                pw.println("</table>");
                                        }
                                }
```

```java
                catch(Exception ee)
                {
                        pw.println("error is -->"+ee);
                }
        }
}
String ia=request.getParameter("sub");
if(ia.equals("submit"))
{
        try
        {
                Class.forName("com.mysql.jdbc.Driver");
                Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root
","");
                PreparedStatement
ps=con.prepareStatement("insert into test (id,name) values(?,?)");
                String aa=request.getParameter("id");
                String b=request.getParameter("name");
                ps.setString(1,aa);
                ps.setString(2,b);
                int upd=ps.executeUpdate();
                if(upd>0)
                {
                        pw.println("Your data is inserted");
                }
                else
                {
                        pw.println("Your data is not inserted
due to some issue");
                }
        }
        catch(Exception ee)
        {
                pw.println("Error is "+ee);
        }
}
else if(ia.equals("usubmit"))
{
        try
        {
                Class.forName("com.mysql.jdbc.Driver");
                Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root
","");
                PreparedStatement
```

```java
ps=con.prepareStatement("UPDATE test set name=? where id=?");
String aa=request.getParameter("id");
String b=request.getParameter("name");
ps.setString(1,b);
ps.setString(2,aa);
int upd=ps.executeUpdate();
if(upd>0)
{
        pw.println("Your data is updated");
}
else
{
        pw.println("Your data is not in our
database");
}
}
catch(Exception ee)
{
        pw.println("Error is "+ee);
}
}
else if(ia.equals("dsubmit"))
{
        try
        {
                Class.forName("com.mysql.jdbc.Driver");
                Connection
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root
","");
                PreparedStatement
ps=con.prepareStatement("delete from test where id=?");
                String aa=request.getParameter("id");
                ps.setString(1,aa);
                int upd=ps.executeUpdate();
                if(upd>0)
                {
                        pw.println("Your data is deleted");
                }
                else
                {
                        pw.println("Id you enter is not in our
database");
                }
        }
        catch(Exception ee)
        {
```

```
                              pw.println("Error is "+ee);
                        }
                  }
            }

            protected void doPost(HttpServletRequest request,
      HttpServletResponse response) throws ServletException, IOException {
                  // TODO Auto-generated method stub
                  doGet(request, response);
            }
      }
```

SnapShot	Insert ○ Update ○ Delete ○ Select ○ submit **Insert form** Id: 1 Name: VRUSHABH RAMANI submit Your data is inserted id name 1 VRUSHABH RAMANI **Update form** Id: 2 Name: magan usubmit

Your data is updated

id	name
1	VRUSHABH RAMANI
2	magan

Delete form

Enter Id for delete: 1

dsubmit

Your data is deleted

id	name
2	magan

Insert ○ Update ○ Delete ○ Select ◉

submit

ID	Name
2	magan

Q-18	insert
Code	import java.sql.Connection; import java.sql.DriverManager; import java.sql.PreparedStatement;

| | ```
import java.sql.SQLException;


public class JdbcInsertDemo {

        public static void main(String[] args) {
                String dbURL = "jdbc:mysql://localhost:3306/sampledb";
                String username = "root";
                String password = "";

                try (Connection conn = DriverManager.getConnection(dbURL,
username, password)) {

                        String sql = "INSERT INTO Users (username, password,
fullname, email) VALUES (?, ?, ?, ?)";

                        PreparedStatement statement =
conn.prepareStatement(sql);
                        statement.setString(1, "AA");
                        statement.setString(2, "123");
                        statement.setString(3, "Homera Durani");
                        statement.setString(4, "homera.durani@rku.ac.in");

                        int rowsInserted = statement.executeUpdate();
                        if (rowsInserted > 0) {
                                System.out.println("A new user was inserted
successfully!");
                        }


                } catch (SQLException ex) {
                        ex.printStackTrace();
                }
        }
}
``` |
| | |
| **Q-19** | **Update** |
| **Code** | ```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;


public class JdbcUpdateDemo {

    public static void main(String[] args) {
        String dbURL =
"jdbc:mysql://localhost:3306/sampledb";
        String username = "root";
``` |

| | ```
        String password = "";

        try (Connection conn =
DriverManager.getConnection(dbURL, username, password)) {

            String sql = "UPDATE Users SET
password=?, fullname=?, email=? WHERE username=?";

            PreparedStatement statement =
conn.prepareStatement(sql);
            statement.setString(1, "123456789");
            statement.setString(2, "Durani Homera");
            statement.setString(3,
"homeradurani@rku.ac.in");
            statement.setString(4, "XYZ");

            int rowsUpdated =
statement.executeUpdate();
            if (rowsUpdated > 0)
             {
                    System.out.println("An existing
user was updated successfully!");
            }


        } catch (SQLException ex) {
            ex.printStackTrace();
        }
    }
}
``` |
| | |
| **Q-20** | **Select** |
| **Code** | ```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;


public class JdbcSelectDemo {

    public static void main(String[] args) {
        String dbURL =
"jdbc:mysql://localhost:3306/sampledb";
        String username = "root";
        String password = "";

        try (Connection conn =
``` |

| | ```
DriverManager.getConnection(dbURL, username, password)) {

                String sql = "SELECT * FROM Users";

                Statement statement =
conn.createStatement();
                ResultSet result =
statement.executeQuery(sql);

                int count = 0;

                while (result.next()){
                        String name = result.getString(2);
                        String pass = result.getString(3);
                        String fullname =
result.getString("fullname");
                        String email =
result.getString("email");

                        String output = "User #%d: %s - %s
- %s - %s";

System.out.println(String.format(output, ++count, name,
pass, fullname, email));
                }

        } catch (SQLException ex) {
                ex.printStackTrace();
        }
    }
}
``` |
| | |
| **Q-21** | **Delete** |
| **Code** | ```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.SQLException;


public class JdbcDeleteDemo {

    public static void main(String[] args) {
            String dbURL =
"jdbc:mysql://localhost:3306/sampledb";
            String username = "root";
            String password = "";

            try (Connection conn =
``` |

| | ```
DriverManager.getConnection(dbURL, username, password)) {

                String sql = "DELETE FROM Users WHERE
username=?";

                PreparedStatement statement =
conn.prepareStatement(sql);
                statement.setString(1, "AAA");

                int rowsDeleted =
statement.executeUpdate();
                if (rowsDeleted > 0)
                {
                        System.out.println("A user was
deleted successfully!");
                }

        } catch (SQLException ex) {
                ex.printStackTrace();
        }
    }
}
``` |
Q-22	**Insert**
| **Code** | **Html File**<br><br>```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert </title>
</head>
<body>
    <form action="insert">
        Id:<input type="text" name="n1" /><br><br>
        Name:<input type="text" name="n2" /><br><br>
        <input type="submit" name="Insert" />
    </form>
</body>
</html>
``` |

Code	Java File
|  | ```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.*;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class insert
 */
@WebServlet("/insert")
public class insert extends HttpServlet {
        private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public insert() {
        super();
        // TODO Auto-generated constructor stub
    }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                //response.getWriter().append("Served at:
").append(request.getContextPath());

                response.setContentType("text/html");
                PrintWriter pw =  response.getWriter();

                try {

                        Class.forName("com.mysql.jdbc.Driver");
``` |

```java
					Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");

					PreparedStatement ps = con.prepareStatement("insert
into test (id,name) values(?,?)");

					String s1 = request.getParameter("n1");
					String s2 = request.getParameter("n2");

					ps.setString(1,s1);
					ps.setString(2,s2);

					int ins = ps.executeUpdate();

					if(ins>0) {

							pw.println("Data Inserted Successfully");
					}
					else {
							pw.println("kaik Vandho che..!!");

					}



			}
			catch(Exception e) {
					pw.println(e);
			}


	}

	/**
	 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
			// TODO Auto-generated method stub
			doGet(request, response);
	}

}
```

SnapShot	Id: 57 Name: pako Submit Query Data Inserted Successfully | id	name
57	pako	
Q-23	**Update**

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	<head>
	<meta charset="ISO-8859-1">
	<title>Insert title here</title>
	</head>
	<body>
	
	<form action="update">
	
	Enter ID <input type="text" name="n1"/>
	
	Enter name<input type="text" name="n2"/>
	
	<input type="submit" value = "Update" />
	
	</form>
	``

| | ```
</body>
</html>
``` |
| **Code** | **Java File**<br><br>```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.*;

import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class update
 */
@WebServlet("/update")
public class update extends HttpServlet {
        private static final long serialVersionUID = 1L;

  /**
   * @see HttpServlet#HttpServlet()
   */
  public update() {
    super();
    // TODO Auto-generated constructor stub
  }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                //response.getWriter().append("Served at:
").append(request.getContextPath());

                response.setContentType("text/html");
                PrintWriter pw = response.getWriter();
``` |

```java
			try {


				Class.forName("com.mysql.jdbc.Driver");

				Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");

				String s1 = request.getParameter("n1");
				String s2 = request.getParameter("n2");

				PreparedStatement st = con.prepareStatement("update
test set name = ? where id = "+s1);

				st.setString(1, s2);

				int ins = st.executeUpdate();
				if(ins>0) {
					pw.println("Data uPdated");
				}
				else {
					pw.println("kaik vandho che");
				}




			}
			catch(Exception e) {
				pw.println(e);
			}

		}

	/**
	 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
			// TODO Auto-generated method stub
			doGet(request, response);
	}
```
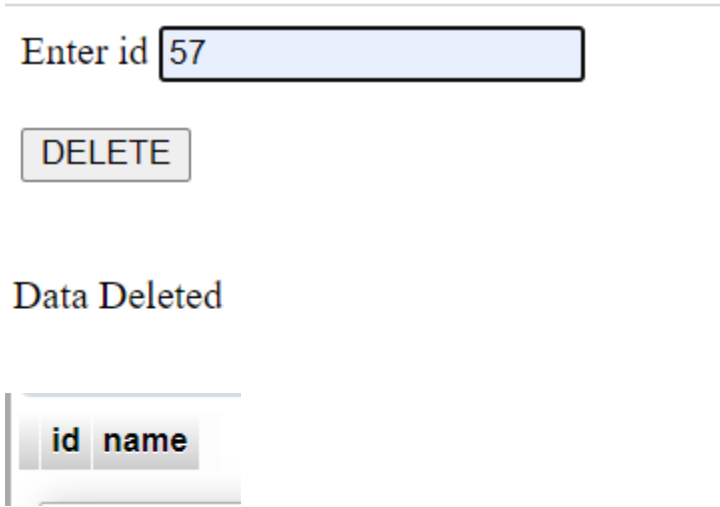
	}
SnapShot	Enter ID 57 Enter name jigo Update Data uPdated Options | id	name
57	jigo	
Q-24	**Delete**
Code	**Html File** ``` <!DOCTYPE html> <html> <head> <meta charset="ISO-8859-1"> <title>Insert title here</title> </head> <body> <form action="delete"> Enter id <input type="text" name="n1" /> <input type="submit" value = "DELETE"> ```

| | ```
</form>

</body>
</html>
``` |
| **Code** | **Java File**<br><br><br>```java
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.*;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class delete
 */
@WebServlet("/delete")
public class delete extends HttpServlet {
	private static final long serialVersionUID = 1L;

  /**
   * @see HttpServlet#HttpServlet()
   */
  public delete() {
    super();
    // TODO Auto-generated constructor stub
  }

	/**
	 * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		// TODO Auto-generated method stub
		//response.getWriter().append("Served at:
").append(request.getContextPath());
``` |

```java
            response.setContentType("text/html");
            PrintWriter pw = response.getWriter();

            try {

                    Class.forName("com.mysql.jdbc.Driver");

                    Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");
                    String s1 = request.getParameter("n1");


                    PreparedStatement st = con.prepareStatement("delete  from
test where id = "+s1);

                    int ins = st.executeUpdate();

                    if(ins>0) {

                            pw.println("Data Deleted");

                    }
                    else {
                            pw.println("kaik vandho che");
                    }

            }
            catch(Exception e) {

                    pw.println(e);

            }

            }

            /**
             * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
             */
            protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                    // TODO Auto-generated method stub
                    doGet(request, response);
            }

}
```

Snapshot	Enter id 57 DELETE Data Deleted id name
Q-25	**Select**

Code	**Java File**
	import java.sql.*;
	
	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;
	
	/**
	 * Servlet implementation class select
	 */
	@WebServlet("/select")
	public class select extends HttpServlet {
	        private static final long serialVersionUID = 1L;
	
	  /**
	   * @see HttpServlet#HttpServlet()
	   */

```java
    public select() {
        super();
        // TODO Auto-generated constructor stub
    }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                //response.getWriter().append("Served at:
").append(request.getContextPath());

                response.setContentType("text/html");
                PrintWriter pw = response.getWriter();

                try {

                        Class.forName("com.mysql.jdbc.Driver");

                        Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/test","root","");

                        Statement st = con.createStatement();

                        ResultSet rs = st.executeQuery("select * from test");

                        while(rs.next()) {
                                pw.println("<table border = '2px'>");
                                pw.println("<th>");
                                pw.println("ID");
                                pw.println("NAME");
                                pw.println("</th>");
                                pw.println("<tbody>");
                                pw.println("<tr>");
                                pw.println("<td>");
                                pw.println(rs.getString(1));
                                pw.println("</td>");


                                pw.println("<td>");
                                pw.println(rs.getString(2));
                                pw.println("</td>");
```

| | ```
                                        pw.println("</tr>");
                                        pw.println("</tbody>");
                                        pw.println("</table");

                        }



                }
                catch(Exception e ) {

                        e.printStackTrace();
                }
        }

        /**
         * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                doGet(request, response);
        }

}
``` |
| **Snapshot** | |

Q-26	Even Series

Code	**Html File**
	
	``html
	<!DOCTYPE html>
	<html>
	<head>
	<meta charset="ISO-8859-1">
	<title>Insert title here</title>
	</head>
	<body>
	        <form action="even">
	        Enter Number:<input type="text" name="n1" />
	        <input type="submit" value="OK" />
	        </form>
	</body>
	</html>
	``

Code	**Java File**
	
	``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;
	
	/**
	 * Servlet implementation class Second
	 */
	@WebServlet("/even")
	public class even extends HttpServlet {
	        private static final long serialVersionUID = 1L;
	
	   /**
	    * @see HttpServlet#HttpServlet()
	    */
	   public even() {
	      super();
	      // TODO Auto-generated constructor stub
	   }
	
	        /**
	``

| | ```
* @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
*/
protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
        response.setContentType("text/html");
        PrintWriter pw=response.getWriter();
        String b=request.getParameter("n1");
        int c=Integer.parseInt(b);
        pw.print("Even Series Is<br>");
        for(int i=0;i<=c;i++)
        {
                if(i%2==0)
                {
                        pw.println(i);
                }

        }
        //pw.print("<br>odd Series Is");

//              for(int j=0;j<=c;)
        }

        /**
         * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub
                doGet(request, response);
        }

}
``` |
SnapShot	Enter Number: 100 OK Even Series Is 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

Q-27	Odd Series

Code	**Html File**
	
	`<!DOCTYPE html>`
	`<html>`
	`<head>`
	`<meta charset="ISO-8859-1">`
	`<title>Insert title here</title>`
	`</head>`
	`<body>`
	`    <form action="odd">`
	`    Enter Number:<input type="text" name="n1" />`
	`    <input type="submit" value="OK" />`
	`    </form>`
	`</body>`
	`</html>`

Code	**Java File**
	
	`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;`
	
	`/**`
	` * Servlet implementation class Second`
	` */`
	`@WebServlet("/odd")`
	`public class odd extends HttpServlet {`
	`    private static final long serialVersionUID = 1L;`
	
	`  /**`
	`   * @see HttpServlet#HttpServlet()`
	`   */`
	`  public odd() {`
	`    super();`
	`    // TODO Auto-generated constructor stub`
	`  }`
	
	`    /**`

```java
	 * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		response.setContentType("text/html");
		PrintWriter pw=response.getWriter();
		String b=request.getParameter("n1");
		int c=Integer.parseInt(b);
//		pw.print("Even Series Is<br>");
//		for(int i=0;i<=c;i++)
//		{
//			if(i%2==0)
//			{
//				pw.println(i);
//			}
//
//
//		}
		pw.print("<br>odd Series Is");

		for(int j=0;j<=c;j++)
		{
			if(j%2==1)
				{
					pw.println(j);
				}
		}
	}

	/**
	 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
	 */
	protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
		// TODO Auto-generated method stub
		doGet(request, response);
	}

}
```

SnapShot	Enter Number: 100 OK
	odd Series Is1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99

Q-28	Web.XML File

Code	`<servlet>`
	`<servlet-name>First</servlet-name>`
	`<servlet-class>First</servlet-class>`
	`</servlet>`
	
	`<servlet-mapping>`
	`<servlet-name>First</servlet-name>`
	`<url-pattern>/First</url-pattern>`
	`</servlet-mapping>`

Q-29	**Demonstrate step to install Tomcat server**
Step-1	Markers Properties Servers ✕ Data Source Explorer Snippets Console No servers are available. Click this link to create a new server...

Step-2	
Step-3	

Step-4	**Add and Remove**
	
	Modify the resources that are configured on the server
	
	Move resources to the right to configure them on the server
	
	Available:
	    emp
	    servlet
	    Test_web
	
	Configured:
	
	Add >
	< Remove
	Add All >>
	<< Remove All
	
	< Back Next > Finish Cancel

Step-5	Markers Properties Servers × Data Source Explorer Snippets **Console** Tomcat v8.5 Server at localhost [Stopped, Republish]