

1. Write a jsp program to find Factorial of given number using JavaBeans, useBean, setProperty, getProperty

FactBean.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
  <body>
    <form method="POST" action="FactBean.jsp">
      Enter A Number<input type="text" name="num"><br>
      <input type="submit" value="Find Factorial">
    </form>
    <%
      String input=request.getParameter("num");
      if(input!=null){
    %>
    <jsp:useBean id="FactBean" class="com.lbrce.mybean.FactBean" scope="request"/>
    <jsp:setProperty name="FactBean" property="num"/>
    <p> The Factorial is:<jsp:getProperty name="FactBean" property="result"/></p>
    <%
      }
    %>
  </body>
</html>
```

FactBean.java

```
package com.lbrce.mybean;

public class FactBean {
  private int num;//input
  private int result;//output
  public FactBean(){ }
  public void setNum(int num){
```

```
        this.num=num;
    }
    public int getNum(){
        return this.num;
    }
    public int getResult()
    {
        int result=1;
        for(int i=this.num;i>0;i--)
        {
            result=result*i;
        }
        return result;
    }
}
```

Output:



Enter A Number



Enter A Number

The Factorial is:120

2. Write a jsp program to perform Basic Arithmetic operation such Addition, Substraction, Multiplication, Division using JavaBeans, useBean, setProperty, getProperty

CalBean.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

    <body>

        <form method="post" action="CalBean.jsp">

            enter a number : <input type="text" name="num1"> <br>
            enter a number : <input type="text" name="num2"> <br>
            <input type="submit" value="find">

        </form>

        <jsp:useBean id="CalBean" class="com.lbrce.mybean.CalBean" scope="request"/>
        <jsp:setProperty name="CalBean" property="num1"/>
        <jsp:setProperty name="CalBean" property="num2"/>

        <p>Addition is: <jsp:getProperty name="CalBean" property="addResult"/>
        <p>Subtraction is: <jsp:getProperty name="CalBean" property="subResult"/>
        <p>Multiplication is: <jsp:getProperty name="CalBean" property="mulResult"/>
        <p>Division is: <jsp:getProperty name="CalBean" property="divResult"/>

    </body>

</html>
```

CalBean.java

```
package com.lbrce.mybean;

public class CalBean {

    private int num1;
    private int num2;
    private int addResult,subResult,mulResult;
    private double divResult;

    public CalBean(){

    }

    public void setNum1(int num1)
    {
```

```
        this.num1=num1;
    }
    public int getNum1(){
        return this.num1;
    }
    public void setNum2(int num2)
    {
        this.num2=num2;
    }
    public int getNum2(){
        return this.num2;
    }
    public int getAddResult(){
        this.addResult=this.num1+this.num2;
        return this.addResult;
    }
    public int getSubResult(){
        this.subResult=this.num1-this.num2;
        return this.subResult;
    }
    public int getMulResult(){
        this.mulResult=this.num1*this.num2;
        return this.mulResult;
    }
    public double getDivResult(){
        try{
            this.divResult=(this.num1)/(this.num2);
        }
        catch(Exception e){System.out.println(""+e);}
        return this.divResult;
    }
}
```

Output:

enter a number :

enter a number :

Addition is: 11

Subtraction is: -1

Multiplication is: 30

Division is: 0.0

3. Write a jsp program to find Student Total Marks & Percentage using JavaBeans, useBean, setProperty, getProperty

StudentBean.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>Student Marks Entry Form</h2>
```

```
<form method="POST" action="StudentBean.jsp">
```

Enter Roll No:

```
<input type="text" name="rollno" required>
```

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

Enter Name:

```
<input type="text" name="name" required>
```

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

Enter Subject 1:

```
<input type="number" name="sub1" required>
```

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

Enter Subject 2:

```
<input type="number" name="sub2" required>
```

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

Enter Subject 3:

```
<input type="number" name="sub3" required>
```


Enter Subject 4:

<input type="number" name="sub4" required>

Enter Subject 5:

<input type="number" name="sub5" required>

<input type="submit" value="Calculate">

</form>

<% if ("POST".equalsIgnoreCase(request.getMethod())) { %>

<jsp:useBean id="student"

class="com.lbrce.mybean.StudentBean"

scope="request"/>

<jsp:setProperty name="student" property="rollno"/>

<jsp:setProperty name="student" property="name"/>

<jsp:setProperty name="student" property="sub1"/>

<jsp:setProperty name="student" property="sub2"/>

<jsp:setProperty name="student" property="sub3"/>

<jsp:setProperty name="student" property="sub4"/>

<jsp:setProperty name="student" property="sub5"/>

<h2>Student Result</h2>

<p>

Roll Number:

<jsp:getProperty name="student" property="rollno"/>

</p>

<p>

Name:

<jsp:getProperty name="student" property="name"/>

</p>

<p>

Subject 1:

```
<jsp:getProperty name="student" property="sub1"/>
</p>
<p>
    Subject 2:
    <jsp:getProperty name="student" property="sub2"/>
</p>
<p>
    Subject 3:
    <jsp:getProperty name="student" property="sub3"/>
</p>
<p>
    Subject 4:
    <jsp:getProperty name="student" property="sub4"/>
</p>
<p>
    Subject 5:
    <jsp:getProperty name="student" property="sub5"/>
</p>
<p>
    Total Marks:
    <jsp:getProperty name="student" property="totalMarks"/>
</p>
<p>
    Percentage:
    <jsp:getProperty name="student" property="percentage"/>%
</p>
<% } %>
</body>
</html>
```

StudentBean.java

```
package com.lbrce.mybean;
```

```
public class StudentBean {  
    private String rollNo;  
    private String name;  
    private int sub1, sub2, sub3, sub4, sub5;  
    private int totalmarks;  
    private double percentage;  
    public void setRollNo(String rollNo) {  
        this.rollNo = rollNo;  
    }  
    public String getRollNo() {  
        return rollNo;  
    }  
    public void setName(String name) {  
        this.name = name;  
    }  
    public String getName() {  
        return name;  
    }  
    public void setSub1(int sub1) {  
        this.sub1 = sub1;  
    }  
    public int getSub1() {  
        return sub1;  
    }  
    public void setSub2(int sub2) {  
        this.sub2 = sub2;  
    }  
    public int getSub2() {  
        return sub2;  
    }  
    public void setSub3(int sub3) {
```

```
        this.sub3 = sub3;
    }
    public int getSub3() {
        return sub3;
    }
    public void setSub4(int sub4) {
        this.sub4 = sub4;
    }
    public int getSub4() {
        return sub4;
    }
    public void setSub5(int sub5) {
        this.sub5 = sub5;
    }
    public int getSub5() {
        return sub5;
    }
    public int getTotalMarks() {
        totalmarks = sub1 + sub2 + sub3 + sub4 + sub5;
        return totalmarks;
    }
    public double getPercentage() {
        percentage = (getTotalMarks() / 500.0) * 100;
        return percentage;
    }
}
```

Output:

Student Marks Calculation

localhost:8080/Helloname/StudentBean.jsp

Student Marks Entry Form

Enter Roll No: 1201

Enter Name: sarath

Enter Subject 1: 89

Enter Subject 2: 99

Enter Subject 3: 78

Enter Subject 4: 67

Enter Subject 5: 88

Calculate

Student Marks Calculation

localhost:8080/Helloname/StudentBean.jsp

Student Marks Entry Form

Enter Roll No: 1201

Enter Name: sarath

Enter Subject 1: 89

Enter Subject 2: 99

Enter Subject 3: 78

Enter Subject 4: 67

Enter Subject 5: 88

Calculate

Student Result

Roll Number: 1201

Name: sarath

Subject 1: 89

Subject 2: 99

Subject 3: 78

Subject 4: 67

Subject 5: 88

Total Marks: 421

Percentage: 84.2%

Activate Windows

Go to Settings to activate Windows.