# ASP.NET Practical – Lab No. 2

## Title:

Student Marksheet using Web Controls

## Objective:

To create a web page in ASP.NET that allows the user to enter enrollment number, student name, and marks of five subjects. The application calculates and displays the total, percentage, and grade of the student.

## Software Requirements:

|  |  |
| --- | --- |
| Software | Version |
| Operating System | Windows 10 or above |
| IDE | Visual Studio 2019 or above |
| Framework | .NET Framework 4.5 or above |
| Browser | Any modern browser |

## Web Controls Used:

* - Label
* - TextBox
* - Button

## Step-by-Step Instructions:

1. Open Visual Studio and create a new ASP.NET Web Forms Application.  
2. Design a form on Default.aspx with TextBoxes to enter enrollment number, name, and marks for 5 subjects.  
3. Add a button to calculate total, percentage, and grade.  
4. Display the results using Labels.  
5. In Default.aspx.cs, write the logic to calculate total, percentage, and grade based on entered marks.

## ASP.NET Frontend Code (Default.aspx):

<table>  
<tr><td>Enrollment No:</td><td><asp:TextBox ID="txtEnroll" runat="server"></asp:TextBox></td></tr>  
<tr><td>Name:</td><td><asp:TextBox ID="txtName" runat="server"></asp:TextBox></td></tr>  
<tr><td>Subject 1:</td><td><asp:TextBox ID="txtSub1" runat="server"></asp:TextBox></td></tr>  
<tr><td>Subject 2:</td><td><asp:TextBox ID="txtSub2" runat="server"></asp:TextBox></td></tr>  
<tr><td>Subject 3:</td><td><asp:TextBox ID="txtSub3" runat="server"></asp:TextBox></td></tr>  
<tr><td>Subject 4:</td><td><asp:TextBox ID="txtSub4" runat="server"></asp:TextBox></td></tr>  
<tr><td>Subject 5:</td><td><asp:TextBox ID="txtSub5" runat="server"></asp:TextBox></td></tr>  
<tr><td colspan="2"><asp:Button ID="btnCalculate" runat="server" Text="Calculate" OnClick="btnCalculate\_Click" /></td></tr>  
</table>  
  
<asp:Label ID="lblResult" runat="server" ForeColor="Blue"></asp:Label>

## Code-Behind (Default.aspx.cs):

protected void btnCalculate\_Click(object sender, EventArgs e)  
{  
 string enroll = txtEnroll.Text;  
 string name = txtName.Text;  
  
 int s1 = Convert.ToInt32(txtSub1.Text);  
 int s2 = Convert.ToInt32(txtSub2.Text);  
 int s3 = Convert.ToInt32(txtSub3.Text);  
 int s4 = Convert.ToInt32(txtSub4.Text);  
 int s5 = Convert.ToInt32(txtSub5.Text);  
  
 int total = s1 + s2 + s3 + s4 + s5;  
 float percentage = total / 5.0f;  
 string grade = "";  
  
 if (percentage >= 90)  
 grade = "A+";  
 else if (percentage >= 80)  
 grade = "A";  
 else if (percentage >= 70)  
 grade = "B";  
 else if (percentage >= 60)  
 grade = "C";  
 else if (percentage >= 50)  
 grade = "D";  
 else  
 grade = "Fail";  
  
 lblResult.Text = "Enrollment: " + enroll + "<br/>Name: " + name + "<br/>Total: " + total + "<br/>Percentage: " + percentage + "%<br/>Grade: " + grade;  
}

## Run Instructions:

1. Build and run the application in Visual Studio.  
2. Enter the enrollment number, name, and marks for five subjects.  
3. Click on the "Calculate" button.  
4. The result (total, percentage, and grade) will be displayed below the button.

## Expected Output:

- After entering all required fields and clicking Calculate, the total marks, percentage, and grade are shown.

## Conclusion:

This practical demonstrated how to use basic web controls in ASP.NET to create a functional student marksheet application.

## Viva Questions with Answers:

1. 1. What controls are used to take user input?

TextBox controls are used to accept user input.

1. 2. How do you trigger calculations on button click?

Using the OnClick event of the Button control.

1. 3. How do you display output in ASP.NET?

By assigning text to Label controls.

1. 4. What data type is used for marks calculation?

Integer is used for marks and float for percentage.

1. 5. How is grade determined?

Grade is based on the calculated percentage using conditional logic.