**Assignment No.**: 6  
**Assignment Name**: Creating an Applet for Web Application Operations

**Java Applet Program: Showcasing Web Application Operations**

import java.applet.Applet;

import java.awt.\*;

import java.awt.event.\*;

public class SimpleCalculatorApplet extends Applet implements ActionListener {

// Declare components

TextField num1Field, num2Field, resultField;

Button addButton, subtractButton, multiplyButton, divideButton;

Label resultLabel;

// Initialize the applet

public void init() {

// Set layout of the applet

setLayout(new FlowLayout());

// Create components

Label num1Label = new Label("Enter First Number:");

num1Field = new TextField(10);

Label num2Label = new Label("Enter Second Number:");

num2Field = new TextField(10);

resultLabel = new Label("Result: ");

resultField = new TextField(20);

resultField.setEditable(false);

add(num1Label);

add(num1Field);

add(num2Label);

add(num2Field);

// Create buttons for operations

addButton = new Button("Add");

subtractButton = new Button("Subtract");

multiplyButton = new Button("Multiply");

divideButton = new Button("Divide");

add(addButton);

add(subtractButton);

add(multiplyButton);

add(divideButton);

add(resultLabel);

add(resultField);

// Add action listeners to buttons

addButton.addActionListener(this);

subtractButton.addActionListener(this);

multiplyButton.addActionListener(this);

divideButton.addActionListener(this);

}

// Handle button click events

public void actionPerformed(ActionEvent e) {

// Get the input numbers

double num1 = Double.parseDouble(num1Field.getText());

double num2 = Double.parseDouble(num2Field.getText());

double result = 0;

// Perform the corresponding operation based on the button clicked

if (e.getSource() == addButton) {

result = num1 + num2;

} else if (e.getSource() == subtractButton) {

result = num1 - num2;

} else if (e.getSource() == multiplyButton) {

result = num1 \* num2;

} else if (e.getSource() == divideButton) {

// Prevent division by zero

if (num2 != 0) {

result = num1 / num2;

} else {

resultField.setText("Error: Div by 0");

return;

}

}

// Display the result

resultField.setText(String.valueOf(result));

}

}

**HTML Code to Embed the Applet in a Web Page:**

<html>

<head>

<title>Simple Calculator Applet</title>

</head>

<body>

<h1>Simple Calculator Applet</h1>

<applet code="SimpleCalculatorApplet.class" width="300" height="300">

</applet>

</body>

</html>