Institute Of Management Studies – Noida

Submitted To Department Of **SOIT**

BCA

JAVA

(2022-2025)

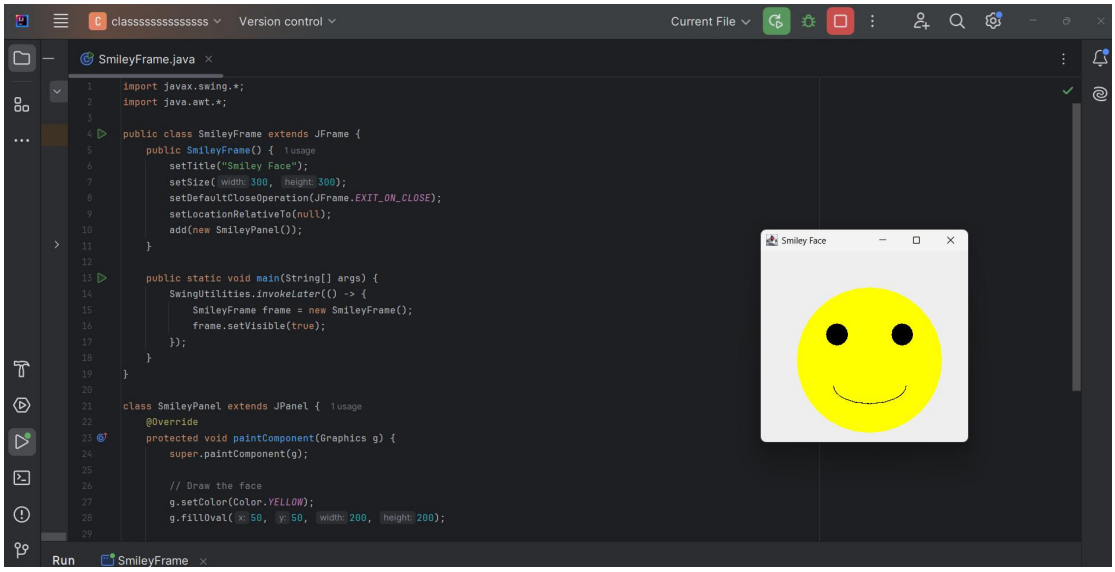
Submitted To:

Sumit Negi

Submitted By:

Sakshi Rai

1.Make a smiley using java applet



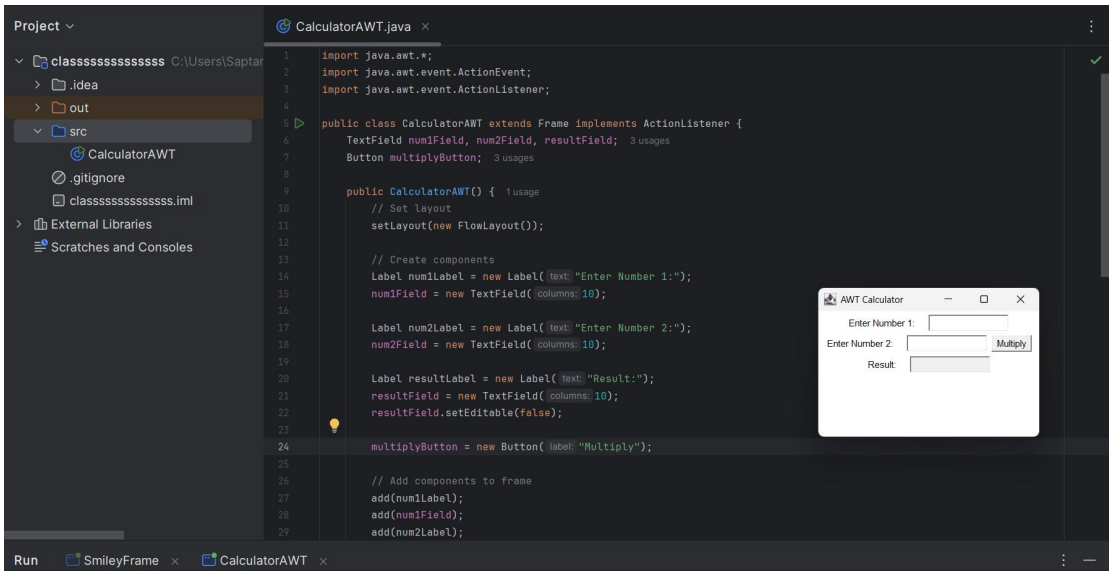
Ans- import javax.swing.*;
import java.awt.*;

```
public class SmileyFrame extends JFrame {
	public SmileyFrame() {
		setTitle("Smiley Face");
		setSize(300, 300);
		setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
		setLocationRelativeTo(null);
		add(new SmileyPanel());
	}

	public static void main(String[] args) {
		SwingUtilities.invokeLater(() -> {
			SmileyFrame frame = new SmileyFrame();
			frame.setVisible(true);
		});
	}
}

class SmileyPanel extends JPanel {
	@Override
	protected void paintComponent(Graphics g) {
		super.paintComponent(g);

		// Draw the face
		g.setColor(Color.YELLOW);
		g.fillOval(50, 50, 200, 200);

		// Draw the eyes
		g.setColor(Color.BLACK);
		g.fillOval(90, 100, 30, 30);    // Left eye
```

```
        g.fillOval(180, 100, 30, 30); // Right eye

        // Draw the mouth
        g.drawArc(100, 160, 100, 50, 0, -180); // Smile
    }
}
```

2.Create a calculator in Java AWT that displays the product of two user-entered numbers, num1 and num2.

Ans-




```
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

public class CalculatorAWT extends Frame implements ActionListener {
    TextField num1Field, num2Field, resultField;
    Button multiplyButton;

    public CalculatorAWT() {
        // Set layout
        setLayout(new FlowLayout());

        // Create components
        Label num1Label = new Label("Enter Number 1:");
        num1Field = new TextField(10);

        Label num2Label = new Label("Enter Number 2:");
        num2Field = new TextField(10);

        Label resultLabel = new Label("Result:");
        resultField = new TextField(10);
        resultField.setEditable(false);

        multiplyButton = new Button("Multiply");

        // Add components to frame
```

```
        add(num1Label);
        add(num1Field);
        add(num2Label);
        add(num2Field);
        add(multiplyButton);
        add(resultLabel);
        add(resultField);

        // Add ActionListener to button
        multiplyButton.addActionListener(this);

        // Frame settings
        setTitle("AWT Calculator");
        setSize(300, 200);
        setVisible(true);
    }

    @Override
    public void actionPerformed(ActionEvent e) {
        // Parse numbers from text fields
        int num1 = Integer.parseInt(num1Field.getText());
        int num2 = Integer.parseInt(num2Field.getText());

        // Calculate the product
        int result = num1 * num2;

        // Set result to the resultField
        resultField.setText(String.valueOf(result));
    }

    public static void main(String[] args) {
        new CalculatorAWT();
    }
}
```