

Assignment: 6 Write a Program that demonstrate color fonts

Step 1: Open Eclipse and Create a New Java Project

1. Open Eclipse.
2. Go to **File > New > Java Project**.
3. Enter a project name (e.g., `ShapeDemoProject`).
4. Click **Finish**.

Step 2: Create a New Package

1. In the **Package Explorer** (left panel), right-click on the `src` folder of your new project.
2. Select **New > Package**.
3. Name the package (e.g., `com.example.shapes`) and click **Finish**.

Step 3: Create a New Java Class

1. Right-click on the package you just created (e.g., `com.example.shapes`).
2. Select **New > Class**.
3. In the **Name** field, type `ShapeDemo`.
4. Check the box for **public static void main(String[] args)** if you want Eclipse to auto-generate the `main` method.
5. Click **Finish**.

Step 4:import the

Import: `JPanel`, `Graphics g`, `Color`, `JFrame`, `Font`

```
package pro;
```

```
import java.awt.Color;
```

```
import java.awt.Font;
```

```
import java.awt.Graphics;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JPanel;
```

```
public class ColorAndFontDemo extends JPanel {
```

```
    // Override the paintComponent method to draw with colors and fonts
```

```
    @Override
```

```
    protected void paintComponent(Graphics g) {
```

```
        super.paintComponent(g); // Call the superclass method to ensure proper rendering
```

```
        // Set background color
```

```
        setBackground(Color.WHITE);
```

```

// Draw a colored rectangle with different border and fill color

g.setColor(Color.CYAN); // Set fill color

g.fillRect(50, 50, 200, 100); // x, y, width, height

g.setColor(Color.DARK_GRAY); // Set border color

g.drawRect(50, 50, 200, 100); // x, y, width, height (border)

// Draw text with different font styles and sizes

g.setColor(Color.RED); // Set color for text

g.setFont(new Font("Serif", Font.BOLD, 20)); // Set font (Serif, Bold, Size 20)

g.drawString("This is a BOLD Serif Font", 50, 200);

g.setColor(Color.BLUE); // Set color for next text

g.setFont(new Font("SansSerif", Font.ITALIC, 24)); // Set font (SansSerif, Italic, Size 24)

g.drawString("This is an ITALIC SansSerif Font", 50, 250);


g.setColor(Color.GREEN); // Set color for next text

g.setFont(new Font("Monospaced", Font.PLAIN, 18)); // Set font (Monospaced, Plain, Size 18)

g.drawString("This is a PLANE Monospaced Font", 50, 300);

// Draw a string with custom font and size

g.setColor(Color.MAGENTA);

g.setFont(new Font("Arial", Font.PLAIN, 30)); // Set font (Arial, Plain, Size 30)

g.drawString("Magenta Text in Arial", 50, 350);
}

// Main method to create the frame and display the panel

public static void main(String[] args) {

    // Create a frame to hold the panel

    JFrame frame = new JFrame("Color and Font Demo");

    // Set up the frame

    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

```

```
frame.setSize(600, 500); // Width and height of the window

// Create an instance of the ColorAndFontDemo panel and add it to the frame
ColorAndFontDemo panel = new ColorAndFontDemo();

frame.add(panel);

// Make the frame visible
frame.setVisible(true);

}

}
```