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import javax.swing.*;

import java.awt.*;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import java.util.Random;

public class RockPaperScissorsGame extends JFrame {

    private JButton rockButton, paperButton, scissorsButton;

    private JLabel resultLabel;

    private Random random;

    public RockPaperScissorsGame() {

        random = new Random();

        setTitle("Rock, Paper, Scissors Game");

        setSize(300, 200);

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        setLayout(new FlowLayout());

        rockButton = new JButton("Rock");

        paperButton = new JButton("Paper");

        scissorsButton = new JButton("Scissors");

        resultLabel = new JLabel("Choose Rock, Paper, or Scissors.");

        add(rockButton);

        add(paperButton);

        add(scissorsButton);

        add(resultLabel);

        rockButton.addActionListener(new ActionListener() {

            public void actionPerformed(ActionEvent e) {
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        playGame("Rock");
    }
});

paperButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        playGame("Paper");
    }
});

scissorsButton.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {
        playGame("Scissors");
    }
});
}

private void playGame(String userChoice) {
    String[] choices = {"Rock", "Paper", "Scissors"};

    String computerChoice = choices[random.nextInt(3)];

    String result = getResult(userChoice, computerChoice);

    resultLabel.setText("You chose " + userChoice + ". Computer chose " + computerChoice + ". Result: "
+ result);
}

private String getResult(String userChoice, String computerChoice) {
    if (userChoice.equals(computerChoice)) {
        return "It's a tie!";
    } else if ((userChoice.equals("Rock") && computerChoice.equals("Scissors")) ||
        (userChoice.equals("Paper") && computerChoice.equals("Rock"))) ||

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        (userChoice.equals("Scissors") && computerChoice.equals("Paper")))) {  
            return "You win!";  
        } else {  
            return "Computer wins!";  
        }  
    }  
}  
  
public static void main(String[] args) {  
    SwingUtilities.invokeLater(() -> {  
        RockPaperScissorsGame game = new RockPaperScissorsGame();  
        game.setVisible(true);  
    });  
}
```

#### OUTPUT:

