# Java Implementation of Practical Session Tasks

import java.util.Scanner;  
  
public class PracticalSession3 {  
 public static void main(String[] args) {  
 Scanner scanner = new Scanner(System.in);  
  
 // 1. Compute Gross Pay  
 System.out.print("Enter Hours: ");  
 double hours = scanner.nextDouble();  
 System.out.print("Enter Rate: ");  
 double rate = scanner.nextDouble();  
 double grossPay = hours \* rate;  
 System.out.println("Pay: " + grossPay);  
  
 // 2. Celsius to Fahrenheit  
 System.out.print("Enter Celsius temperature: ");  
 double celsius = scanner.nextDouble();  
 double fahrenheit = (celsius \* 9 / 5) + 32;  
 System.out.println("Fahrenheit: " + fahrenheit);  
  
 // 3. Slope of a Line  
 System.out.print("Enter x1: ");  
 double x1 = scanner.nextDouble();  
 System.out.print("Enter y1: ");  
 double y1 = scanner.nextDouble();  
 System.out.print("Enter x2: ");  
 double x2 = scanner.nextDouble();  
 System.out.print("Enter y2: ");  
 double y2 = scanner.nextDouble();  
 double slope = (y2 - y1) / (x2 - x1);  
 System.out.println("Slope: " + slope);  
  
 // 4. Distance between two points  
 double distance = Math.sqrt(Math.pow(x2 - x1, 2) + Math.pow(y2 - y1, 2));  
 System.out.println("Distance: " + distance);  
  
 // 5. Area of a Triangle  
 System.out.print("Enter side a: ");  
 double a = scanner.nextDouble();  
 System.out.print("Enter side b: ");  
 double b = scanner.nextDouble();  
 System.out.print("Enter side c: ");  
 double c = scanner.nextDouble();  
 double s = (a + b + c) / 2;  
 double area = Math.sqrt(s \* (s - a) \* (s - b) \* (s - c));  
 System.out.println("Area of the triangle: " + area);  
  
 // 6. Arithmetic Operations  
 System.out.print("Enter value a: ");  
 int valueA = scanner.nextInt();  
 System.out.print("Enter value b: ");  
 int valueB = scanner.nextInt();  
 System.out.println("The result of adding is " + (valueA + valueB));  
 System.out.println("The result of subtracting is " + (valueA - valueB));  
 System.out.println("The result of multiplying is " + (valueA \* valueB));  
 if (valueB != 0) {  
 System.out.println("The result of dividing is " + (valueA / (double) valueB));  
 } else {  
 System.out.println("Division by zero is not allowed.");  
 }  
  
 // 7. Revenue Calculation  
 System.out.print("Enter number of participants: ");  
 int participants = scanner.nextInt();  
 double costPerParticipant = 2500;  
 double totalRevenue = participants \* costPerParticipant;  
 System.out.println("Total revenue: " + totalRevenue);  
  
 // 8. Volume and Surface Area of a Sphere  
 System.out.print("Enter radius of the sphere: ");  
 double radius = scanner.nextDouble();  
 double volume = (4.0 / 3) \* Math.PI \* Math.pow(radius, 3);  
 double surfaceArea = 4 \* Math.PI \* Math.pow(radius, 2);  
 System.out.println("Volume of the sphere: " + volume);  
 System.out.println("Surface area of the sphere: " + surfaceArea);  
  
 scanner.close();  
 }  
}

## How to Use:

1. Copy the code into a .java file (e.g., PracticalSession3.java).  
2. Compile the file using javac PracticalSession3.java.  
3. Run the program using java PracticalSession3.  
4. Follow the prompts to input values and see the results.