**Output:**

**Enter**

**Enter second angle: angle:**

**Enter first angle:**

**Check FOR THE THIRD ANGLE**

Code:

import java.util.Scanner;

public class Triangle {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.println("Enter the first angle of the triangle (in degrees):");

int angle1 = scanner.nextInt();

System.out.println("Enter the second angle of the triangle (in degrees):");

int angle2 = scanner.nextInt();

// Input validation: Check if angles are within valid range (0 to 180)

if (angle1 <= 0 || angle2 <= 0 || angle1 + angle2 >= 180) {

System.out.println("Invalid angles. Angles must be positive and their sum must be less than 180 degrees.");

return;

}

int angle3 = 180 - (angle1 + angle2);

System.out.println("The third angle of the triangle is: " + angle3 + " degrees");

// Check triangle type based on angles

if (angle1 < 90 && angle2 < 90 && angle3 < 90) {

System.out.println("The triangle is acute (all angles are less than 90 degrees).");

} else if (angle1 == 90 || angle2 == 90 || angle3 == 90) {

System.out.println("The triangle is right angled (one angle is 90 degrees).");

} else {

System.out.println("The triangle is obtuse (one angle is greater than 90 degrees).");

}

}

}

