**Lab Exercises**

**ACTIVITY:**

***Create a program in java to implement Logic to find third angle of a triangle. After that check the triangle type with respect to the angle. Write the program on either paper or compiler but do not execute.***

**CODE**

**import java.util.Scanner;**

**public class Lab\_exercise {**

**public static void main(String[] args) {**

**Scanner scanner = new Scanner(System.in);**

**System.out.print("Enter angle 1 ");**

**int angle1 = scanner.nextInt();**

**System.out.print("Enter angle 2 ");**

**int angle2 = scanner.nextInt();**

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

**System.out.println("Angles cannot be negative and their sum must be less than 180 degrees.");**

**return;**

**}**

**int angle3 = 180 - (angle1 + angle2);**

**if (angle1 > 90 || angle2 > 90 || angle3 > 90) {**

**System.out.println("Triangle is obtuse and one angle is greater than 90 degrees");**

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

**System.out.println("Triangle is right angled one angle is equal to 90 degrees");**

**} else {**

**System.out.println("Triangle is acute and all angles are less than 90 degree");**

**}**

**System.out.println("Third angle: " + angle3);**

**}**

**}**