SLIIT UNI
THE KNOWLEDGE UNIVERSITY

SE2030 – Software Engineering

Department of Information Technology, Faculty of Computing

Year 2 semester 1 (2025)

Tutorial 08

Activity 01

Using Boundary Value Analysis and Equivalence Partitioning test design techniques, identify the optimum set of test cases for testing the business requirement given below.

A system that is designed to work out the tax to be paid should check the following requirements:

- If the salary of an employee is less than **Rs. 50,000**, then he/she is not taxed.
- If the salary of an employee is greater than or equal to **Rs. 50,000** and less than **Rs. 200,000**, then he/she is taxed at 10%.
- If the salary of an employee is greater than or equal to **Rs. 200,000** and less than **Rs. 400,000**, then he/she is taxed at 15
- If the salary of an employee is greater than or equal to **Rs. 400,000**, then he/she is taxed at 25%.

Activity 02

1. **What is the percentage of statement coverage that can be achieved for the given code if the test case is (x=10)?**

```
Void testme (int x) {
        for (int j=0;j<2;j++){
                if (x==j) {
                        printf (“Good\n”);
                }
        }
        return x;
}
```

2. **Calculate the minimum number of test cases needed for full branch coverage for the given code.**

```
public static void printSum(int a, int b) {
int result = a + b;
 while (result != 0) {
   if (result > 0) {
        System.out.println("Positive: " + result);
      result--;
    }
else {
       System.out.println("Negative: " + result);
      result++;
    }
  }
System.out.println("Zero: 0");
}
```