# UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

IS2104 - Rapid Application Development 2020

Activity 3

**Objective**

- Learn about the control statements

**Instructions**

- You need to submit
    - **Calculator.java** and **Calculator.class** files for 1st question
    - **Random.java** and **Random.class** for 2nd question
    - A **report** including the screenshots of contents of above mentioned files along with the outputs.
- Submit the report in PDF format
- Rename the report as <Index Number>.pdf
- Zip above mentioned 5 files and rename it to <Index Number>.zip and upload it to the submission link.(Calculator.java, Calculator.class, Random.java, Random.class, Report)
- Use appropriate text editor (eg : Notepad , Notepad ++)
- You are not allowed to use IDEs
- Any form of plagiarism or collusion is not allowed.

**Assignment 3**

1. Create a simple calculator using Java (Calcultor.java)
   a. This calculator should be able to add, subtract, multiply and divide two numbers.
   b. User needs to enter two numbers and the operator from the terminal.
   c. Use **switch case** to check the mathematical operation entered by the user and perform the operation.
   d. Your output can be something like this. If the user inputs an incorrect operator, it should output an error message.

```
Enter first number: 14
Enter second number: 5
Enter an operator (+, -, *, /): /
14.0 / 5.0 = 2.8
```

```
Enter first number : 54
Enter second number : 76
Enter an operator (+,-,*,/ ) : 7
Incorrect Operator
```

2. Create a java programme to generate random numbers (Random.java)
   a. You need to generate 5 random numbers between 0 and 100
   b. Then include a condition where you check whether that random number is less than 50 or greater than 50
   c. Finally you need to print that **random number** and its value as **'High'** or **'Low'**.
      - If random number is greater than or equal 50 : High
      - If random number is less than 50                : Low
   d. Your output can be something like this

```
72 : High
39 : Low
86 : High
9 : Low
75 : High
```