



# UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

IS2104 - Rapid Application Development 2020

## Practical - 11 - Java packages

In this tutorial, we are going to learn about how to create and use packages Java.

### Instructions

1. You should submit
  - a. **.java** and **.class** files from question A.
  - b. **.java** and **.class** files from question B.
  - c. A report with screenshots of
    - i. The folder structure of packages.
    - ii. Contents of 4 java files
    - iii. Outputs of 4 running .class files with the given test cases
  - d. The report must be in **PDF** format.
  - e. The report name should be **<Index Number>.pdf** eg – 18000000.pdf
2. Zip all files, name it **<Index Number >.zip**, and upload it to the submission link. eg – 18000000.zip
3. Use an appropriate text editor (eg – Notepad, Notepad ++). You are not allowed to use IDEs
4. Any form of plagiarism or collusion is not allowed.

## Practical - 11

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### Question A

Create a java program to calculate tax interest to be paid considering Tax Rate and Purchase Price.

#### Note:

You need to create two(2) java packages which include the following details:

- You need to create a separate Java package to calculate interest.
  - **calculator package** should include **SimpleCalculator class** including the public method **interestCalculation method**.
- Another separate java package to output interest generated.
  - **taxCalc package** should include **TaxCalculation class** which includes the main method.

Example output :

```
D:\java\practical 11>java taxCalc.TaxCalculation
Interest rate to be paid 80
```

### Question B

Create a java program to calculate arithmetic calculations considering the 2 integer values input by a given user. (Summation, Subtraction, division, and multiplication)

#### Note:

You need to create two(2) java packages which include the following details:

- You need to create a separate Java package to calculate interest.
  - **arithmeticCalculator package** should include **SimpleArithmeticCalculator class** including the four(4) methods **add, subtract, division and multiplication**.
- Another separate java package to output interest generated.
  - **calc package** should include **Calculation class** which includes the main method.

Example output :

```
D:\java\practical 11>javac -d . SimpleArithmeticCalculator.java
D:\java\practical 11>javac -d . Calculation.java
D:\java\practical 11>java calc.Calculation
Enter first number: 12
Enter first number: 6
Addition = 18
Substraction = 6
Division = 2
Multiplication = 72
```