Software Engineering Lab (CS29006)
Assignment 1: Java Programming
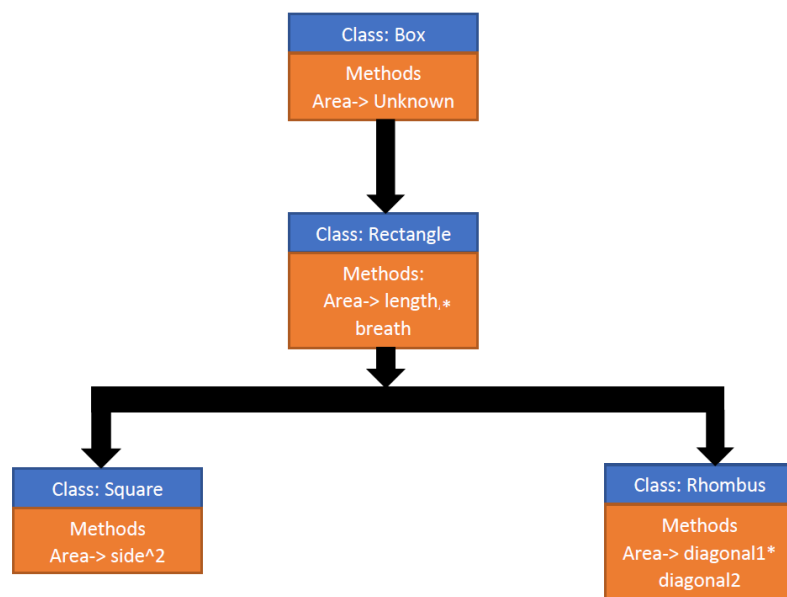
Time: 2:00 pm - 4:55 pm   **Date : 23/01/2019**

Instructions for submission

- Give meaningful comments to explain the functionality of each class and function used in your program. Comments and proper indentation carry credits.

- Create a separate directory for each question and give the name of the directory as
  A1_ < YourRollNo > Q < QuestionNo >.

- Make a zip file and give the name of the zip file as **A1_ < YourRollNo >**.

- Submit the zip file to the Moodle system.

- Submit your solution latest by **4:55 pm** on **23/01/2019**.

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1. Write a java program to find the factorial of a number.

2. Write a java program to display the prime numbers between two intervals.

3. Write a java program to display the following pattern:
   1
   2 3
   4 5 6
   7 8 9 10
   11 12 13 14 15
   16 17 18 19 20 21

4. Write a java program to sum the square of elements of an array.

5. Write a java program to implement following classes along with their methods mentioned below and constraints.

6. Write a Java program to implement a class Account having two overloaded constructors. The first constructor is used for initializing, name of account holder, account number, and initial account balance. The second constructor is used for initializing name of account holder, account number, addresses, type of account, and current balance. Account class has methods Deposit (), Withdraw (), and Get_Balance(). Create a AccessAccount class to access and use the objects of Account class.

7. Write a Java program to implement a superclass Data and a subclass NewData. Data class has two integer data fields data1 and data2. NewData class has two integer data fields data3 and data4. Initialize all the data fields. Create a Data class variable that references a NewData class object. Try to print all the four data fields using this object.