

**SWT 12031: Practical for Object-oriented Program**  
**Lab Sheet No: 04**  
**Class, Objects, Methods**

**Time:- 01.30 – 3.30 pm**

**Submission Due: 2020-02-09**

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**Exercise 01:**

1. Create a class called **ICT**. Within this class,
  - a. Define two variables namely **regno** and **indexno**.
  - b. Initialize **regno** to “SEU/IS/20/ICT/003” and **indexno** to “ICT 150”.
  - c. Create an object **exam**
  - d. Access the objects through the reference variable.
2. Modify the above program to bring the main method inside a separate class called **Student**.
  - a. Create an object **john**.
  - b. Access the objects through the reference variable.
3. Modify question 2 as per the following instructions:
  - a. Create a method called **insertStudentRecord()** inside the **Student** class to initialize the **regno** and **indexno**.
  - b. Create another method **displayStudentDetails()** inside **Student** class to display the student details.
  - c. Create another object **mich** inside **Student**.
  - d. Call the method **insertStudentRecord()** to enter student data and **displayStudentDetails()** method to display the details of the **Student**.

**Exercise 02:**

1. Create a class called **StateBank**. Within the class,
  - a. Create the variables **bankid**, **bankname** and **banksalary** (salary is a float value).
  - b. Create a method called **insertBankDetails()** to enter bank data.
  - c. Next, create another method **displayBankDetails ()** to display the bank details.
2. Within the same program, create another class **PrivateBank** with the main method.
  - a. Here, create three instances, **pb1**, **pb2** and **pb3**.
  - b. Call the method **insertPbBankDetails ()** to enter **PrivateBank** data and **displayPbBankDetails()** method to display the **PrivateBank** details.

**Exercise 03:**

1.
  - Create a class called **Rectangle**. Within the class,
    - I. Create the variables **length** and **width**.
    - II. Create a method called **insert()** to enter rectangle details.
    - III. Next, create another method **calculateArea()** to calculate the area of the given rectangle.
  - Within the same program, create another class **TestRectangle** with the main method.
    - I. Here, create two instances, **rect1** and **rect2**.
    - II. Call the method **insert()** to enter length and width values of rectangle and **calculateArea()** method to display the area of the rectangles.

### **Discussion**

- Class
- Object
- Method
- Keyword
- reference variable
- The different ways to create an object in Java