

# Assignment 1 – Objects, Classes and Inheritance

Work honestly and **Don't Copy** other's intellectual efforts. Plagiarized and late submitted solution **shall not** be considered.

**Every Student** should attempt the assignment individually. The Assignment carries solid **5 MARKS**.

Submit the source code file(s) **With your Name and Reg # in Next Lab** after allocation of the assignment.

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## Q 1 Classes and Objects: [ 2 + 4 + 2 + 2 = 10]

a) Write the code in JAVA language to create a class **Computer** having following specifications:

- Two data members — **Type** (String) and **ProcessingSpeed** (Integer).
- The **SetData** and **ShowData** methods to set and show values of the data members.
- A **copy constructor** to clone an existing object of the class.
- Now, in the main class, create an object of the **Computer** class and call the SetData and GetData methods.

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## Q 2 Classes and Inheritance: [ 4 + 4 + 2 = 10 ]

b) Derive two classes **Desktop** and **Laptop** from the **Computer** class:

- Add an additional data member **Location** (String) to the Desktop class and **Weight** (Integer) to the **Laptop** class.
- **Override** the **SetData** and **ShowData** methods in the two classes to process the additional data members.
- Now in the main class, create an object for Desktop and Laptop Classes and call the SetData() and ShowData functions for each of the object.

**“Practice Leads Towards Perfection”**