CSN-103: Fundamentals of Object Oriented Programming

Assignment 07

General Instructions:

a) Whenever required, use **Scanner** class to accept inputs for the user at the runtime.
b) To submit this assignment: Create a single .zip file containing all the source code (.java) files. Rename the zip as 07_xxxxxxx where xxxxxxx is your enrollment number.
c) Send the zip file to oop2019.iitr@gmail.com
d) Follow indentation while writing programs.
e) All submissions will be checked for Plagiarism. ANY ATTEMPT TO CHEAT WILL BE SEVERELY PENALIZED.

Programming Problems

1) Write a JAVA program that defines two interfaces viz., **First** and **Second**. In both interfaces, define one default method **Display()** which should print the name of the interface in which the method is defined. For example, **Display()** in interface **First** should print "Interface First" when called. Create a class **Third** which also defines a method **Display()** and the method should print "Class Third" when called. Finally create a class **FtoT** which should implement interfaces **First** and **Second**, and extend class **Third**. FtoT should define a method **PrintAll()** which on calling should execute the **Display()** of **First, Second** and **Third** in a sequence.
   Hint: User super keyword inside **PrintAll()** to call different versions of **Display()**

2) Create a class **Box** with three member variables **Length, Width,** and **Height**. Define a parameterized constructor which accepts three integers and initialize the variables **Length, Width,** and **Height**. Override **toString()** method of Object class such that calling println for any Box object **b** as follows:

   System.out.println(b);

   should print the values of member variables of object **b** as follows:

   Length = 10, Width = 20, Height = 30