**LIST OF PROGRAM 07/12/2020**

### Create a class 'Degree' having a method 'getDegree' that prints "I got a degree". It has two subclasses namely 'Undergraduate' and 'Postgraduate' each having a method with the same name that prints "I am an Undergraduate" and "I am a Postgraduate" respectively. Call the method by creating an object of each of the three classes.

1. A boy has his money deposited $1000, $1500 and $2000 in banks-Bank A, Bank B and Bank C respectively. We have to print the money deposited by him in a particular bank.  
   Create a class 'Bank' with a method 'getBalance' which returns 0. Make its three subclasses named 'BankA', 'BankB' and 'BankC' with a method with the same name 'getBalance' which returns the amount deposited in that particular bank. Call the method 'getBalance' by the object of each of the three banks.
2. A class has an integer data member 'i' and a method named 'printNum' to print thevalue of 'i'. Its subclass also has an integer data member 'j' and a method named 'printNum' to print the value of 'j'. Make an object of the subclass and use it to assign a value to 'i' and to 'j'. Now call the method 'printNum' by this object.
3. Suppose a class 'A' has a method to print "Parent". Its subclass 'B' also has a method with the same name to print "Child". Now call this method by the objects of the two classes. Also, call this method by an object of the parent class refering to the child class i.e.

A obj = new B()

1. All the banks operating in India are controlled by RBI. RBI has set a well defined guideline (e.g. minimum interest rate, minimum balance allowed, maximum withdrawal limit etc) which all banks must follow. For example, suppose RBI has set minimum interest rate applicable to a saving bank account to be 4% annually; however, banks are free to use 4% interest rate or to set any rates above it.

Write a JAVA program to implement bank functionality in the above scenario and demonstrate the polymorphism concept. Note: Create classes namely Customer, Account, RBI (Base Class) and few derived classes (SBI, ICICI, PNB etc). Assume and implement required member variables and functions in each class.

Hint:  
Class Customer  
{  
//Personal Details ...  
// Few functions ...  
}  
Class Account  
{  
// Account Detail ...  
// Few functions ...  
}  
Class RBI  
{  
Customer c; //hasA relationship  
Account a; //hasA relationship  
..  
Public double GetInterestRate() { }  
Public double GetWithdrawalLimit() { }  
}  
Class SBI: public RBI  
{  
//Use RBI functionality or define own functionality.  
}  
Class ICICI: public RBI  
{  
//Use RBI functionality or define own functionality.  
}