Session-4 Lab
(Solve any two problems)

Assignment-1.

● Create a BankAccount class that.

● BankAccount class should have three fields accoundHolderName (String), bankName(String), accountBalance(double).

● Create a constructor that takes account holder's name, bankname and initial balance.

● Add three methods to the interface - getBalance(), deposit() and withdraw().

● Implement all three methods.

● In the main method create three bank accounts withdifferent account holders names and ICICI, HDFC and SBI as banknames.

● Deposit and withdraw money for each account. Displaytheaccount balance.

Assignment-2.

● Write a Java program that demonstrates method overridingbycreating a superclass called Animal and two subclasses calledDogand Cat.

● The Animal class should have a method called makeSound(), whichsimply prints "The animal makes a sound".

● The Dog and Cat classes should override this method to print "TheCat/The dog meows/barks" respectively.

● The program should allow the user to create and display objects of each class.

Assignment-3. (Harder problem).

● Create an enum BankName.

● Create a constructor of the enum which takes a parameter interestRate of type double.

● Create the enum constant -ICICI (6.3), HDFC(5.8), SBI (6.0).

● Now in the BankAccount class of previous exercise, modifythetype of bankName to enum BankName. Change constructor accordingly.

● Modify the instantiation of a new Account accordingly. (Example: new

BankAccount(12000, "Harry", BankName.SBI);

● Print the bankName for each account.

● Add a method which calculates total interest - calculateInterest(int numberOfYears). The interest will be calculated basedoninterest rate and available balance. Print total interest. [Hints: double totalInterest = bankName.interestRate* numberOfYears * accountBalance;].