

Session-4 Lab

(Complete at least two assignments)

Assignment-1.

- Create a BankAccount class that
- BankAccount class should have three fields
accountHolderName (String), bankName(String),
accountBalance(double).
- Create a constructor that takes account holder's name, bank
name 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 with different
account holders names and ICICI, HDFC and SBI as bank
names.
- Deposit and withdraw money for each account. Display the
account balance.

Assignment-2.

- Write a Java program that demonstrates method overriding by
creating a superclass called Animal and two subclasses called Dog
and Cat.
- The Animal class should have a method called makeSound(), which
simply 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, modify the type 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 based on interest rate and available balance. Print total interest.

[Hints: double totalInterest = bankName.interestRate*
numberOfYears * accountBalance;]