LAB-5

```
import java.util.scanner
class Account {
    private string customer_name;
    private int acc_no;
    protected double bbalance;
    public Account (string customer_name,
            int acc_no, double balance) {
        this.customer_name = customer_name;
        this.acc_no = acc_no;
        this.balance = balance;
    }

public double getBalance() {
        return balance;
    }

public void deposit (double amount) {
    if (amount > 0) {
        balance += amount;
        System.out.println ("Deposited:" + amount);
    }
    else {
        system.out.println ("Deposited amount
                must be positive.");
    }
}
```

```
public void withdraw(double amount){
    if (amount <= getBalance()){
        balance -= amount;
        System.out.println("withdrew: " + amount
            " balance is: " + balance);
        }
    else {
        System.out.println("Insufficient funds!!");
    }
public void displayBalance(){
    System.out.println("Current Balance: "+
        balance);
    }
}

class SavingsAccount extends Account{
    private double intrestRate;
    public SavingsAccount(String customerName
int accountNumber, double initialBalance,
    double intrestRate){
    this.intrestRate = intrestRate;
}
```

```
public void computeAndDepositInterest(){
    double interest = getBalance()* interestRate /100;
    deposit(interest);
  }
}

class CurrentAccount extends Account{
  private double minimumBalance;
  private double serviceCharge;
  public CurrentAccount(String customerName,
    int accountNumber, double initialBalance,
    double minimumBalance, double serviceCharge
  ){
    super(customerName, accountNumber,
    initialBalance);
    this.minimumBalance = minimumBalance;
    this.serviceCharge = serviceCharge;
  }

  public void checkMinimumBalance(){
    if (getBalance() < minimumBalance){
      System.out.println("Balance is below
                          minimum");
      balance -= serviceCharge;
      System.out.println("Deducted service
```

```
        charge:" + serviceCharge);
System.out.println("Balance after deduction is
                    + balance);
    }
  }
}
```

```
public class Bank{
    public static void main(String[] args){
      Scanner sc = new Scanner(System.in);
    System.out.println("enter customer name:");
      String name = sc.nextLine();
        sop("enter accno:");
        int acc_no = sc.nextInt();
        sop("enter initial balance:");
        double balance = sc.nextDouble();
        sop("enter interest rate:");
        double interest_rate = sc.nextDouble();
        sop("enter service charge:");
        double service_charge = sc.nextDouble();
        sop("Enter choice:\n 1. current acc \n
            2. savings acc");
        int ch = sc.nextInt();
        sop("customer name is:"+ name +
```

```
"\n Account number : " + acc_no + "\n Afreen Anz -
                                    1BM23CS016");
switch(ch){
  case(1) :
    sop("account is current type");
  current Account ca = new CurrentAccount (
          name, acc_no, balance, minimum_
          balance, service_charge);
  .do{
      sop ("enter choice: \n 1. deposit \n 2. withdraw
        \n 3. display balance");
    int c = sc.nextInt();
    ca.checkMinimumBalance();
    if (c==1){
      sop ("enter amount to be deposited:");
      double amt = sc.nextDouble();
      ca.deposit(amt); }
    else if (c==2){
      sop("enter amount to withdraw:");
      double amt = sc.nextDouble();
      ca.withdraw(amt); }
    else if (c==3){
        ca.displayBalance(); }
    else system.exit(0);
  } while (true);
```

```
case(2):
    Sop("account is savings type");
    SavingsAccount sa = new Savings Account(
        name, acc-no, balance, inlrust-rate);
    do{
        sop("enter choice:\n 1. deposit \n2. withdraw
            3. display balance");
        int c1 = sc.nextInt();
        if (c1==1){
            sop("enter amount to be deposited:
            double amt = sc.nextDouble();
            sa. deposit(amt);}
        else if (c1==2){
            sop("enter amount to withdraw:");
            double amt = sc.nextDouble();
            sa.withdraw(amt);}
        else if (c1==3){
            sa.computeAndDepositInlrest();
            sa. displayBalance();}
        else{
            System.exit(0);
        }
    } while(true);
}
}
```

o/p enter customer name: Afreen
enter acc no: 12345
enter initial balance : 300000
enter minm balance: 5000
enter interest rate : 12
enter service charge : 10

enter choice :
1. Current acc
2 savings acc
2
Customer name is: Afreen
Account number : 12345
Account is savings type
enter choice:
1. deposit
2. withdraw
3. display balance
1
enter amount to ~~withdraw~~ be deposited:
1000
Deposited 1000.0

enter choice:
1. deposit
2. withdraw
3. display balance
2

enter amount to withdraw:
5000
withdrew: 5000.0 balance is: 6000.0

enter choice:
1. deposit
2. withdraw
3. display balance
3

Current balance: 6000.0

Seen
21
20/11/24