Lab Program - 5

```
import java.util.Scanner;
class Account
{
    String name;
    String accno;
    char acctype;

    Scanner ss = new Scanner(System.in);
    Account()
    {
        name = "";
        accno = "";
    }
    void accept()
    {
        System.out.println("Enter ACCOUNT DETAILS");
        System.out.println("Enter the NAME :");
        name = ss.next();
        System.out.println("Enter Account Number:");
        accno = ss.next();
        System.out.println("Enter the Account Type
                (S = Savings or C - Current)");
        acctype = ss.next().charAt(0);
    }
}

class Curr_acct extends Account
{
    double ci, deposit, withdraw, amt, balance;
    int ch;
    double time, r = 0.05;
    Scanner ss = new Scanner(System.in);
```

```
void acceptch()
{
  System.out.println("Enter account BALANCE:");
  balance = ss.nextDouble();
  do
  {
    System.out.println("\n1. Deposit Money");
    System.out.println("2. Withdraw Money");
    System.out.println("3. EXIT");
    System.out.println("\nEnter your choice:");
    ch = ss.nextInt();
    if (ch==1)
      depositamt();
    else if (ch==2)
      withdrawamt();
    else if (ch==3)
      break;
    else
      System.out.println("Invalid Choice");
  }
  while(ch!=3);
  System.out.println("Enter the time (in years)
    for which interest has to calculated:");
  time = ss.nextDouble();
  displaydet();
}
void depositamt()
{
  System.out.println("Enter the amt you
    want to DEPOSIT.");
  deposit = ss.nextDouble();
  balance += deposit;
}
```

```
void withdrawamt()
{
    System.out.println("Enter the amount
                you want to WITHDRAW ");
    withdraw = ss.nextDouble();
    balance -= withdraw;
}

void displaydet()
{
    amt = balance * Math.pow((1+r), time);
    System.out.printf("YOUR UPDATED BALANCE:
                %0.3f", amt);
}
}

class Cust_act extends Account
{
double balance;
double deposit;
double withdraw;
double amt;
int ch;
double min_bal = 1000;
int penalty = 25;
Scanner ss = new Scanner(System.in);

void acceptch()
{
    System.out.println("Enter the account BALANCE:");
    balance = ss.nextDouble();
    do
    {
        System.out.println("\n1. Deposit Money");
        System.out.println("2. Withdraw Money");
```

```
        System.out.println("3. EXIT");
        System.out.println("Enter your choice");
        ch = ss.nextInt();
        if (ch == 1)
          deposit amt();
        else if (ch == 2)
          withdrawamt();
        else if (ch == 3)
          break;
        else
          System.out.println("Invalid Choice!");
    }
    while (ch != 3);
    displaydet();
}}
    void depositamt()
    {
        System.out.println("Enter the amt you
                want to DEPOSIT:");
        deposit = ss.nextDouble();
        balance += deposit;
    }
    void withdrawalamt()
    {
        System.out.println("Enter the amt you
                want to WITHDRAW:");
        withdraw = ss.nextDouble();
        balance -= withdraw;
    }

    void displaydet()
    {
        System.out.println("YOUR
        if (balance < min-bal)
        {
```

```
            System.out.println(" Your balance is less
                than the minimum balance required ");
            System.out.println(" So, a Penalty of Rs. "
                + penalty + " has been imposed! ");
            balance -= penalty;
        }
        System.out.printf(" Your updated balance:
                %0.3f\n ", balance);
        System.out.println(" Cheque Book facility is
                provided ");
    }
}

class Bank
{
    public static void main(String args[])
    {
        Account a[] = new Account();
        a.accept();
        if (a.acctype == 'S')
        {
            Sav_acct s = new Sav_acct();
            s.acceptch();
        }
        else if (a.acctype == 'C')
        {
            Curr_acct c = new Curr_Acct();
            c.acceptch();
        }
        else
            System.out.println(" Enter a VALID
                account type ");
    }
}
```