LAB 5

```
import java.util.*;
import java.lang.*;
class Account {
    String name, abc;
    int accNO;
    char accType;
    double bal = 0;
    double deposit;
    Scanner in = new Scanner (System.in);

    void in-data() {
      System.out.println("Enter your account type (S/C): ");
      abc = in.nextLine();
      accType = abc.charAt(0);
    }

    void deposit() {
      System.out.println("Enter an amount to deposit : ");
      deposit = in.nextDouble();
      bal += deposit;
      System.out.println("Balance has been updated.");
    }

    void view-balance() {
       System.out.println("Balance = " + bal);
    }

    public static void main (String[] args) {
      Scanner s = new Scanner (System.in);
      int x;
      Account a1 = new Account();
```

```
a1.in-data();
if (a1.accType == 'C' || a1.accType == 'c') {
  Current a2 = new Current();
  do {
   System.out.println("WELCOME TO CURRENT ACC.");
   System.out.println("1. Deposit");
   System.out.println("2. Check Balance");
   System.out.println("3. Issue Check");
   System.out.println("4. Exit");
   System.out.println("Enter your choice:");
   x= in.nextInt();
   switch (x) {
     case 1: a2.deposit();
     break;
     case 2: a2.check-balance();
      break;
      case 3: a2.issue-check();
      break;
      case 4; System.exit(0);
      break;
      default : System.out.println("ERROR! INVALID CHOICE");
    }
  } while ( x<=4 && x>=1);
}
  else if (a1.accType == 'S' || a1.accType == 's') {
    Savings a3 = new savings();
    do {
    System.out.println("WELCOME TO SAVINGS ACC");
    System.out.println("1. Deposit");
    System.out.println("2. View Balance");
    System.out.println("3. Withdraw");
    System.out.println("4. Calculate compound interest");
```

```
System.out.println("5. Exit");
System.out.println("Enter your choice");
x = s.nextInt();
switch (x) {
  case 1: a3.deposit();
  break;
  case 2: a3.view-balance();
  break;
  case 3: a3.withdraw-balance();
  break;
  case 4: a3.compute-CI();
  break;
  case 5: System.exit(0);
  break;
  default: System.out.println("ERROR! INVALID CHOICE.");
  }
 } while (x <= 5 && x >= 1);
}
 else System.out.println("INVALID ACCOUNT TYPE!");
 }
}
class Current extends Account {
 Current() {
  System.out.println("Enter your name: ");
  name = in.nextLine();
  System.out.println("Enter account no. : ");
  accNo = in.nextInt();
  deposit();
 }
 double chq-amount;
```

```
void issue_~~check~~cheque() {
    System.out.println(" Enter amount for which cheque is to be issued ");
    chq_amount. = in.nextDouble();
    if (chq_amount > bal) {
        System.out.println (" ERROR! Insufficient balance in account ");
    }
    else {
        bal -= chq_amount;
        System.out.println(" Cheque has been issued successfully ");
    }
}

~~else~~ void check_balance() {
    if (bal < 1000) {
        System.out.println(" Current available balance is lesser than
        min required balance. ");
        bal -= 100;
        System.out.println(" Service charge of Rs. 100 has been
        deducted from your balance. ");
    }
    view_balance();
}
}

class Savings extends ~~Am~~ Account {
    double CI, withdrawal_amount, time;
    Savings() {
        System.out.println (" Enter your name: ");
        name= in.nextLine();
        System.out.println(" Enter your account no.: ");
        accNo = in.nextInt();
        deposit(); }
```

```
void compute_CI() {
    System.out.println(" Enter the time period: ");
    time = in.nextInt();
    CI = (bal * (Math.pow(6, time))) - bal;
    System.out.println(" CI has been deposited ");
}

void withdraw_balance() {
    System.out.println(" Enter the amount you want to withdraw: ");
    withdrawal_amount = in.nextDouble();
    if (withdrawal_amount > bal) {
        System.out.println(" ERROR! THE ENTERED AMOUNT IS GREATER
        THAN THE AVAILABLE BALANCE ");
    }
    else {
        bal -= withdrawal_amount;
        System.out.println(" AMOUNT HAS BEEN SUCCESSFULLY
            WITHDRAWN");
    }
}
}
```