LAB-5.

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1BM19CS210

```
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 input_data() {
        System.out.println("Enter Account type (Savings or Current):");
        abc = in.nextLine();
        accType = abc.charAt(0);
    }

    void deposit() {
        System.out.println("Enter an amount to be deposited:");
        deposit = in.nextDouble();
        bal += deposit;
        System.out.println("Balance updated !! ");
    }
    void view_balance() {
        System.out.println("Balance is : " + bal);
    }
    public static void main(String[] args) {
        Scanner S = new Scanner(System.in);
        int x;
        Account a1 = new Account();
        a1.input_data();
        if(a1.accType == 'c' || a1.accType == 'C') {
            Current a2 = new Current();
```

```
do {
System.out.println("YOU HAVE CHOOSEN CURRENT ACCOUNT");
System.out.println("1.Deposit");
System.out.println("2. Check Balance");
System.out.println("3. Issue cheque");
System.out.println("4. Exit");
System.out.println("Enter your choice as 1 or 2 or 3 or 4:");
x= s.nextInt();
switch (x) {
    case 1:
        a2.deposit();
        break;
    case 2:
        a2.check_balance();
        break;
    case 3:
        a2.issue_cheque();
        break;
    case 4:
        system.exit(0);
        break;
    default:
        System.out.println("INVALID CHOICE");
}
} while (x<=4 && x>=1);
}else if(a1.accType == 's' || a1.accType == 'S') {

Savings a3= new Savings();

do {
System.out.println("YOU HAVE CHOOSEN SAVINGS ACCOUNT");
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 as 1 or 2 or 3 or 4");
x = s.nextInt();
```

```
Switch (x) {
   case 1:
      a3.deposit();
       break;
      case 2;
       a3. view_balone();
         break;
      case 3:
        a3.withdraw_balance();
         break;
      case 4;
        a3.compute_CI();
         break;
      case 5:
        System.exit(0);
         break;
       default:
        System.out.println("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 your account number :");
    accNo = in.nextInt();

    deposit();

}
 double cha_amount;
  void issue_cheque() {.
```

```
System.out.println("Enter the amount");
cha_amount = in.nextDouble();
if (cha_amount > bal) {
    System.out.println("ERROR Low balance");
} else {
    bal -= cha_amount;
    System.out.println("cheque issued has been suressful");
}
}
void check_balance() {
    if (bal < 1000) {
        System.out.println("available balance is lower than
                            threshhold limit.");
        bal -= 100;
        System.out.println("Servie charge: Rs100 is deducted");
    }
    view_balance();
}
}
class savings extends Account{
    double CI, withdrawal_amount, time;
    Savings() {
        System.out.println("Enter your name:");
        name = in.nextLine();
        System.out.println("Enter your account number:");
        accNo = in.nextInt();
        deposit();
    }
void compute_CI(){
    System.out.println("Enter time period:");
    time = in.nextInt();
    CI = bal * Math.pow(1+(0.08/12), 12*time) - bal;
    System.out.println("CI = " + CI);
```

```
bal += CI;
System.out.println("CI Deposited SUCCESSFULLY");
}
Void withdraw_balance() {
    System.out.println("Enter the amount to withdraw:");
    withdrawal_amount = in.nextDouble();
    if (withdrawal_ammount > bal) {
        System.out.println("ERROR your account doesnot have
        enough balance");
    } else {
        bal -= withdrawal_amount;
        System.out.println("Amoual withdraw success");
    }
}
}
```