

L A B 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.nextIntLine();
        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");  
    }  
}
```

```
void 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();  
        de posit();  
    }
```



```
void compute-CI() {
```

```
    System.out.println("Enter the time period: ");
```

```
    time = in.nextInt();
```

```
    CI = (bal * (Math.pow(1, time))) - bal;  
    CI = bal * Math.pow(1 + ((0.08)/12), 12 * 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");
```

```
    }
```

```
}
```

```
}
```