

## LAB 5

```
import java.util.Scanner ;
abstract class account{
    String accname,acctype;
    long accnum;
    double balance;
    final int minbal=1000;
    account(String name, long num, double bal, String type) {
        accname = name;
        accnum = num;
        balance = bal;
        acctype = type;
    }
    abstract void addBal(double amt);
    abstract void dispBal();
    abstract void withdraw(double amt);
}
class curr_acct extends account{
    curr_acct(String name, long num, double bal, String type) {
        super(name,num, bal,type);
        System.out.println("name: "+accname+"\naccnum: "+accnum+"\nbalance: "+balance+"\nacctype:
Current");
    }
    void addBal(double amount){
        balance = balance + amount;
    }
    void dispBal(){
        System.out.println("Your balance is: " + balance);
    }
    void withdraw(double amount){
        if(balance < amount){
            System.out.println("you dont have enough balance");
            System.out.println("balance is "+balance);
            return;
        }
        balance =balance - amount;
        System.out.println("balance = "+balance);
        if (balance < minbal) {
            System.out.println("penalty of RS."+(balance * 0.01)+" as balance is less than the minumun
needed ");
            balance = balance - balance * 0.01;
            System.out.println("current balance = "+ balance);
        }
    }
}
```

```

class Sav_acct extends account {
Sav_acct(String name, long num, double bal) {
    super(name, num, bal, "Savings");
    System.out.println("name: " + accname + "\taccno: " + accnum + "\tbal: " + bal + "\ttype: " +
acctype);
}

    void addBal(double amount){
        balance = balance + amount;
        interest();
    }

    void interest() {
        int t = 2;
        balance = balance*Math.pow(1+(0.2) , t);
    }

    void dispBal(){
        System.out.println("Your balance is: " + balance);
    }

    void withdraw(double amount){
        balance = balance - amount;
        System.out.println("balance = "+balance);

    }
}

```

```

public class Main
{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        curr_acct c = new curr_acct("jay",123456,3000.0,"Current");
        double amount;
        int flag= 0;
        while( flag == 0) {
            System.out.println("1:AddBal\n2:displayBal\n3:withdraw\n4:checkbook\n5:quit");
            int ch = sc.nextInt();
            switch (ch) {
                case 1:
                    System.out.println("enter amount to be added:");
                    amount = sc.nextDouble();
                    c.addBal(amount);
                    break;

                case 2:
                    c.dispBal();
                    break;
            }
        }
    }
}

```

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case 3:
    System.out.println("enter amount to be withdrawn:");
    amount = sc.nextDouble();
    c.withdraw(amount);
    break;
case 4:
    System.out.println("enter details \nenter name of the reciever:");
    String recname = sc.nextLine();
    recname = sc.nextLine();
    System.out.println("enter the amount to be sent:");
    double a = sc.nextDouble();
    if(a > c.balance)
    {
        System.out.println("you dont have enough balance");
    }
    else{
        System.out.println("Enter password");
        String p = sc.nextLine();
        p=sc.nextLine();
        System.out.println(" reciever : "+recname +"\namount sent is "+a);
        c.balance = c.balance - a;
    }
    System.out.println("balance = "+c.balance);

    break;

default:
    flag = 1;
}
}
Sav_acct s = new Sav_acct("jennie",500676, 7000);
flag = 0;
while(flag == 0){
    System.out.println("1:AddBal\n2:displayBal\n3:withdraw\n4:quit");
    int ch = sc.nextInt();
    switch (ch) {
        case 1:
            System.out.println("enter amt to be added:");
            amount = sc.nextDouble();
            s.addBal(amount);
            break;

        case 2:
            s.dispBal();
            break;

        case 3:

```

```
System.out.println("enter amt to be withdrawn:");
amount = sc.nextDouble();
s.withdraw(amount);
break;
```

```
default:
    flag =1;
```

```
}
```

```
}
```

```
}
```

```
}
```

```
name: jay
accnum: 123456
balance: 3000.0
acctype: Current
1:AddBal
2:displayBal
3:withdraw
4:checkbook
5:quit
1
enter amount to be added:
2000
1:AddBal
2:displayBal
3:withdraw
4:checkbook
5:quit
3
enter amount to be withdrawn:
1000
balance = 4000.0
1:AddBal
2:displayBal
3:withdraw
```

```
4:checkbook
5:quit
3
enter amount to be withdrawn:
3500
balance = 500.0
penalty of RS.5.0 as balance is less than the minumun needed
current balance = 495.0
1:AddBal
2:displayBal
3:withdraw
4:checkbook
5:quit
4
enter details
enter name of the reciever:
jay
enter the amount to be sent:
200
Enter password
12345
    reciever : jay
amount sent is 200.0
balance = 295.0
```

```
1:AddBal
2:displayBal
3:withdraw
4:checkbook
5:quit
5
name: jennie      accno: 500676    bal: 7000.0      type: Savings
1:AddBal
2:displayBal
3:withdraw
4:quit
1
enter amt to be added:
400
1:AddBal
2:displayBal
3:withdraw
4:quit
2
Your balance is: 10656.0
1:AddBal
2:displayBal
3:withdraw
4:quit

3
enter amt to be withdrawn:
1000
balance = 9656.0
1:AddBal
2:displayBal
3:withdraw
4:quit
4

...Program finished with exit code 0
Press ENTER to exit console.█
```