LAB 5 program – 2/11/2020

```
import java.util.Scanner;


abstract class Account {
    String cName, accType;
    long accNo;
    double bal;
    final double minBal = 1000.0;

    Account(String cName, long accNo, double bal, String
accType) {
        this.accNo = accNo;
        this.cName = cName;
        this.bal = bal;
        this.accType = accType;
    }

    abstract void addBal(double amt);
```

```
    abstract void dispBal();

    abstract void withBal(double amt);
}

class Curr_acct extends Account {
    Curr_acct(String cName, long accNo, double bal) {
        super(cName, accNo, bal, "Current");
        System.out.println("name: " + cName + "\taccno: " + accNo
+ "\tbal: " + bal + "\ttype: " + accType);
    }

    void addBal(double amt) {
        this.bal += amt;

    }

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

```
    }

    void withBal(double amt) {
        if (this.bal == 0 || amt > this.bal) {
          System.out.println("withdrawal not possible");
        }else{
       this.bal -= amt;
       checkBal();
        }
    }

    void checkBal() {
       if (this.bal < minBal) {
          this.bal -= this.bal * 0.02;
       }
    }
}
```

```
class Sav_acct extends Account {
    Sav_acct(String cName, long accNo, double bal) {
        super(cName, accNo, bal, "Savings");
        System.out.println("name: " + cName + "\taccno: " + accNo
+ "\tbal: " + bal + "\ttype: " + accType);
    }

    void addBal(double amt) {
        this.bal += amt;
        addIntr();
    }

    void addIntr() {
        this.bal += this.bal * 0.07;
    }

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

```
    void withBal(double amt) {
        if (this.bal == 0 || amt > this.bal) {
            System.out.println("withdrawal not possible");
        }else{
        this.bal -= amt;
        }

    }

}

class Account_test{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        Double amt;
        int flag = 0;
        while (flag == 0) {
```

```
        System.out.println("1:Current acc.\n2:Savings
acc.\ndefault:exit");
        int ch = sc.nextInt();
        String nam;
        long acno;
        double balan;
        switch (ch) {
           case 1:
              System.out.println("Enter name, acc no, initial
balance in order:");
              nam = sc.next();
              acno = sc.nextLong();
              balan = sc.nextDouble();
              Curr_acct c = new Curr_acct(nam, acno, balan);
              System.out.println("\nCurrent_acct\n");
              int flag1 = 0;

              while (flag1 == 0) {
```

```
System.out.println("1:Addamount\n2:displayBalance\n3:withdraw\ndefault:exit");
                int ch1 = sc.nextInt();
                switch (ch1) {
                   case 1:
                      System.out.println("enter amt to be added:");
                      amt = sc.nextDouble();
                      c.addBal(amt);
                      break;

                   case 2:
                      c.dispBal();
                      break;

                   case 3:
                      System.out.println("enter amt to be withdrawn:");
                      amt = sc.nextDouble();
```

```
                    c.withBal(amt);
                    break;


                default:
                    flag1 = 1;
                }
            }
            break;
        case 2:
            System.out.println("\nSavings_acct\n");
            System.out.println("Enter name, acc no, initial
balance in order:");
            nam = sc.next();
            acno = sc.nextLong();
            balan = sc.nextDouble();
            Sav_acct s = new Sav_acct(nam, acno, balan);
            int flag2 = 0;
            while (flag2 == 0) {
```

```
System.out.println("1:AddBal\n2:displayBal\n3:withdraw\ndefa
ult:exit");
                int ch2 = sc.nextInt();
                switch (ch2) {
                   case 1:
                      System.out.println("enter amt to be added:");
                      amt = sc.nextDouble();
                      s.addBal(amt);
                      break;

                   case 2:
                      s.dispBal();
                      break;

                   case 3:
                      System.out.println("enter amt to be
withdrawn:");
                      amt = sc.nextDouble();
```

```
                    s.withBal(amt);
                    break;

                default:
                    flag2 = 1;
                }

            }
            break;
        default:
            flag = 1;
        }
    }
  }
}
```

```
C:\Users\admin\Documents>java Account_test
1:Current acc.
2:Savings acc.
default:exit
2

Savings_acct

Enter name, acc no, initial balance in order:
Sharat 12
3000
name: Sharat    accno: 12       bal: 3000.0     type: Savings
1:AddBal
2:displayBal
3:withdraw
default:exit
1
enter amt to be added:
4000
1:AddBal
2:displayBal
3:withdraw
default:exit
3
```

```
3:withdraw
default:exit
3
enter amt to be withdrawn:
200
1:AddBal
2:displayBal
3:withdraw
default:exit
3
```