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PE-20

1032201304

problem statement- 8 (banking system)

code

```
package pracexam;
```

```
import java.util.*;
```

```
class mininterest extends Exception{
```

```
    mininterest(){
```

```
        super("interest rate is low");
```

```
    }
```

```
}
```

```
interface Rbi{
```

```
    int mininterestrates=4;
```

```
    long minimumbalance=300000,
```

```
    maxwithdrawallimit=20000;
```

```
    void checkminbalance();
```

```
    void checkmaxwithdrawallimit();
```

```
}
```

```
interface Account extends Rbi{
```

```
    String bankname="";
```

```
    long accno= 00000000;
```

```
    long balance=0;
```

```
        long withdrawalamount=0;

    }

    class SBI implements Account{

        int interestRate;

        String name;

        long accountno;

        long balance;

        long withdrawalamount;

        SBI(int Intrate,String Name,long accno,long balance,long withdrawalamount){

            this.interestRate=Intrate;

            this.name=Name;

            this.accountno= accno;

            this.balance=balance;

            this.withdrawalamount=withdrawalamount;

            checkmaxwithdrawallimit();

        }

        public void printDetails() {

            System.out.println("bankname:"+bankname);

            System.out.println("name of account holder:"+name);

            System.out.println("accountno:"+accountno);

            System.out.println("withdrawal amont:"+withdrawalamount);

            System.out.println("interest rate:"+interestRate);

        }

    }
```

```

public void checkminbalance() {
    try {
        if(balance<minimumbalance) {
            throw new Exception("current blanace is less than minimum balance");
        }
    }catch(Exception e) {
        System.out.println(e);
    }
}

public void
checkmaxwithdrawallimit() {
    try {
        if (withdrawalamount>maxwithdrawallimit) {

        }

    }catch (Exception e) {
        System.out.println(e);
    }
}

}

}

class PNB implements Account{
    String bankname="Pnb";
    int interestRate;
    String name;
    long accountno;
    long balance;
    long withdrawalamount;

```

```

PNB(int Intrate,String Name,long accno,long balance,long withdrawalamount){

    this.interestRate=Intrate;

    this.name=Name;

    this.accountno= accno;

    this.balance=balance;

    this.withdrawalamount=withdrawalamount;


    checkmaxwithdrawallimit();

}

public void printDetails() {

    System.out.println("bankname:"+bankname);

        System.out.println("name of account holder:"+name);

    System.out.println("accountno:"+accountno);

    System.out.println("withdrawal amont:"+withdrawalamount);

    System.out.println("interest rate:"+interestRate);

}

```

```

public void checkminbalance() {

    try {

        if(balance<minimumbalance) {

            throw new Exception("current blanace is less than minimum balance");

        }

    }catch(Exception e) {

```

```

        System.out.println(e);
    }
}

public void
checkmaxwithdrawallimit() {
    try {
        if (withdrawalamount>maxwithdrawallimit) {

        }
    }catch (Exception e) {
        System.out.println(e);
    }
}

}

class ICICI implements Account{
    String bankname="ICICI";
    int interestRate;
    String name;
    long accountno;
    long balance;
    long withdrawalamount;

    ICICI(int Intrate,String Name,long accno,long balance,long withdrawalamount){
        this.interestRate=Intrate;
        this.name=Name;
        this.accountno= accno;
        this.balance=balance;
        this.withdrawalamount=withdrawalamount;
    }
}

```

```

        checkmaxwithdrawallimit();

    }

    public void printDetails() {
        System.out.println("bankname:"+bankname);
        System.out.println("name of account holder:"+name);
        System.out.println("accountno:"+accountno);
        System.out.println("withdrawal amont:"+withdrawalamount);
        System.out.println("interest rate:"+interestRate);
    }

}

public void checkminbalance() {
    try {
        if(balance<minimumbalance) {
            throw new Exception("current blanace is less than minimum balance");
        }
    }catch(Exception e) {
        System.out.println(e);
    }
}

public void
checkmaxwithdrawallimit() {
    try {
        if (withdrawalamount>maxwithdrawallimit) {

        }
    }
}

```

```

        }catch (Exception e) {
            System.out.println(e);
        }
    }
}

public class bank{

    public static void main(String[]args) {
        SBI account=new SBI(2,"Ankit",1032201304,1000,500000);
        account.printDetails();
        System.out.println("\n\n");
        PNB acc=new PNB(2,"shreyas",1032201305,1000,400000);
        acc.printDetails();
        System.out.println("\n\n");
        ICICI acc1=new ICICI(2,"kaustubh",1032201307,1000,600000);
        acc1.printDetails();
        System.out.println("\n\n");
    }

}

```

output-

