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BATCH : B2

Q1:

Consider a scenario where Bank is a class that provides functionality to get the rate of interest and withdrawal amount. However, the rate of interest varies according to banks varies and min. balance as per bank is different. For example,

1. ICICI-7% rate of interest.
2. AXIS- 9% rate of interest.
3. SBI 8% rate of interest.

SBI---MIN. BALANCE required 100

ICICI--MIN. BALANCE required 500

AXIS---MIN. BALANCE required 300

If the amount to withdraw makes available balance less than min. the required balance then print " you don't have enough balance to withdraw"

Print the final amount Ayush will get from that particular bank by applying the rate of interest and period.

Code:

```
import java.util.*;
class Bank{
    int amt,w_amt;
    int per,mbal;
    float roi;
    public Bank( int per,int amt){
        this.per=per;
        this.mbal=mbal;
        this.roi=roi;
        this.amt=amt;
    }
    void RateOfInterest(){

    }
    void Withdraw(){
```

```

    }
}
class ICICI extends Bank{
    Scanner sc= new Scanner(System.in);
    public ICICI(int per,int amt) {
        super(per,amt);
        this.per=per;
        this.mbal=500;
        this.roi=0.07f;
    }
    @Override
    void RateOfInterest() {
        this.amt+=this.amt*(1+this.roi *
this.per);
        System.out.println("Your total amount
is rupees: "+this.amt);
    }
    @Override
    void Withdraw() {
        System.out.println("Enter the amount
you want to withdraw:");
        float w_amt= sc.nextFloat();
        this.amt-=w_amt;
        if((this.amt>=this.mbal) &&
(this.amt>w_amt)) {
            System.out.println("You have
succesfully made a withdrawal of rupees
:"+w_amt);
            System.out.println("Your remaining
balance is rupees :"+ this.amt);
        }
    }
}

class SBI extends Bank {
    Scanner sc = new Scanner(System.in);

    public SBI(int per, int amt) {

```

```

        super(per, amt);
        this.per = per;
        this.mbal = 100;
        this.roi = 0.08f;
    }

    @Override
    void RateOfInterest() {
        this.amt += this.amt * (1 + this.roi *
this.per);
        System.out.println("Your total amount
is rupees: " + this.amt);
    }

    @Override
    void Withdraw() {
        System.out.println("Enter the amount
you want to withdraw:");
        float w_amt = sc.nextFloat();
        this.amt -= w_amt;
        if ((this.amt >= this.mbal) &&
(this.amt > w_amt)) {
            System.out.println("You have
succesfully made a withdrawal of rupees :" +
w_amt);
            System.out.println("Your remaining
balance is rupees :" + this.amt);
        }
    }
}

class Axis extends Bank {
    Scanner sc = new Scanner(System.in);

    public Axis(int per, int amt) {
        super(per, amt);
        this.per = per;
        this.mbal = 300;
    }
}

```

```

        this.roi = 0.09f;
    }

    @Override
    void RateOfInterest() {
        this.amt += this.amt * (1 + this.roi *
this.per);
        System.out.println("Your total amount
after applying interest is rupees: " +
this.amt);
    }

    @Override
    void Withdraw() {
        System.out.println("Enter the amount
you want to withdraw:");
        float w_amt = sc.nextFloat();
        this.amt -= w_amt;
        if ((this.amt >= this.mbal) &&
(this.amt > w_amt)) {
            System.out.println("You have
succesfully made a withdrawal of rupees :" +
w_amt);
            System.out.println("Your remaining
balance is rupees :" + this.amt);
        }
        else if ((this.amt >= this.mbal) ||
(this.amt > w_amt) ) {
            System.out.println("Withdrawal
unsuccesfull");
        }
    }
}

public class exp6a2{
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
    }
}

```

```
        System.out.println("Enter your  
choice:");  
        System.out.println("1.ICICI BANK");  
        System.out.println("2.SBI BANK");  
        System.out.println("3.AXIS BANK");  
        int var=sc.nextInt();  
        switch (var) {  
            case 1 -> {  
                System.out.println("Enter the  
period and amount of ICICI Bank:");  
                ICICI i = new  
ICICI(sc.nextInt(), sc.nextInt());  
                i.Withdraw();  
                i.RateOfInterest();  
            }  
            case 2 -> {  
                System.out.println("Enter the  
period and amount of SBI Bank:");  
                SBI s = new SBI(sc.nextInt(),  
sc.nextInt());  
                s.Withdraw();  
                s.RateOfInterest();  
            }  
            case 3 -> {  
                System.out.println("Enter the  
period and amount of Axis Bank:");  
                Axis a = new Axis(sc.nextInt(),  
sc.nextInt());  
                a.Withdraw();  
                a.RateOfInterest();  
            }  
            default -> {  
                System.out.println("Invalid  
input!");  
            }  
        }  
    }  
}
```

```
}  
    }  
}  
}
```

Output:

```
exp6a2 ×  
"C:\Program Files\Java\jdk-18.0.1\bin\java.exe" "-javaagent:C:\Pro  
Enter your choice:  
1.ICICI BANK  
2.SBI BANK  
3.AXIS BANK  
2  
Enter the period and amount of SBI Bank:  
5 1290  
Enter the amount you want to withdraw:  
345  
You have succesfully made a withdrawal of rupees :345.0  
Your remaining balance is rupees :945  
Your total amount is rupees: 2268
```