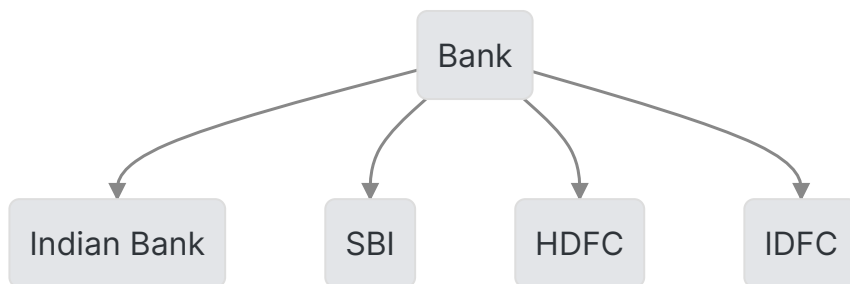


Problem Statement:

The list of banks and their interest rates are specified in the below table

Name of the Bank	Interest Rate
Indian Bank	8%
SBI	7%
HDFC	9.5%
IDFC	9%

Here Bank is an abstract base class(ABC).



Bank

- `getRateOfInterest()`

All objects must implement this function and return the rate of interest from the above table

This *getRateOfInterest* is from our Abstract Base Class Bank.

Code:

NOTE: `@Override` is written as a best practice.

Bank Abstract Class:

```
public abstract class Bank {  
    public abstract double getInterestRate();  
}
```

Indian Bank Class:

```
class IndianBank extends Bank {  
    double interestRate = 8;  
    String name = "Indian Bank ";  
  
    @Override  
    public double getInterestRate() {  
        System.out.print(name);  
        return interestRate;  
    }  
}
```

SBI Class:

```
class SBI extends Bank {  
    double interestRate = 7;  
    String name = "SBI ";  
  
    @Override  
    public double getInterestRate() {  
        System.out.print(name);  
        return interestRate;  
    }  
}
```

HDFC Class:

```
class HDFC extends Bank {  
    double interestRate = 9.5;  
    String name = "HDFC ";  
  
    @Override  
    public double getInterestRate() {  
        System.out.print(name);  
        return interestRate;  
    }  
}
```

IDFC Class:

```
class IDFC extends Bank {
    double interestRate = 9;
    String name = "IDFC ";

    @Override
    public double getInterestRate() {
        System.out.print(name);
        return interestRate;
    }
}
```

Test Bank class:

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.List;

public class TestBank {

    public static void main(String[] args) {
        // creating a list of banks to iterate
        // and print interestRate
        List<Bank> banks = new ArrayList<Bank>();

        // adding different banks
        Collections.addAll(banks,
            new IndianBank(), new SBI(), new HDFC(), new
IDFC());

        // iterate over banks list and print interestRate
        for (Bank bank : banks) {
            System.out.println(bank.getInterestRate() + "%");
        }
    }
}
```

Output:

```
g\Code\User\workspaceStorage\f77a834e7629e99ad7d7fa6e35319ecc\redhat.java\jdt_ws\Class_7513acaf\bin' 'TestBank'  
Indian Bank 8.0%  
SBI 7.0%  
HDFC 9.5%  
IDFC 9.0%  
PS E:\Sarath\java\Class>
```