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**Overloading - Payment**

With all the software systems that are being built, one of the widely used utilities in the financial sector is payments through various channels. The widely used channels are OnlineBanking, CreditCard and Wallet. The banks generate revenue by charging a small margin as part of the usage. Create a class called PaymentUtil. Overload a method “makePayment” as given below in the specification and calculate the total payment amount.

Create a class named as **PaymentUtil**, which contains following Overload methods,

|  |  |  |
| --- | --- | --- |
| **No** | **Method Name** | **Method Description** |
| 1 | public Double makePayment(Map<String,Float> bankTax,String bankName,Double amount) | This method calculates the total amount (amount + service tax amount). Here the tax percent gets varied depending on the bank. Fetch the corresponding service tax from a map collection by bank name. Map<String bankName, Float serviceTax> This map is prefilled. Only banks present in the map would be part of input. |
| 2 | public Double makePayment(Double amount) | This method calculates the total amount (include service tax and value added tax(VAT). First, calculate the service tax amount and then calculate the VAT amount. [ VAT % is applied on total amount+service tax ] |
| 3 | public Double makePayment(Double amount, Float discountPercent) | This method calculates the total amount, which is a discount from the amount with parameterized discount percentage. |

Create the class named as **Main**, which contains the main method. Input and output operations will be done in the main method.  
It calls various methods in PaymentUtil class to perform the task.  
  
The following data will be placed inside the static block in the **Main** class

onlineBankingMap.put("ICICI", 4.2f);

onlineBankingMap.put("IBRD", 3f);

onlineBankingMap.put("IFC", 4.9f);

onlineBankingMap.put("HSBC", 3.9f);  
  
That data will provide in template code.

**Problem Specification:**  
Overload a method “makePayment” as given in the specification and calculate the total payment amount.  
The bank name is case insensitive.  
The service tax for credit card is 5.2%.  
The VAT for the credit card is 2.3%.  
The discount  percentege for Wallet is 20.2%.  
  
**Input and Output format:**  
Refer Sample Input and Output.  
  
**Sample Input and Output:**

1. Online banking

2. Credit card

3. Wallet

Enter the choice:

**1**

Enter the user name:

**ICICI74484**

Enter the password:

**Mu7485**

Enter the amount:

**12560**

Enter the bank name:

**icici**

Total amount(Inclusive of Service Tax): 13087.52  
  
**Sample Input and Output 2:**

1. Online banking

2. Credit card

3. Wallet

Enter the choice:

**2**

Enter the account number:

**8458 9665 7485 2256**

Enter the pin:

**8451**

Enter the amount:

**16300**

Total amount(Inclusive of Service Tax and VAT): 17541.99  
  
Sample Input and Output 3:

1. Online banking

2. Credit card

3. Wallet

Enter the choice:

**3**

Enter the user name:

**HSBC7457**

Enter the password:

**Yu67488**

Enter the amount:

**28500**

Discounted amount: 22743.00