# Fee Insights(---RETIRED---)

**Grade settings**: Maximum grade: 100

Disable external file upload, paste and drop external content: Yes

**Based on**: Fee Insights(---RETIRED---)

Run: Yes Evaluate: Yes Automatic grade: Yes

As a Fee Insights employee, you were tasked with developing a new service called the platform fee calculator. This service was important for the company because it would allow clients to quickly and easily calculate the fees associated with different platforms, which would help them make informed decisions about which platforms to use for their businesses.

As a software developer, help them put the requirements into practice.

## **Component Specification: Transaction**

Type(Class)	Attributes	Responsibilities
Transaction	String mobileNumber	
	String bankName	Necessary Getters, setters, no- argument and 5-argument constructor are provided as a part of the code skeleton.
	String ifscCode	
	String platform	
	double amount	

# Functional Requirement 1: Extract the details of the Transaction and create an object of the Transaction class.

Type(Class)	Attributes	Responsibilities
UserInterface	public static Transaction extractDetails(String transactionDetails)	This method accepts <b>transactiondetails</b> separated by the colon as an argument and extracts the properties of the <b>Transaction</b> from the argument. Set these values to the <b>Transaction</b> object and return the object.

# Functional Requirement 2: Calculate the platform fee for the number of transactions.

Type(Class)	Class) Attributes Responsibilities		
		This method is used to calculate the platform fee for the transactions based on the ifscCode, platform and amount.	
	public double <b>calculatePlatformFee</b> ()	and amount.  The first four characters of a valid Ifsc code should be capital letters (A-Z), and the following seven characters must be either uppercase letters (A-Z) or numbers (0-9).  Example: ASFG2385728  kindly refer below table for the fee percentage based on platform and amount.  Condition:  The platform is case-Insensitive.  If the amount is less than or equal to zero and greater than 100000 return - 1.  If the platform doesn't	
		match the platform mentioned table below return -1.  If the ifscCode does not match the validation criteria return -1.	

Fee percentages are based on platform and amount.

Platform	Amount>0 Amount<=10000	Amount>10000 Amount<=50000	Amount>50000 Amount<=100000
Gpay	2%	5%	8%
PayTM	1%	3%	6%
PhonePe	3%	4%	7%

## Formula to Calculate platform Fee

Platform Fee = (amount\*FeePercentage)/100

### for example,

Let the platform be phonepe, the amount be 5000,

then Platform Fee = (5000\*3)/100=150.0

The main method in the UserInterface class is excluded from evaluation. You are free to write your own code in the main method to invoke the business methods to check its correctness.

#### Note:

- In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the rest of the text represents the output.
- Ensure to follow the object-oriented specifications provided in the question
- Ensure to provide the names for classes, attributes, and methods as specified in the question.
- Adhere to the code template, if provided.

### Sample Input / Output 1

Enter the details

9897456321:AxisBank:ANDB0145456:Gpay:8000

Mobile Number: 9897456321

Bank Name: AxisBank

IFSC Code: ANDB0145456

Platform: Gpay

Amount: 8000.0

Platform Fee: Rs. 160.0

## Sample Input / Output 2

Enter the details

9874561234:SBI:SBI4567897:PhonePe:5000

Invalid Transaction details

[Explanation: Invalid IFSC code]

# Sample Input / Output 3

Enter the details

7894589689:AndraBank:ANDB0456784:PayTM:-9000

**Invalid Transaction details** 

[Explanation: Amount is negative]

## Sample Input / Output 4

Enter the details

8978969878:StateBank:SBIN7097856:sling:50000

Invalid Transaction details

[Explanation: Invalid Platform]





