

## Exercise: Instructions

**Background:** Mr. Hathodawala has loan offers from three banks and he wants to choose the one based on key insights.

**Task:** Open the 'loan\_repayment' excel file. It contains two tables. 'Loan Details' table contains the offer from all 3 banks.

Loan Details			
Bank	Left Join Bank	Y Axis Bank	CBI Bank
Loan Amount	₹ 1,500,000.00	₹ 1,500,000.00	₹ 1,500,000.00
Annunal Interest Rate	15.00%	12.50%	11.00%
Loan Period in years	5	8	10

You need to create the formulas for loan summary which contains three insights

Loan Summary			
Monthly Payment (EMI)			
Total cost of loan			
Total Interest Amount			

Below are the hints to create the insights.

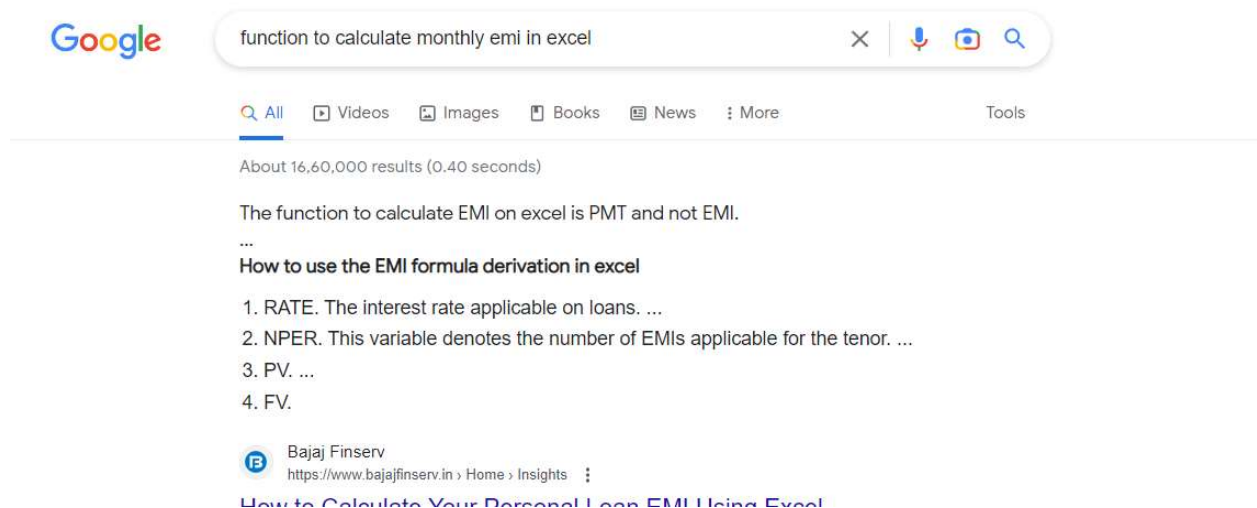
## Insight 1: Monthly payment (EMI)

This determines how much Mr. Hathodwala has to pay every month. He would like to know how much he needs to pay per month so that he can decide if it fits his budget.

There is a function in excel to calculate that.

Ask Mr. G

Okay, this is what you will find.



You can use a function called PMT to calculate it.

This function will return the monthly payment based on the 'Loan amount', 'Annual Interest Rate' and 'Loan Period in years' which are the inputs provided in the loan details table.

`= -PMT(argument1, argument2, argument3)`

$\text{argument1} = \text{Annual Interest Rate}/12$

$\text{argument2} = \text{Loan Period in years} * 12$

$\text{argument3} = \text{Loan Amount}$

It is important to note that the PMT() function returns negative values by default. To obtain a positive value, we need to add a negative sign before the result.

### **Insight2: Total cost of loan**

This refers to the total amount of money that Mr. Hathodwala will have to pay in order to fully repay the loan. He wants to know this so he gets an idea of how much amount he is actually repaying.

**Formula:**  $\text{Monthly Payment (EMI)} * (\text{Loan Period in years} * 12)$

### **Insight3: Total Interest Amount**

The total interest amount refers to the overall amount of interest that Mr. Hathodwala will pay on a loan. Besides the money that was borrowed, the total interest amount is the extra cost of borrowing money.

**Formula:**  $\text{Loan amount} - \text{Total cost of loan}$

**Note:** Please check the accuracy of the formulas you have written by referring to the "Loan\_repayment\_template.pdf" file. It is important to ensure that the values obtained from your calculations match the values in the template file.

### Final Request:

After calculating the 'Total Interest Amount' and 'Total cost of loan' for different 'Annual Interest Rate' and 'Loan Period in years', please provide a brief summary of your findings and recommend the most suitable bank for Mr. Hathodwala to consider. His monthly budget for loan repayment is 25000.