HOUSE LOAN (EMI)

1. Principal Amount

* The bank provides loan on different purposes, it starts for minimum amount.
* The principal amount is the original sum of money that is invested, loaned, or borrowed before interest or other earnings are added.
* Once the loan is confirmed, the principal amount of money is deposited into their account.
* Ex: house loan, personal loan, educational loan.
* In loans, the principal is the amount borrowed from a lender. Interest is calculated based on this amount.

**2. Interest**

* Interest is the cost of borrowing money or the reward for saving money, usually expressed as a percentage of the principal.
* When you **save money** in a bank, you **earn** interest.
* When you **borrow money**, you **pay** interest.
* Interest can be calculated **annually, semi-annually, quarterly**, or **monthly**, especially in compound interest.
* Banks use interest to make profits (e.g., lending at higher rates than they offer on deposits).
* Higher interest rates **increase** earnings on savings and also **increase** the cost of loans.
* Private banks had more interest percentage than compare to Public Sector banks.

1. **Duration**

* Loan duration (or **loan tenure**) is the **total time** given by the bank to **repay a loan**, including both principal and interest. It’s usually expressed in **months or years**.
* Different loans have different standard durations:

Example

| **Loan Type** | **Typical Duration** |
| --- | --- |
| **Home Loan** | 10 to 30 years |
| **Car Loan** | 3 to 7 years |
| **Personal Loan** | 1 to 5 years |
| **Education Loan** | 5 to 15 years |
| **Business Loan** | 1. to 10 years |

* Effect on EMI:

**Longer duration** = **lower EMI** (but more interest overall).

**Shorter duration** = **higher EMI** (but less interest paid).

### ****. Benefits of Paying Monthly (EMIs):****

* **Easier Budgeting:**  
  Paying smaller fixed amounts every month is easier to manage than a big lump sum.
* **Builds Credit History:**  
  Regular monthly payments show discipline and improve your credit score.
* **Reduces Interest Burden Over Time:**  
  Each EMI partly reduces the principal, so interest calculated on the remaining balance keeps decreasing.

1. MONTHLY EMI CALCULATION

* Interest = Chosen Interest/12
* Total Interest Payable = Principal Amount/100\*Interest
* Total Amount Payable=Principal amount + Total Interest Payable
* Amount per Month=Total amount payable/duration

**Code:**

**#include<stdio.h>**

**int main()**

**{**

**float Principal\_amount;**

**float Interest;**

**float Duration;**

**float Interest\_percentage;**

**float Total\_Interest\_payable;**

**float Total\_amount\_payable;**

**float Amount\_payable\_per\_month;**

**printf("Enter the Principal\_amount:");**

**scanf("%f",&Principal\_amount);**

**printf("Your choosen Principal\_amount:%f\n",Principal\_amount);**

**printf("Enter the Interest:");**

**scanf("%f",&Interest);**

**printf("Your choosen Interest:%f\n",Interest);**

**printf("Enter the Duration:");**

**scanf("%f",&Duration);**

**printf("your choosen Duration:%f\n",Duration);**

**Interest\_percentage=Interest/12;**

**printf("Your choosen Interest\_percentage:%f\n",Interest\_percentage);**

**Total\_Interest\_payable= Principal\_amount/100\* Interest\_percentage;**

**printf("Total\_Interest\_payable:%f\n",Total\_Interest\_payable);**

**Total\_amount\_payable=Principal\_amount+Total\_Interest\_payable;**

**printf("Total\_amount\_payable:%f\n",Total\_amount\_payable);**

**Amount\_payable\_per\_month=Total\_amount\_payable/Duration;**

**printf("Amount\_payable\_per\_month:%f\n",Amount\_payable\_per\_month);**

**printf("|-----------------------------------------------------------------------------------------------------------------------------------------------|\n");**

**printf("| M0NTHLY EMI |\n");**

**printf("| Rupees %f\* |\n",Amount\_payable\_per\_month);**

**printf("| Principal\_Amount : %f |\n",Principal\_amount);**

**printf("| Total\_interest\_Payable : %f |\n",Total\_Interest\_payable);**

**printf("| Total\_Amount\_payable : %f |\n",Total\_amount\_payable);**

**printf("|-----------------------------------------------------------------------------------------------------------------------------------------------|");**

**return 0.2;**

**}**