**LAB EXERCISES**

**EX.NO:01**

**SIMPLE AND COMPOUND INTEREST**

**AIM:**

**To write a C program to calculate the simple and compound interest.**

**PROCEDURE:**

**1) Start the program.**

**2) Define the required variables: P,R,N,SI,CI.**

* **P → Principal amount**
* **R → Rate of interest**
* **N → Number of years**
* **SI → Simple Interest**
* **CI → Compound Interest**

**3) Get the input from the user:**

* **Enter the** **Principal amount (P)**
* **Enter the Rate of interest (R)**
* **Enter the Number of years (N)**

**4) Calculate Simple interest using:**

**SI=(P\*N\*R)/100;**

**5) Calculate Compound interest using:**

**CI=P\*(1+R/100)^N-P;**

**6) Display the both Simple Interest (SI) and Compound Interest(CI).**

**7) End the program.**

**PROGRAM:**

**#include<stdio.h>**

**#include<math.h>**

**void main()**

**{**

**int N;**

**float P,R,SI,CI;**

**clrscr();**

**printf("Enter the principal amount\n");**

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

**printf("\nEnter number of years\n");**

**scanf("%d",&N);**

**printf("\nEnter rate of interest\n");**

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

**SI=(P\*N\*R)/100;**

**CI=P\*pow(1+R/100,N)-P;**

**printf("\nSimple Interest = Rs.%6.2f",SI);**

**printf("\nCompound Interest = %6.2f",CI);**

**getch();**

**}**

**RESULT:**

**Thus the above C program is executed and the output is obtained.**