**TASK-14**

**Monthly Payments.**

**EXPLANATION:**

The program takes the input from the user the LOAN AMMOUNT, the NUMBER OF PAYMENTS, the INTEREST RATE. Then gives output as:

Loan Amount: Rs. 10000

Monthly Interest Rate: 1%

Number of Payments: 36

Monthly Payments: Rs. 332.14

Amount Paid Back: Rs. 11957.15

Interest Paid: Rs. 1957.15

**INPUT:**

#include <iostream>

#include <iomanip>

#include <cmath>

#include <conio.h>

#include <stdlib.h>

using namespace std;

int main()

{

a:

double loan\_ammount , rate , monthly\_payment ;

int number\_of\_payments ;

cout << "Enter the Loan Amount: " ;

cin >> loan\_ammount ;

cout << "Enter the Monthly Interest Rate : " ;

cin >> rate ;

rate = rate / 100 ;

cout << "Enter the desired number of payments: " ;

cin >> number\_of\_payments ;

monthly\_payment = rate \* pow ( 1 + rate , number\_of\_payments ) / ( pow ( 1 + rate , number\_of\_payments ) - 1 ) \* loan\_ammount ;

system ("CLS") ;

cout << "Loan amount: " << setw ( 2 ) << fixed << setprecision ( 2 ) << loan\_ammount << " $ " << endl << endl ;

cout << "Monthly interest rate: " << rate \* 100 << " %" << endl << endl ;

cout << "Number of payments: " << setw ( 2 ) << fixed << setprecision ( 2 ) << number\_of\_payments << endl << endl ;

cout << "Monthly payment: " << setw ( 2 ) << fixed << setprecision ( 2 ) << monthly\_payment << " $ " << endl << endl ;

cout << "Amount need to pay back: " << setw ( 2 ) << fixed << setprecision ( 2 ) << monthly\_payment \* number\_of\_payments << " $ " << endl <<endl ;

cout << "Interest paid: " << setw ( 2 ) << fixed << setprecision ( 2 ) << ( monthly\_payment \* number\_of\_payments ) - loan\_ammount << " $ " << endl << endl ;

getch () ;

system ("CLS") ;

goto a ;

}

**OUTPUT:**







