1) To analyze a loan payment many things are required and the most important is the monthly payment. Following is a sample table that shows important information for monthly payments:

        Principal $11000.00
        Interest Rate   10.00%
        No. of Years   4
        Payments per year   12
        No. of Payments   48
        Monthly Payment $278.99

Write a program which prompts the user to enter the principal, annual interest rate, the number of years and the number of payments per year. Then using this information, calculate the monthly payment for the loan. The formula for calculating the monthly payment is as follows:

$$MonthlyPayment = Principal * \frac{Interest\_Rate}{(1 - (Interest\_Rate+1)^{-term})}$$

Interest_Rate = annual interest rate / 12
term = years * payments per year

Use the following functions; note two are void functions one is float returning:
Read_Loan_Info(Principal, Rate, Years, PaymentsPerYear)
MonthlyPayment(Principal, Rate, Years, PaymentsPerYear)
Show_Table(Principal, Rate, Years, PaymentsPerYear)

COMMENTS:
Output should look just like above table, with same usage of $ and % signs as well as all floats being displayed in 2 decimal points only and no scientific notation to be displayed. Need to use header file iomanip to do this, and look at handout "C++ output stream" for help.

Also need to use math.h header file to do part in formula that involves the exponent. Advice is not to write out whole equation into one statement, but break it down into a few smaller statements. And make sure when dividing you are doing float division and not integer division.

The annual interest rate when read in to program will be in form of percent, i.e. 8 for 8%, 7.75 for 7.75%, but formula must have decimal equivalent, which is 0.08 for 8% and 0.075 for 7.75%. Make sure you take this into consideration and divide number accordingly as well.

Program should also be in a continuous loop

Main program should be relatively short. Test the program for the following input data:
(Note: below is not a table to be displayed, output should look like above example)

Principal	Rate	Years	Period
$11,000.00	10.00%	4	12
$15,500.00	5.70%	5	12
$115,000.00	7.75%	30	12