The formula to calculate the monthly payment, given loan L, term T in year and annual interest rate R is shown below.

\[
\text{Monthly payment} = \frac{L \times \frac{R}{12}}{1 - \frac{1}{(1 + \frac{R}{12})^{12 \times T}}}
\]

Create a python program that uses input statements to ask user to enter loan, term in year and annual interest rate, and compute and display the monthly payment with a currency format. Do not use other formula to compute the payment. Submit the source code and the result of the program as it runs. You copy the source code and paste to a Word document, and run the program with the test data, and copy/past the output lines to the Word document. Submit the Word document by email attachment.

Note 1: Test your program with the following data: Loan = $800,000, annual rate = 4.2%, term = 30 years. You may use Excel’s PMT function to verify your output.

Note 2: The annual interest rate should be entered without the percentage sign. For example, 3.5% should enter as .035. Use the input statement to explain how to enter the rate. For example: input(‘Please enter interest rate (4.5% entered as 0.045)’).

Note 3: Use comment lines to enter your name, section and a brief description of the purpose of this program.

Note 4: Variable names must be meaningful and have at least 4 characters.

Note 5: Use the format statement to format dollar figures with currency format and rate with percentage format.

The screenshot of the program is similar to this:

Enter loan: 800000

Enter rate(4.5% entered as 0.045): .042
Enter term in year: 30

With $800,000.00 loan, 4.20% rate, 30.0 years term, the monthly payment is: $3,912.14