

| **TITLE:** Write a program for:  a. Program to find area and circumference of various Geometric shapes.  b. Program to calculate EMI (Equated Monthly Instalment) of loan amount if principal, rate of interest and time in years is given by the user. (E = (P.r.(1+r)n ) / ((1+r)n – 1) |
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**AIM:** Write a program for:

a. Program to find area and circumference of various Geometric shapes.

b. Program to calculate EMI (Equated Monthly Instalment) of loan amount if principal, rate of interest and time in years is given by the user. (E = (P.r.(1+r)n ) / ((1+r)n -1)

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**Expected OUTCOME of Experiment:**

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**Books/ Journals/ Websites referred:**

1. Programming in ANSI C, E. Balagurusamy, 7 th Edition, 2016, McGraw-Hill Education, India.
2. Structured Programming Approach, Pradeep Dey and Manas Ghosh, 1 st Edition, 2016, Oxford University Press, India.
3. Let Us C, Yashwant Kanetkar, 15th Edition, 2016, BPB Publications, India.

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**Problem Definition:**

Problem 1 : Area and Circumference of any shape(**will be given by instructor**) (example Circle)

Ask user to enter the value of radius of a circle.  Put the values in the formula for finding area of a circle and circumference of a circle and print the outcome for area of a circle and circumference of a circle

Problem 2: Calculating EMI

Ask the user to enter the value of principle amount, rate of interest and time (in years).Store the value in E and print the final monthly instalment E as an outcome.

Formula to be used: (E = (P.r.(1+r)n ) / ((1+r)n – 1)

**Flowchart:**

**Implementation details:**

**Output(s):**

**Conclusion:**

**Post Lab Descriptive Questions**

1. **Describe problem definition phase with one case study.**
2. **What is a flowchart? What are the standard symbols used to draw a flow chart? Explain in brief.**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Signature of faculty in-charge**