

Tutorial 03

L05 - Loops and Conditional Statements

L06 – Time complexity

Exercise

- Write a program in MATLAB to read 10 numbers from keyboard and find their sum and average.
- Write a program in MATLAB to display the n terms of harmonic series and their sum.
- $1 + 1/2 + 1/3 + 1/4 + 1/5 \dots 1/n$ terms
- *Expected Output :*
>> **1/1 + 1/2 + 1/3 + 1/4 + 1/5 +**
>> **Sum of Series upto 5 terms : 2.283334**

Exercise

- Write a program in MATLAB to print the Floyd's Triangle.
 - 1
 - 01
 - 101
 - 0101
 - 10101
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- Write a MATLAB program to keep asking for a number until you enter a negative number. At the end, print the sum of all entered numbers. **USE WHILE LOOP.**

Exercise

- Write a MATLAB code to search a given element in a sorted array.
- Find its time complexity $T(n)$?
- Hint : Use binary search

Exercise

- Write a pseudocode algorithm (Iterative and Recursive) to reverse the contents of the array.
- Find the time complexity of the algorithm.