L#-Tut/Th/Ass#problemno

Lecture 1 : Flowchart Practice Questions

1-Tut : **Average of three numbers**

Send Feedback

You are given three numbers. You need to calculate and print their average value. Draw a flowchart for this process.

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

2-Tut: **Check Number**

Send Feedback

You are given a single number. You need to print one of the following outputs according to the number's nature.

Print 1, if the number is positive

Print -1, if it's negative

Print 0, if it's equal to 0

Draw a flowchart for this process.

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

3-Tut : **Valid Triangle**

Send Feedback

You are given 3 numbers. Each number represents the length of a line. You need to figure out whether these lines can form a valid triangle.

If a valid triangle can be formed, print "Yes", otherwise print "No".

Draw a flowchart for this process

A triangle is a **valid triangle**, If and only If, the sum of any two sides of a triangle is greater than the third side. For Example, let A, B and C are three sides of a triangle. Then, A + B > C, B + C > A and C + A > B

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

4-Tut : Find Product

Send Feedback

You are given a single non-negative integer, N. You need to calculate and print N factorial (N!)

N factorial is defined as the product of all integers from 1 to N (both inclusive)

Draw a flowchart for this process

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

5-Tut : Print Even Numbers

Send Feedback

You are given a single positive integer, N. You need to print all even integers that occur between 1 and N (both inclusive).

Draw a flowchart for this process

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

6-Assignment : Check triangle

Send Feedback

You are given the lengths of 3 sides of a valid triangle. You need to print any one of the following outputs depending on the triangle's nature.

Print 1, if the triangle is equilateral

Print 0, if it's isosceles

Print -1, if it's scalene

Draw a flowchart for this process.

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

7-As: Sum of evens

Send Feedback

You are given a single positive integer, N. You need to calculate and print the sum of all even numbers till N(inclusive)

Draw a flowchart for this process

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

8-As : Find GCD

Send Feedback

You are given two numbers. You need to calculate and print their greatest common divisor (GCD).

Draw a flowchart for this process.

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

9-As : All primes

Send Feedback

You are given a single positive integer, N. You need to print all prime numbers that occur in the range 1 to N (both inclusive).

Draw a flowchart for this process

Note : You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

10-As : All fibonacci numbers

Send Feedback

You are given a single non-negative integer, N. You need to print all numbers that:

(i) occur in the range 0 to N (both inclusive)

(ii) are a part of the fibonacci sequence

Draw a flowchart for this process

Note 1: The first two terms of the fibonacci sequence are 0 and 1.
Note 2: You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.

11-As : Member of Fibonacci

Send Feedback

You are given a single non-negative integer, N. You need to find out whether N is a part of the fibonacci sequence.

Print "Yes" if it is and "No" if it's not.

Draw a flowchart for this process

Note 1: The first two terms of the fibonacci sequence are 0 and 1.
Note 2: You don't need to submit the problem. Just attempt in your notebook and ask doubts if you need help.