



Flowcharts & Pseudocodes

Learning's,...

What are FlowCharts?

Flow charts are Diagrams that represent solutions to Problems. To solve any problem Logically we have to divide the problem into small parts & Arrange it logically and then try to solve it,...

Example:- **Make a Tea**

Start

Bowl with water ▾

Gas stove on ▾

Sugar, tea, leaves, milk ▾

Boil ▾

Exist

Flowcharts Components,...

Components

Start/Exit

Start

Input/Output

Read N

Print "Hi"

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Process

name = "Shradha"

sum = a + b

Decision

is
marks > 33?

YES

print "PASS"

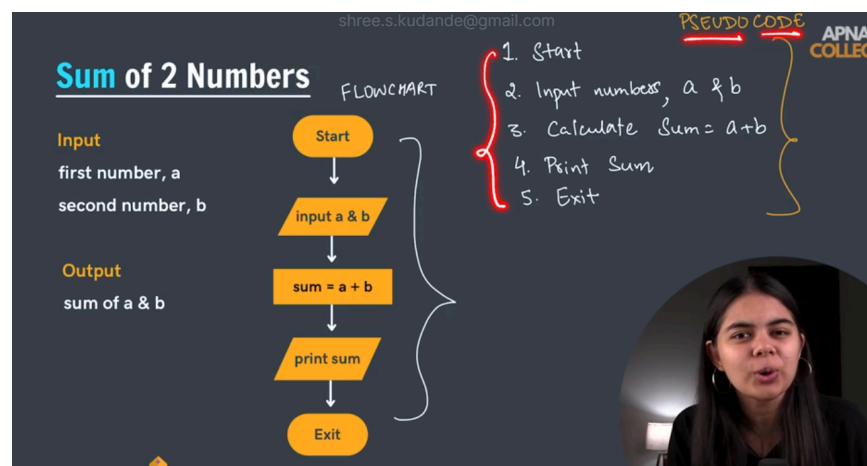
NO

print "FAIL"

LOGIC BUILDING



Sum of 2 Numbers,...



Calculate Simple Interest,...

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Pseudo Code

APNA COLLEGE

Calculate Simple Interest

Input

Principal, P
Rate, R
Time, T


Output


SI = PRT/100

```

graph TD
    Start([Start]) --> Input[/input P, R, T/]
    Input --> Process[SI = (P*R*T)/100]
    Process --> Output[/print SI/]
    Output --> Exit([Exit])
        
```

1. Start
2. Input Principal (P), Rate (R) & Time (T)
3. Calculate
 $SI = (P * R * T) / 100$
4. Print SI ✓
5. Exit



LOGIC BUILDING 

Max of 3 Numbers,...

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APNA COLLEGE

Find max of 3 numbers

Pseudo Code

1. Start
2. Input a, b & c
3. if a > b do
 - if a > c do
 - print a
 - else
 - print c
- else
 - if b > c do
 - print b
 - else
 - print c
4. Exit

```


graph TD
    Start([Start]) --> Input[/input a, b & c/]
    Input --> IsAB[is a > b?]
    IsAB -- YES --> IsAC[is a > c?]
    IsAB -- NO --> IsBC[is b > c?]
    IsAC -- YES --> PrintA[/print a/]
    IsAC -- NO --> PrintC[/print c/]
    IsBC -- YES --> PrintB[/print b/]
    IsBC -- NO --> PrintC
    PrintA --> Exit([Exit])
    PrintC --> Exit
    PrintB --> Exit
        
```


Input

3 numbers :
a, b & c

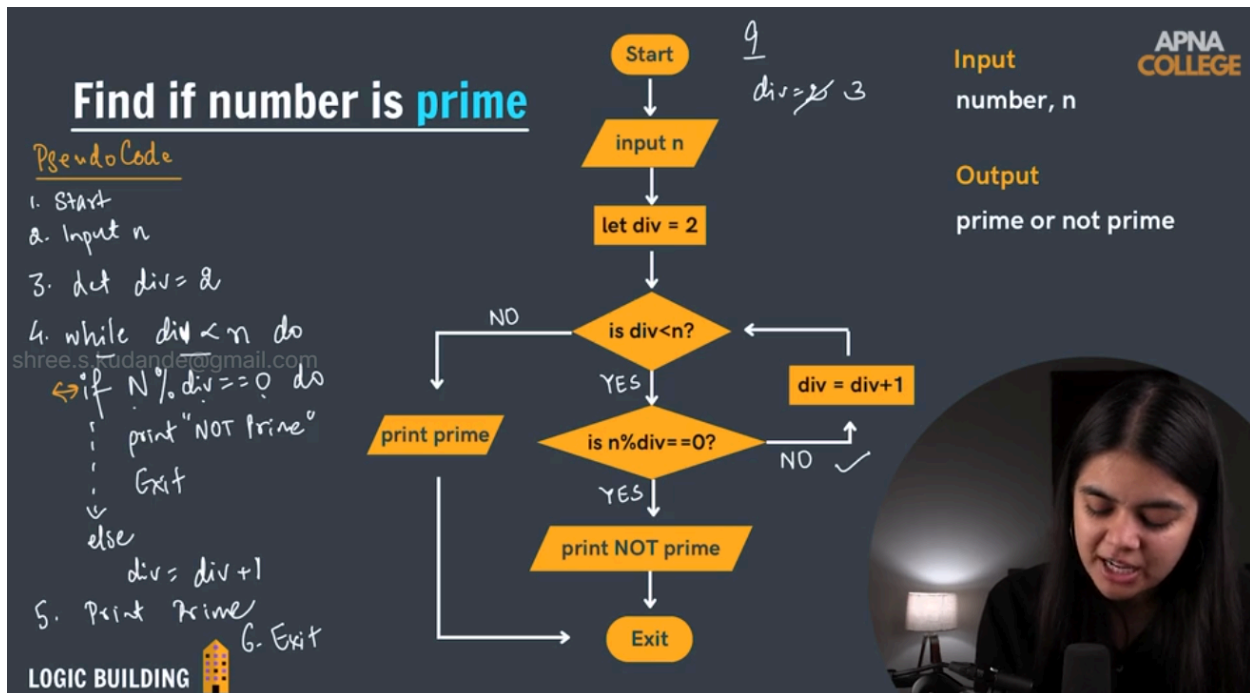
Output

max of 3

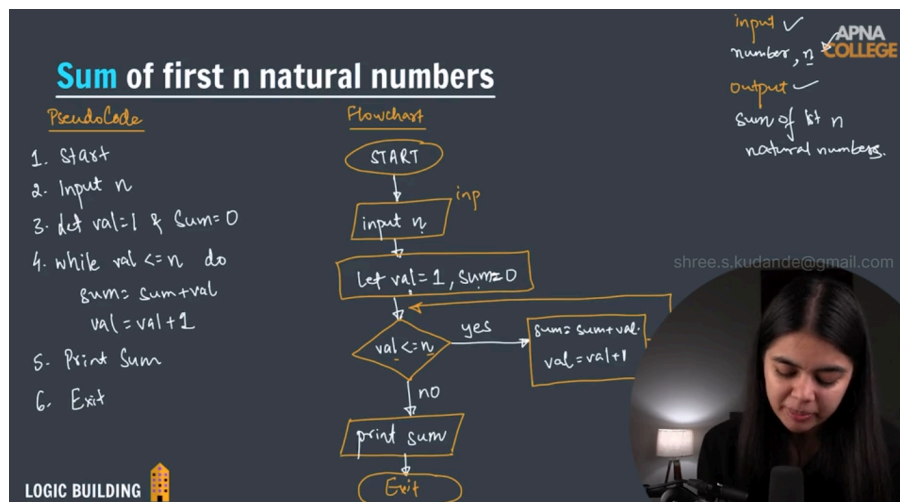


LOGIC BUILDING 

Find if a Number is Prime or Not,...



Sum of first N natural numbers,...

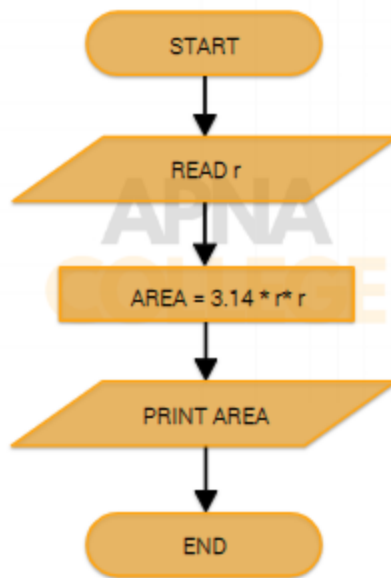


Practice Questions

Question 1: Flowchart to Calculate the area of a Circle.

Ans -

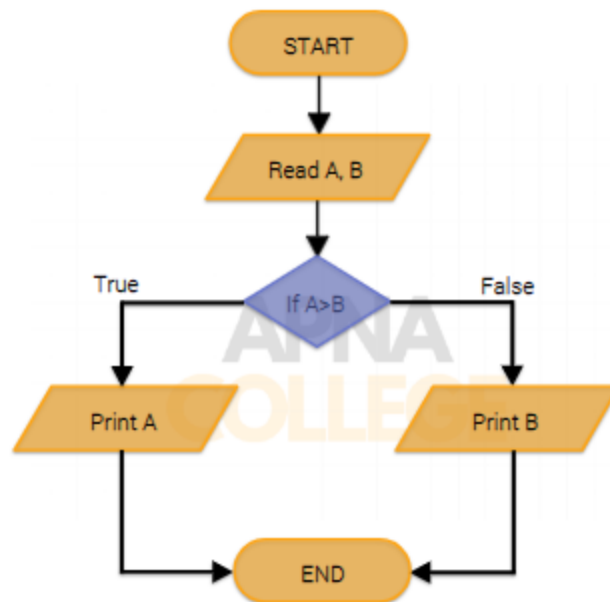
Solution 1:



Question 2 : Flowchart to Find the Greatest from 2 Numbers.

Ans :

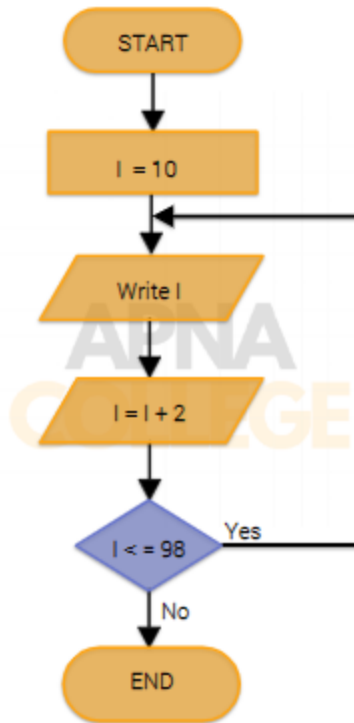
Solution 2:



Question 3 : Flowchart to Print the Even numbers Between 9 and 100.

Ans :

Solution 3:



Question 4 : Flowchart for calculating the average from 25 exam scores.

Ans :

Solution 4:

