

EXPERIMENT 3

3.1 PROGRAMS:

3.1.1//Largest of three numbers

ALGORITHM:

Step 1 : Start

Step 2 : Input n1,n2,n3

Step 3 : If n1 > n2 and n1 > n3

 Print n1 is largest

 el if n2 > n1 and n3 > n2

 print n2 is the lagest

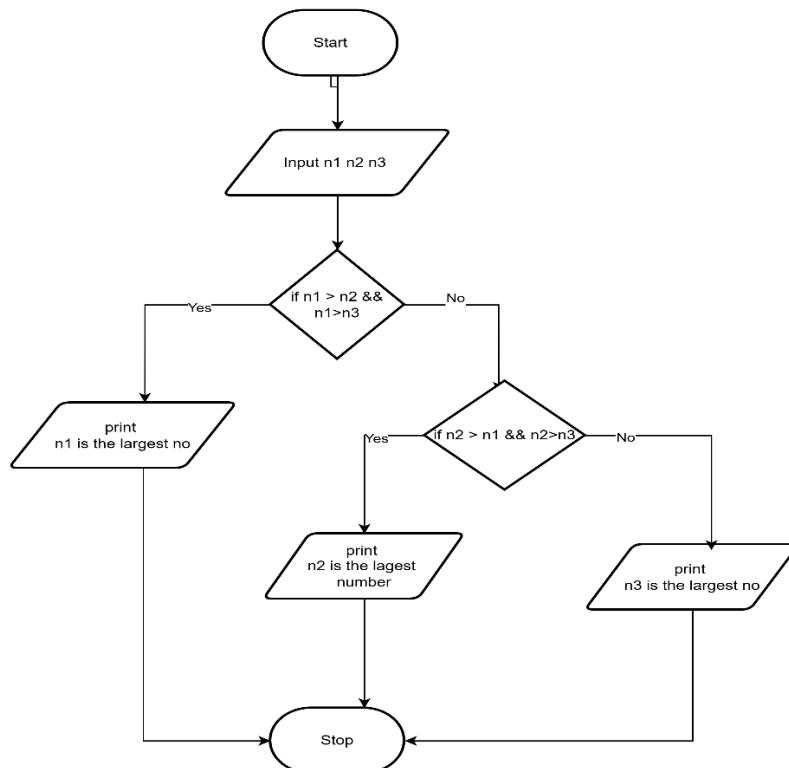
 else

 print n3 is the lagest

loop end

Step 4 : Stop

FLOWCHART:



CODETANTRA:

The screenshot shows the CodeTantra IDE interface. The title bar says "CODETANTRA" and "Home". The main area is titled "3.1.1. Largest of Three Numbers". It contains the following text:

Write a Python program that prompts the user to enter three integers. Print the largest of the three integers.

Input Format:

- The program will prompt the user to enter three integers, one per line.

Output Format:

- The output will display the largest integer among the three integers.

The code editor shows the following Python code:

```
a = int(input())
b = int(input())
c = int(input())

if a>b and a>c:
    print(a)
elif b>a and b>c:
    print(b)
else:
    print(c)
```

Below the code editor, there is a performance summary:

Average time	0.009 s	8.50 ms
Maximum time	0.010 s	10.00 ms

Test results indicate 2 out of 2 shown test case(s) passed and 2 out of 2 hidden test case(s) passed.

Sample Test Cases: 5, 6, 7, 7

Test case 1: Expected output: 5, Actual output: 5

Test case 2: Expected output: 6, Actual output: 6

Terminal: Test cases

Buttons at the bottom: Prev, Reset, Submit, Next

3.1.2/Celsius to farehinheit

ALGORITHM:

Step 1: Start

Step 2: Read temperature in Celsius → C

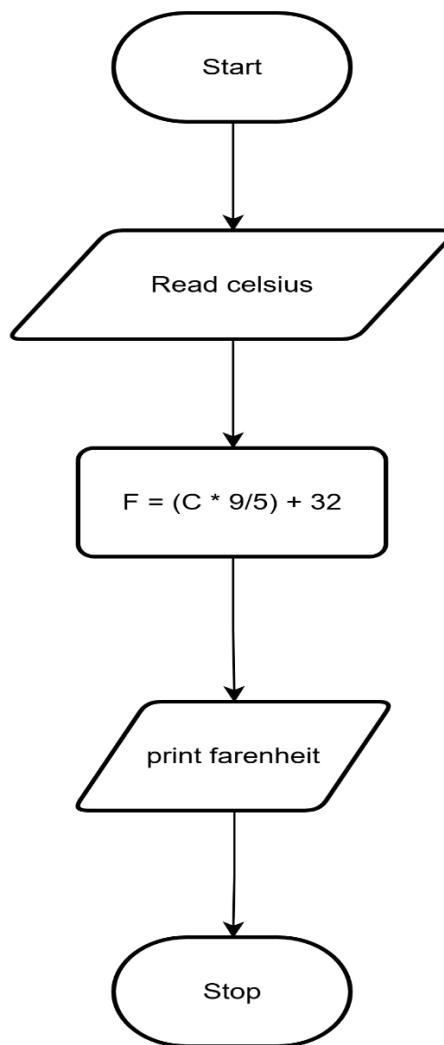
Step 3: Calculate Fahrenheit using the formula

$$F = (C \times \frac{9}{5}) + 32$$

Step 4: Display value of F

Step 5: Stop

FLOWCHART:



CODETANTRA:

The screenshot shows the CodeTantra IDE interface. The left sidebar displays the problem statement: "3.1.2. Celsius to Fahrenheit" and instructions to write a Python program to convert temperature from Celsius to Fahrenheit. It provides a formula: $Fahrenheit = \left(Celsius \times \frac{9}{5} \right) + 32$. The right side shows the code editor with the following Python script:

```

temperat...
1 celsius = float(input())
2
3 fahrenheit = (celsius * 9/5) + 32
4
5 print(f"{fahrenheit:.2f}")
6
7
  
```

The code editor includes performance metrics: Average time 0.004 s, Maximum time 0.006 s, and memory usage 3.63 ms. Below the code, the results of the test cases are shown:

- Test case 1: Expected output 32.00, Actual output 32.00 (Passed)
- Test case 2: Expected output 32.00, Actual output 32.00 (Passed)
- Test case 3: Expected output 32.00, Actual output 32.00 (Passed)

At the bottom, there are buttons for "Debug", "Run", and "Submit".