

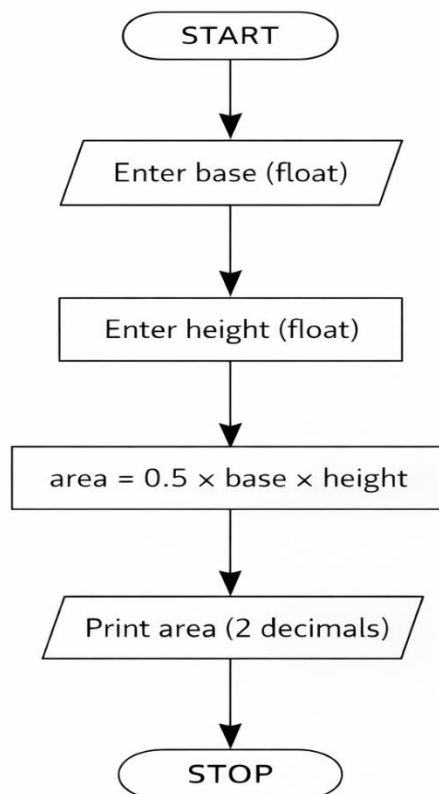
EXPERIMENT - 1

1.1.4 AREA OF TRIANGLE

ALGORITHM

- Step 1:- Start
- Step 2:- Read the base of the triangle.
- Step 3:- Read the height of the triangle.
- Step 4:- Calculate the area using the formula
- Step 5:- $\text{area} = 0.5 \times \text{base} \times \text{height}$
- Step 6:- Display the area formatted to 2 decimal places.
- Step 7:- Stop

Flowchart



Python Code

EXPERIMENT - 1

```
base = float(input())  
height = float(input())  
area = 0.5 * base * height  
print(f"{area:.2f}")
```

EXCECUTION

The screenshot displays the CodeTANTRA IDE interface. On the left, a problem description for "1.1.4. Area of Triangle" is shown, including the formula $\text{Area of Triangle} = 0.5 \times \text{base} \times \text{height}$, input/output formats, and sample test cases. The main editor shows the Python code for calculating the area. The right sidebar displays the execution results, including a table of test cases and their outputs.

Problem Description:

Write a Python program that prompts the user to enter the triangle's base and height and computes the triangle's area.

Formula: $\text{Area of Triangle} = 0.5 \times \text{base} \times \text{height}$.

Input Format:

- The first line of input is the float value that represents the base of the triangle.
- The second line of input is the float value that represents the height of the triangle.

Output Format:

- The output is the floating point value that represents the area of a triangle, formatted to two decimals.

Sample Test Cases:

Test Case	Expected output	Actual output
Test case 1	6.54	6.54
Test case 2	1.23	1.23
Test case 3	4.02	4.02

Execution Results:

- Average time: 0.022 s
- Maximum time: 0.043 s
- 2 out of 2 shown test case(s) passed
- 2 out of 2 hidden test case(s) passed