

# EXPERIMENT - 1

Name : Om Kashikar

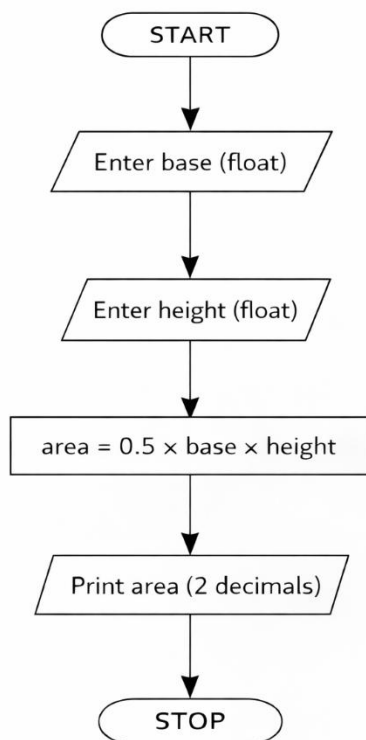
PRN : 25070521170

## 1.1.4 AREA OF TRIANGLE

### ALGORITHM

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

### Flowchart



# EXPERIMENT - 1

## Python Code

```
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 titled "1.1.4. Area of Triangle" is shown, including the problem description, formula, input/output formats, and sample test cases. The main editor on the right contains the Python code for calculating the area of a triangle. Below the code editor, the execution results are displayed, showing that 2 out of 2 shown test cases passed and 2 out of 2 hidden test cases passed. The test cases table shows expected and actual outputs for two test cases.

**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:**  $Area\ of\ Triangle = 0.5 \times base \times height$ .

**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