

EXPERIMENT - 1

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1.1.2 Area of a Rectangle

A] Algorithm

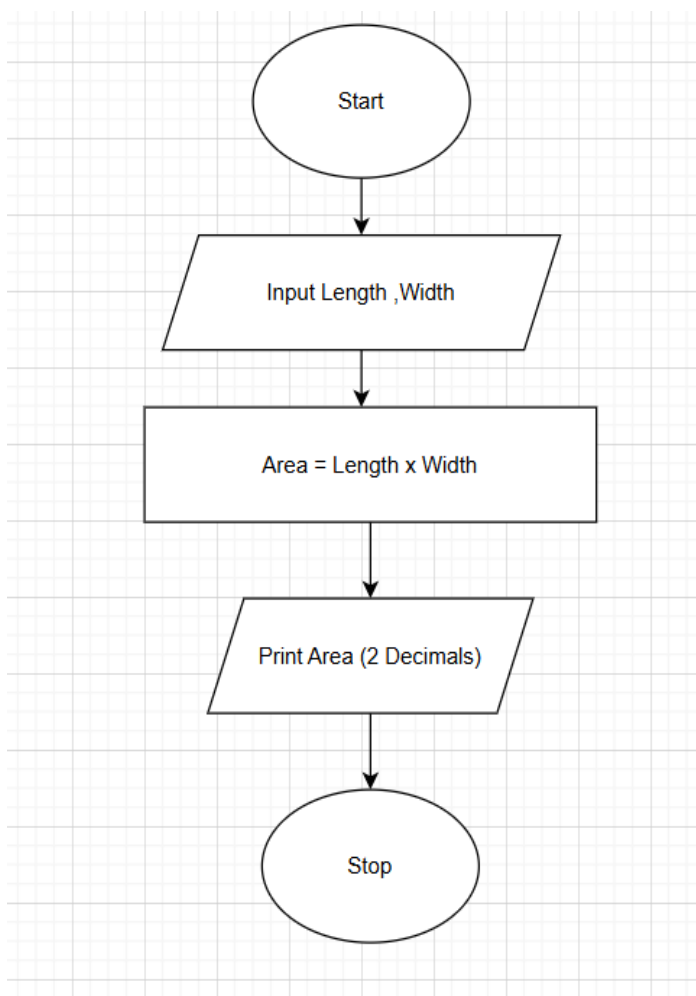
- 1] Start
- 2] Read the length of the rectangle.
- 3] Read the width of the rectangle.
- 4] Calculate the area using the formula

$$\text{area} = \text{length} \times \text{width}$$

- 5] Display the area formatted to 2 decimal places.

- 6] Stop

Flowchart



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PYTHON CODE

```
length = float(input())
```

```
width = float(input())
```

```
area = length * width
```

```
print(f"{area:.2f}")
```

EXECUTION

The screenshot displays the CODETANTRA IDE interface. On the left, the problem statement for "1.1.2. Area of Rectangle" is shown, including the formula $\text{Area of Rectangle} = \text{Length} \times \text{Width}$ and input/output formats. The main editor on the right contains the Python code for calculating the area. Below the code, the execution results are displayed, showing that 5 out of 5 test cases passed. The test cases table shows expected and actual outputs for two cases.

Problem Statement: 1.1.2. Area of Rectangle

Write a Python program to calculate the area of a rectangle given its length and width.

Formula:
 $\text{Area of Rectangle} = \text{Length} \times \text{Width}$

Input Format:

- First line contains a float value representing the length of the rectangle
- Second line contains a float value representing the width of the rectangle

Output Format:

- Print the area of the rectangle as a float value formatted to 2 decimal places.

Sample Test Cases

Code:

```
1 length = float(input())
2 width = float(input())
3 area = length * width
4 print(f"{area:.2f}")
```

Execution Results:

- Average time: 0.006 s (5.60 ms)
- Maximum time: 0.009 s (9.00 ms)
- 5 out of 5 shown test case(s) passed
- 5 out of 5 hidden test case(s) passed

Test case	Expected output	Actual output
Test case 1	18.5 5.2 54.60	18.5 5.2 54.60
Test case 2		

Buttons: < Prev, Reset, Submit, Next >