

## Experiment - 1.1.2. Area of Rectangle

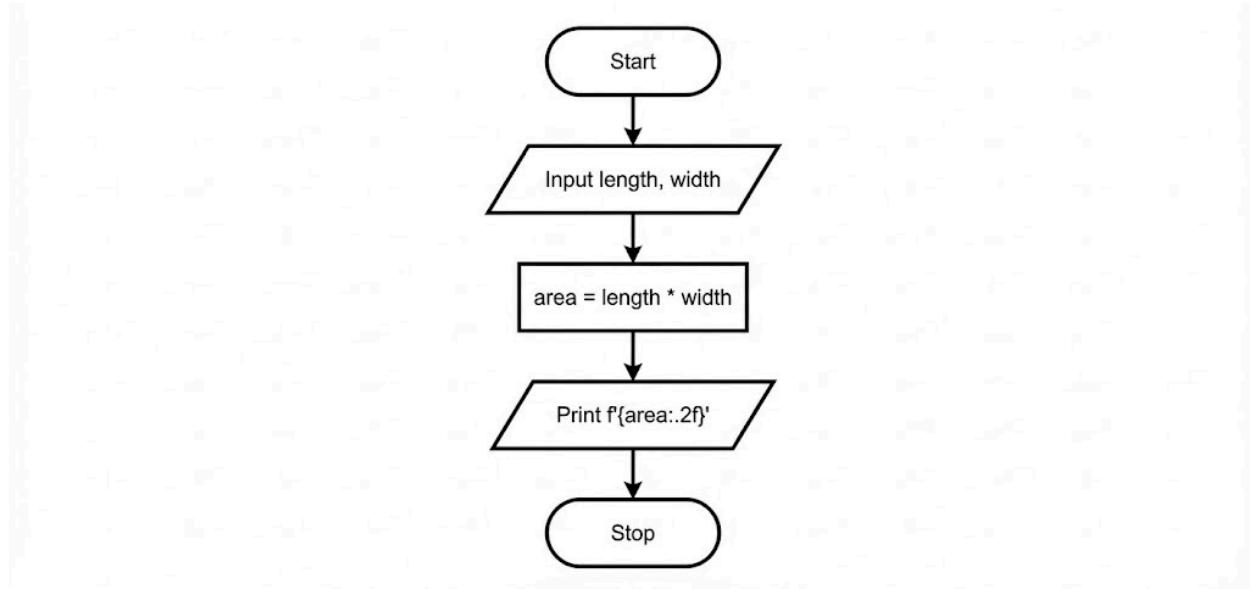
### 1. Aim

To design and implement a Python program that calculates the area of a rectangle. The program accepts the length and width as floating-point inputs from the user and computes the area using the formula  $\text{Area} = \text{Length} \times \text{Width}$ , displaying the result formatted to two decimal places.

### 2. Pseudocode

1. **START**
2. **READ** the first input value and store it as a float in the variable length.
3. **READ** the second input value and store it as a float in the variable width.
4. **CALCULATE** the area by multiplying length and width.
5. **STORE** the result in the variable area.
6. **FORMAT** the value of area to 2 decimal places.
7. **PRINT** the formatted result.
8. **END**

### 3. Flowchart



## 4. Python Program

```
# Program to calculate the area of a rectangle
# Input: Length and Width as floats
# Output: Area formatted to 2 decimal places

# Taking inputs from the user
length = float(input())
width = float(input())

# Calculating area
area = length * width

# Displaying the result formatted to 2 decimal places
print(f"{area:.2f}")
```

## 5. Experiment Screenshot

The screenshot shows the CodeTantra platform interface for solving a problem titled "1.1.2. Area of Rectangle".

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

**Formula:** Area of Rectangle = Length × 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.

**Code Editor:**

```
areaOfRe...
1 length = float(input())
2 width = float(input())
3
4 area = length * width
5
6 print(f"{area:.2f}")
7
8
```

**Performance Metrics:**

Average time 0.004 s 4.30 ms	Maximum time 0.007 s 7.00 ms	5 out of 5 shown test case(s) passed	5 out of 5 hidden test case(s) passed
------------------------------------	------------------------------------	--------------------------------------	---------------------------------------

**Test Case 1:**

Expected output 10.5 5.2 54.60	Actual output 10.5 5.2
---	------------------------------

**Buttons at the bottom:**

- < Prev
- Reset
- Submit
- Next >