

Experiment - 1.1.2. Area of Rectangle

1. Aim

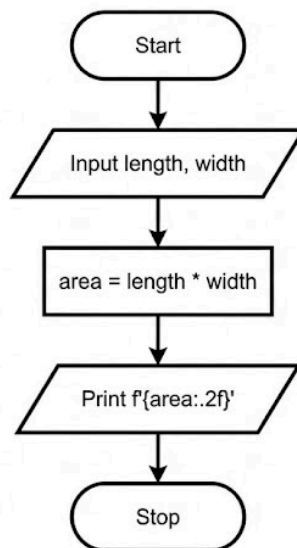
To design and implement a Python program that calculates the area of a rectangle. The program accepts the length and width as floating-point inputs from the user and computes

the area using the formula $Area = Length \times Width$, 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 displays the CODETANTRA IDE interface. On the left, a sidebar shows the file explorer with a file named 'areaOfRe...'. The main editor area contains the following Python code:

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

Below the code editor, the test results are shown. The average time is 0.004 s (4.30 ms) and the maximum time is 0.007 s (7.00 ms). The test results indicate that 5 out of 5 shown test case(s) passed and 5 out of 5 hidden test case(s) passed. A detailed view of Test case 1 shows the expected output as 10.5 and 5.2, and the actual output as 10.5 and 5.2.

The bottom of the interface features a terminal and a 'Test cases' button. The footer includes navigation buttons: < Prev, Reset, Submit, and Next >.