

practical : 1.1.1

AIM : Write a Python program that calculates the area of a circle when the radius is provided by the user. Use $\pi = 3.14$ and display the area.

Step 1 -> start

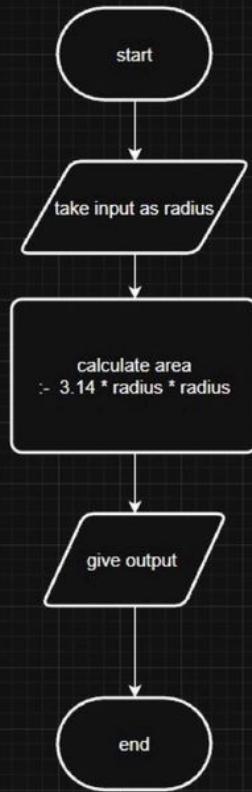
Step 2 -> take input of radius

Step 3 -> calculate area of circle as:

$$\text{Area} = 3.14 * \text{radius} * \text{radius}$$

Step 4 -> give output

Step 5 -> stop



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1.1.1. Area of Circle

Write a Python program that calculates the area of a circle when the radius is provided by the user. Use $\pi = 3.14$ and display the area.

Input Format:

- A single line containing a floating-point number representing the radius.

Output Format:

- Print the computed area of the circle formatted to 4 decimal places.

Editor: `circlearea...`

```
1 radius = float(input())
2 area = 3.14 * radius * radius
3 print(f'{area:.4f}')
```

Sample Test Cases

Test case 1
3.14
35.4403

Test case 2
12.5600
35.4403

Average time: 0.006 s Maximum time: 0.010 s

2 out of 2 shown test case(s) passed
2 out of 2 hidden test case(s) passed

Test case 1
Expected output
3.14
35.4403

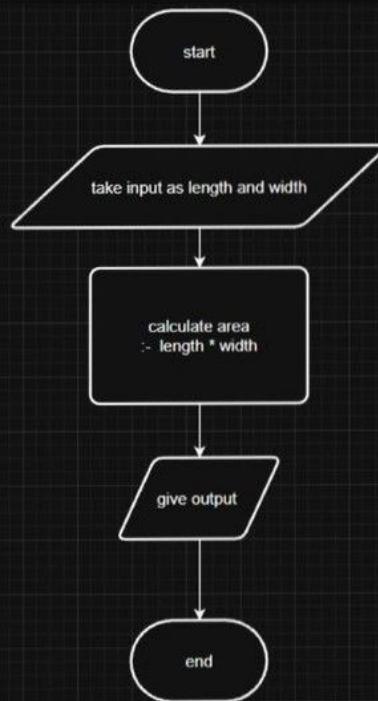
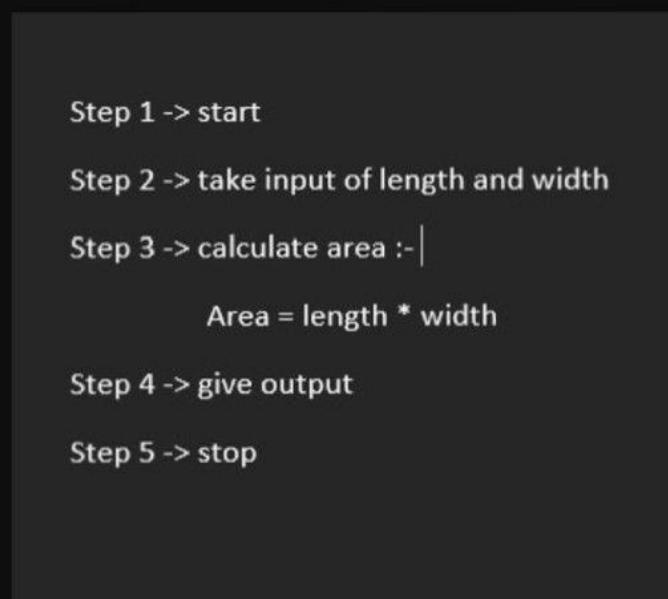
Actual output
3.14
35.4403

Test case 2

Terminal Test cases

practical : 1.1.2

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



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1.1.2. Area of Rectangle

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.

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

Average time: 0.008 s Maximum time: 0.011 s 7.60 ms 11.00 ms 5 out of 5 shown test case(s) passed 5 out of 5 hidden test case(s) passed

Test case 1 Expected output: 18.5 Actual output: 18.5

S 5.2 54.00 54.00

practical : 1.1.3

AIM : Write a Python program that prompts the user to enter the side length of a square and computes the area of the square.

Step 1 -> start

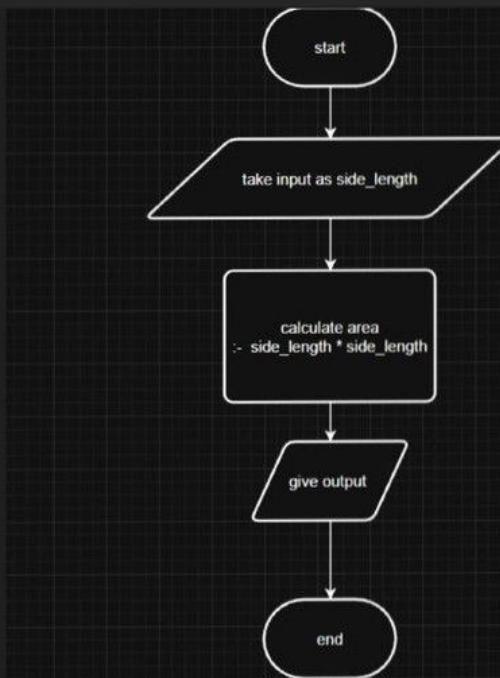
Step 2 -> take input of side_length

Step 3 -> calculate area :-

$$\text{Area} = \text{side_length} * \text{side_length}$$

Step 4 -> give output

Step 5 -> stop



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1.1.3. Calculate Area of the Square

Write a Python program that prompts the user to enter the `side_length` of a square and computes the area of the square.

Formula:

- $\text{Area} = \text{side_length}^2$

Input Format:

- The input is a positive integer value that represents the `side_length` of the square.

Output Format:

- The output is a positive integer value that represents the area of the square.

Sample Test Cases

Test case 1

| | |
|---|----|
| 1 | 25 |
|---|----|

Test case 2

| | |
|---|----|
| 1 | 25 |
|---|----|

Code Editor

```
# AreaSquare.py
1 side = int(input())
2 area = side * side
3 print(f"{area}")
4
5
6
7
8
9
```

Average time: 0.009 s Maximum time: 0.019 s 9.25 ms 2 out of 2 shown test case(s) passed 2 out of 2 hidden test case(s) passed

Test case 1

| | |
|-----------------|---------------|
| Expected output | Actual output |
| 1 | 25 |

Test case 2

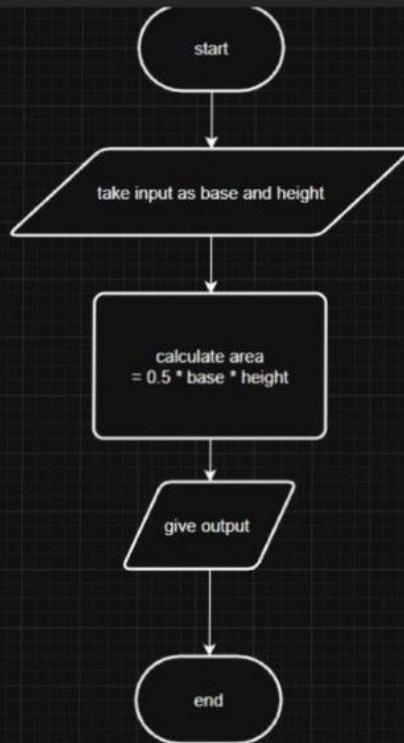
| | |
|-----------------|---------------|
| Expected output | Actual output |
| 1 | 25 |

Terminal Test cases

practical : 1.1.4

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

- Step 1 -> start
- Step 2 -> take input of base and height
- Step 3 -> calculate area :-
$$\text{Area} = 0.5 * \text{base} * \text{height}$$
- Step 4 -> give output
- Step 5 -> stop



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1.1.4. Area of Triangle

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 1

| | |
|------|------|
| 3.54 | 5.23 |
|------|------|

Average time: 0.007 s Maximum time: 6.78 ms 2 out of 2 shown test case(s) passed

Test case 1

| | |
|------|------|
| 1.23 | 3.45 |
|------|------|

Expected output: 2.01 Actual output: 2.01 2 out of 2 hidden test case(s) passed

Test case 1

| | |
|------|------|
| 4.62 | 7.89 |
|------|------|

Expected output: 18.60 Actual output: 18.60

Debug

practical 1.1.5

AIM :: Write a Python program to determine whether a student passed the exam or not based on their marks.

Step 1 -> start

Step 2 -> take input of marks

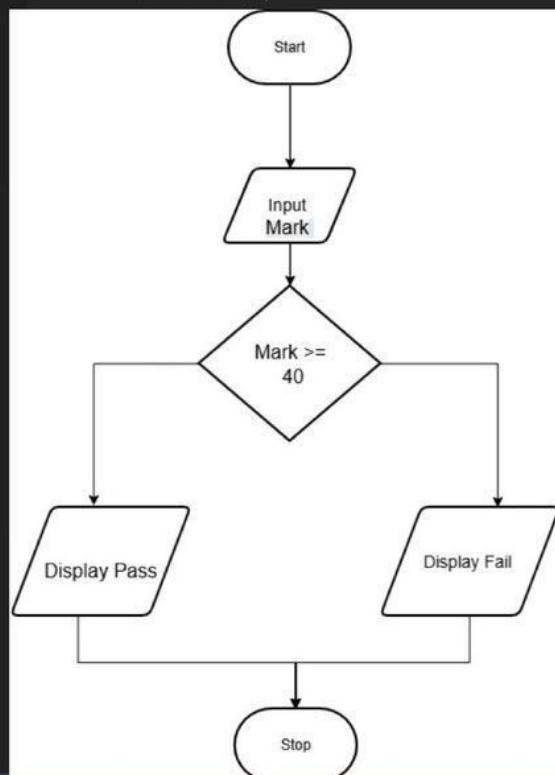
Step 3 -> if marks ≥ 40

Step 4 -> give pass

Step 5 -> else

Step 6 -> give fail

Step 7-> stop



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Student Pass or Fail Status

Write a Python program to determine whether a student passed the exam or not based on their marks.

Pass/Fail Criteria:

- A student passes if marks ≥ 40
- A student fails if marks < 40

Output Format:

- Print "Pass" if the student passed the exam.
- Print "Fail" if the student failed the exam.

Sample Test Cases

Test case 1
Expected output: Pass
Actual output: Pass

Test case 2
Expected output: Fail
Actual output: Fail

Test case 3
Expected output: Pass
Actual output: Pass

Code Editor

```
passOrFail.py
1 marks = int(input())
2 if(marks>=40):
3     print("Pass")
4 else:
5     print("Fail")
```

Average time: 0.004 s Maximum time: 0.005 s

3 out of 3 shown test case(s) passed
4 out of 4 hidden test case(s) passed

Test case 1
Expected output: 45
Actual output: Pass

Test case 2
Expected output: 35
Actual output: Fail

Test case 3
Expected output: 40
Actual output: Pass

Terminal Test cases