

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

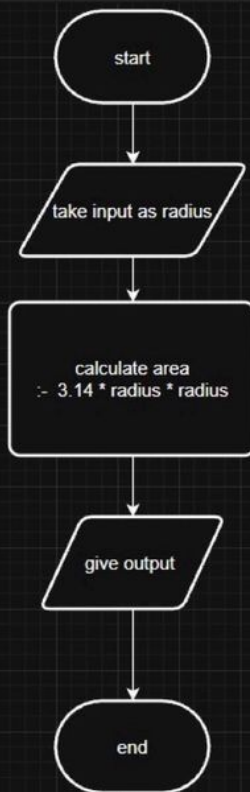
Step 2 -> take input of radius

Step 3 -> calculate area of circle as:

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

Step 4 -> give output

Step 5 -> stop



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.

Sample Test Cases

Test case 1

3.26

35.4483

Test case 2

12.5000

circlesarea...

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

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

3.26

35.4483

Actual output

3.26

35.4483

Test case 2

12.5000

practical : 1.1.2

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

Step 1 -> start

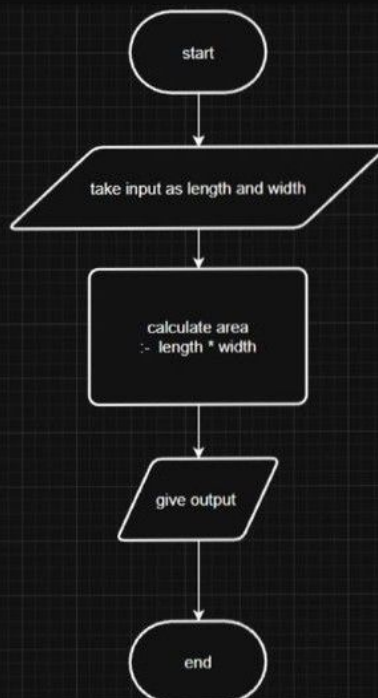
Step 2 -> take input of length and width

Step 3 -> calculate area :- |

$$\text{Area} = \text{length} * \text{width}$$

Step 4 -> give output

Step 5 -> stop



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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.

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

5 out of 5 shown test case(s) passed
5 out of 5 hidden test case(s) passed

Average time: 0.008 s
Maximum time: 0.011 s

Test case 1

Expected output	Actual output
34.30	34.30
5.30	5.30
54.00	54.00

practical : 1.1.3

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

Step 1 -> start

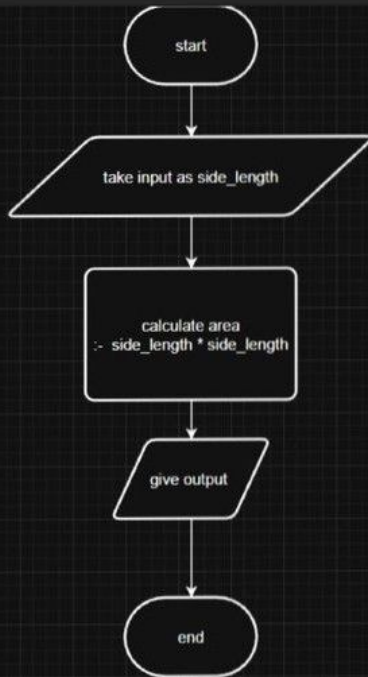
Step 2 -> take input of side_length

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:

- Area = 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	Input	Output
Test case 1	25	625
Test case 2	16	256

AreaSqua...

```
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 19.00 ms

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

Test case 1 ✓

Expected output: 25
Actual output: 25

Test case 2 ✓

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

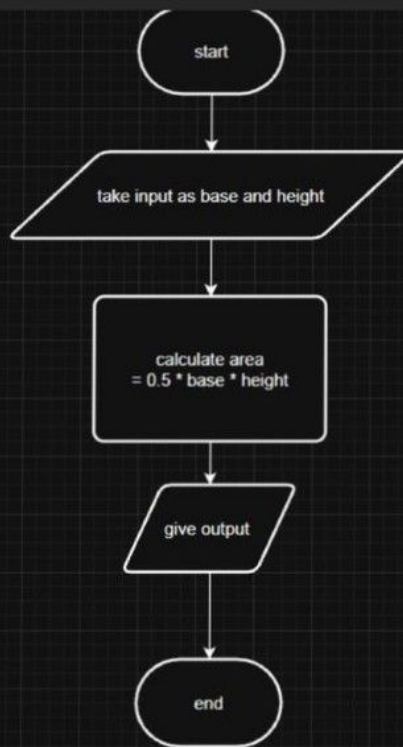
Step 2 -> take input of base and height

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: *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

8.54

1.22

4.62

triangleA.py

```
1 base = float(input())
2 height = float(input())
3 area = 0.5 * base * height
4 print(f"area:.2f")
```

Average time: 0.007 s
Maximum time: 0.008 s
6.75 ms 8.66 ms

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

Test case 1

Expected output: 4.62

Actual output: 4.62

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

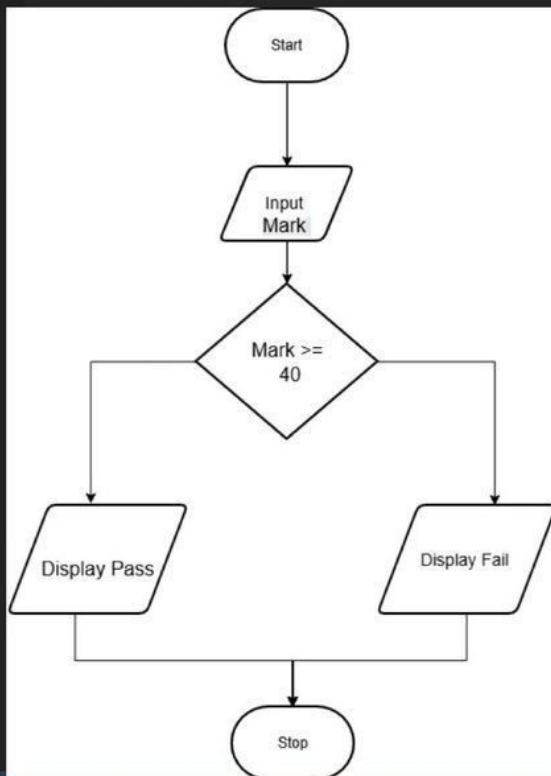
Step 3 -> if marks ≥ 40

Step 4 -> give pass

Step 5 -> else

Step 6 -> give fail

Step 7 -> stop



DE TANTRA Home

Student Pass or Fail Status

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

Test/Fail Criteria:

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

Input Format:

- Single line contains an integer representing the marks obtained by the student.

Output Format:

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

Sample Test Cases:

Test case	Input	Expected output	Actual output
Test case 1	45	Pass	Pass
Test case 2	35	Fail	Fail
Test case 3	40	Pass	Pass

passOrFa..

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

Average time: 0.004 s
Maximum time: 2.57 ms

Maximum time: 0.005 s
5.00 ms

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

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

Terminal Test cases