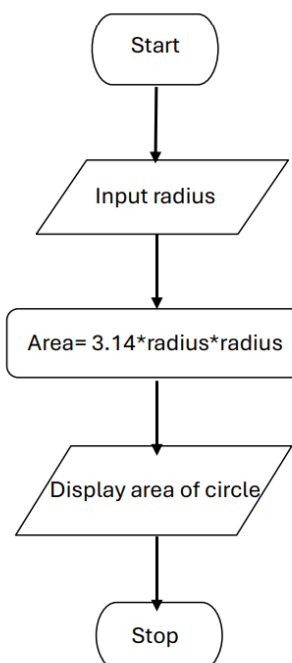


1.1.1 Area of a circle

ALGORITHM:

- 1.Start
- 2.Read the radius of the circle as a floating-point number.
- 3.Assign the value of π (pi) as 3.14.
- 4.Calculate the area of the circle using the formula:
$$\text{area} = \pi \times \text{radius} \times \text{radius}$$
- 5.Display the calculated area formatted to 4 decimal places.
- 6.Stop

FLOWCHART:



CODE:

```
radius = float(input())
pi = 3.14
area = pi * radius * radius
print(f"{area:.4f}")
```

CODETANTRA EXECUTION:

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1.1.1. Area of Circle04:04

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

circlearea...

```
1 radius = float(input())
2 pi = 3.14
3 area = pi * radius * radius
4 print(f"area:.4f")
```

Average time0.006 s6.25 ms

Maximum time0.009 s9.00 ms

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

Test case 16 ms

Expected output3.36

Actual output3.36

35.4493

Test case 29 ms

Terminal

Test cases

< Prev

Reset

Submit

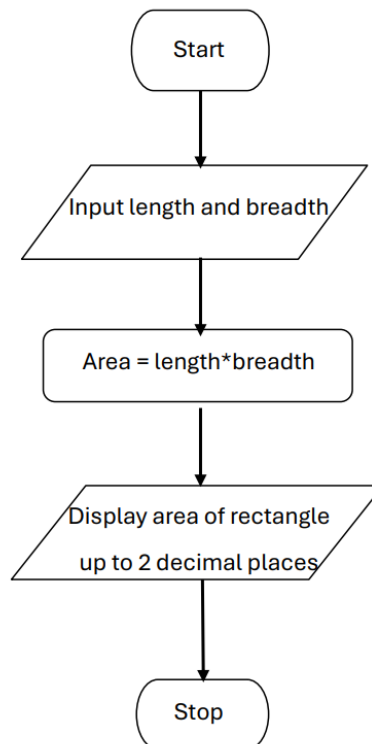
Next >

1.1.2 Area of a rectangle

ALGORITHM:

- 1 Start
- 2 Read the length of the rectangle as a floating-point number.
- 3 Read the width of the rectangle as a floating-point number.
- 4 Calculate the area using the formula:
- 5 $\text{area} = \text{length} \times \text{width}$
- 6 Display the area of the rectangle formatted to 2 decimal places.
- 7 Stop

FLOWCHART:



CODE:

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

CODETANTRA:

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1.1.2. Area of Rectangle

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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.

Sample Test Cases

areaOfRe...

Submit

1length = float(input())

2width = float(input())

3area = length * width

4print(f"{area:.2f}")

Average time

0.009 s

8.50 ms

Maximum time

0.016 s

16.00 ms

5 out of 5 shown test case(s) passed

5 out of 5 hidden test case(s) passed

Test case 116 ms

Debug

Expected output

Actual output

10.5

10.5

5.2

5.2

54.60

54.60

Test case 210 ms

Terminal

Test cases

< Prev

Reset

Submit

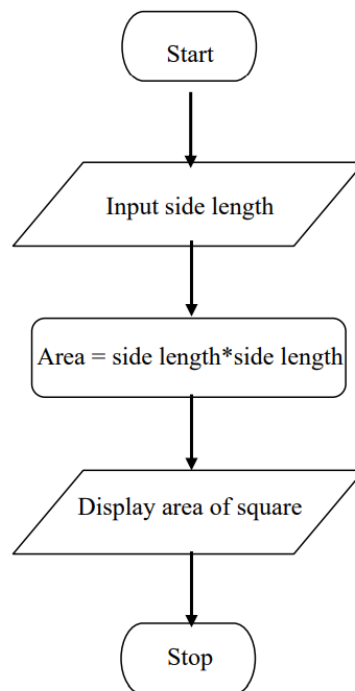
Next >

1.1.3 Calculate area of a Square

ALGORITHM:

- 1 **Start**
- 2 **Read** the side length of the square as an integer.
- 3 **Calculate** the area using the formula:
4 $\text{area} = \text{side} \times \text{side}$
- 5 **Display** the calculated area.
- 6 **Stop**

FLOWCHART:



CODE:

```
side = int(input())
area = side * side
print(area)
```

CODETANTRA:

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1.1.3. Calculate Area of the Square

01:02

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

AreaSqua...

Submit

1side = int(input())

2area = side * side

3print(area)

4

Average time0.007 s6.75 ms

Maximum time0.011 s11.00 ms

2 out of 2 shown test case(s) passed

2 out of 2 hidden test case(s) passed

Test case 111 ms

Expected output5

Actual output5

25

Test case 28 ms

Terminal

Test cases

< Prev

Reset

Submit

Next >

1.1.4 Area of Triangle

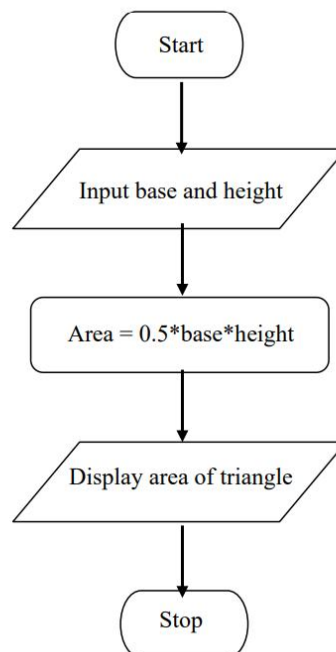
ALGORITHM:

1. Start
2. Read the base of the triangle as a floating-point number.
3. Read the height of the triangle as a floating-point number.
4. Calculate the area using the formula:

$$\text{area} = 0.5 \times \text{base} \times \text{height}$$

5. Display the area formatted to 2 decimal places.
6. Stop

FLOWCHART:



CODE:

```
base = float(input())
height = float(input())
area = 0.5 * base * height
print(f"{area:.2f}")
```

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1.1.4. Area of Triangle00:24

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

Formula: $Area\ of\ Triangle = 0.5 \times base \times height$.

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 +

triangleA...

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

Average time0.011 s11.00 msMaximum time0.016 s16.00 ms

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

Test case 116 ms

Expected output6.541.234.02
Actual output6.541.234.02

Test case 212 ms

TerminalTest cases

< PrevResetSubmitNext >

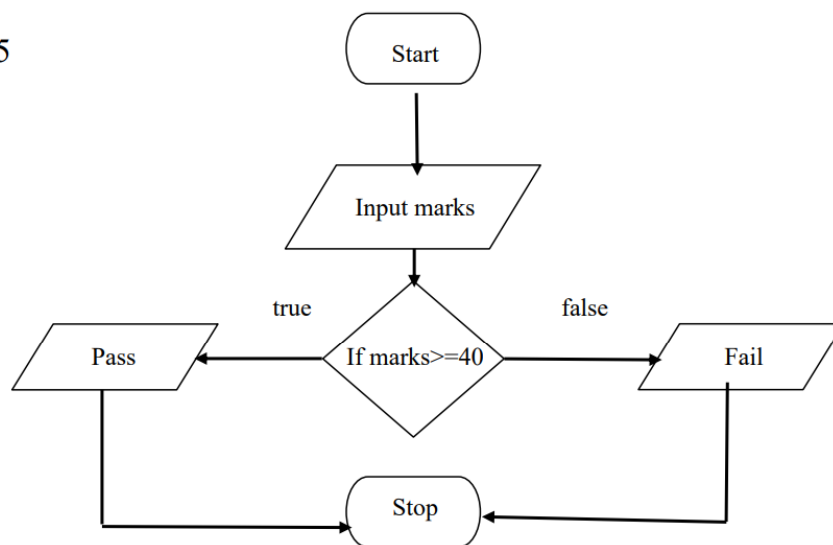
1.1.5. Student Pass or Fail Status

ALGORITHM:

1. Start
2. Read the marks obtained by the student as an integer.
3. Check if marks are greater than or equal to 40.
4. If marks ≥ 40 , display "Pass".
5. Otherwise, display "Fail".
6. Stop

FLOWCHART:

1.1.5



CODE:

```
marks = int(input())
if marks >= 40:
    print("Pass")
else:
    print("Fail")
```

CODETANTRA:

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1.1.5. Student Pass or Fail Status

00:24

AA

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

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

passOrFa...

Submit

1marks = int(input())

2if marks >= 40:

3 print("Pass")

4else: print("Fail")

Average time0.005 s5.14 ms

Maximum time0.007 s7.00 ms

3 out of 3 shown test case(s) passed

4 out of 4 hidden test case(s) passed

Test case 14 ms

Expected output45

Actual output45

PassPass

Test case 27 ms

Test case 34 ms

TerminalTest cases

Debugger

< Prev

Reset

Submit

Next >