

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.

```
1 #Read the radius as a float
2 radius=float(input())
3
4 #define the value of pi
5 pi=3.14
6
7 #calculate the area
8 area=pi * radius * radius
9
10 #display the area formatted to 4 decimal places
11 print(f"area:.4f")
12
```

25
1962.5000
===== YOUR PROGRAM HAS ENDED =====

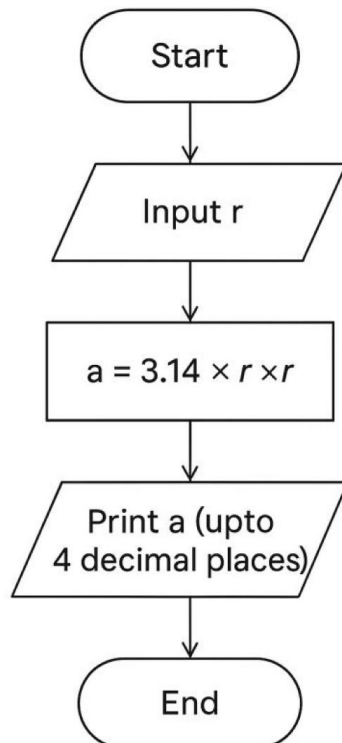
Start

Input: Read the radius (r).

Process: Calculate the area by multiplying $3.14 * r * r$.

Output: Print the result (formatted to 4 decimal places).

Stop



1.1.2. Area of Rectangle

02:20

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

Formula:
Area of Rectangle = Length \times 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.

areaOfRe...

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

20
20
400.00

YOUR PROGRAM HAS ENDED

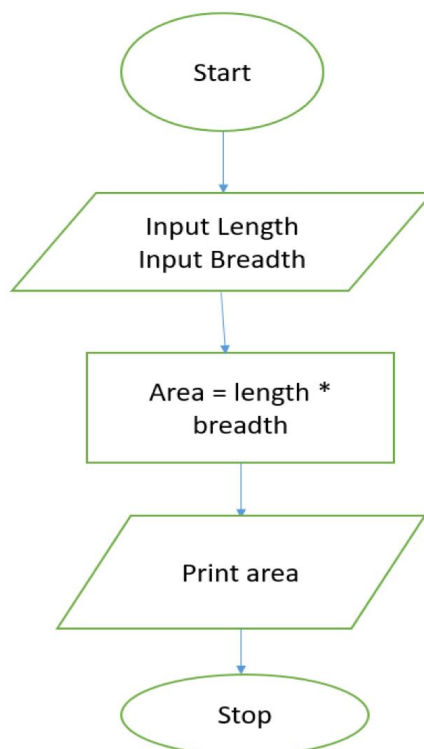
Start

Input: Read length and width.

Process: Calculate the area by multiplying length *width.

Output: Print the result (formatted to 2 decimal places).

Stop



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.

```
1 side_length=int(input())
2 area=side_length * side_length
3 print(area)
4
5
6
7
8
9
10
11
```

720
518400
YOUR PROGRAM HAS ENDED

Start

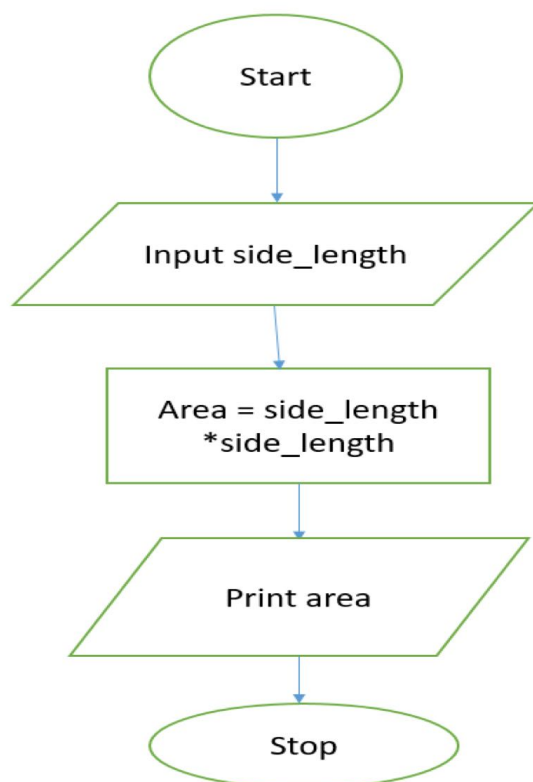
Input: Read the value for `side_length` from the user.

Process: Convert the input value to an integer.

Calculation: Calculate the area using the formula: $\text{Area} = \text{side_length}^2$

Output: Print the calculated area.

Stop



1.1.4. Area of Triangle

00:43

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.

triangleA...

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

67
4
134.00

YOUR PROGRAM HAS ENDED

Start

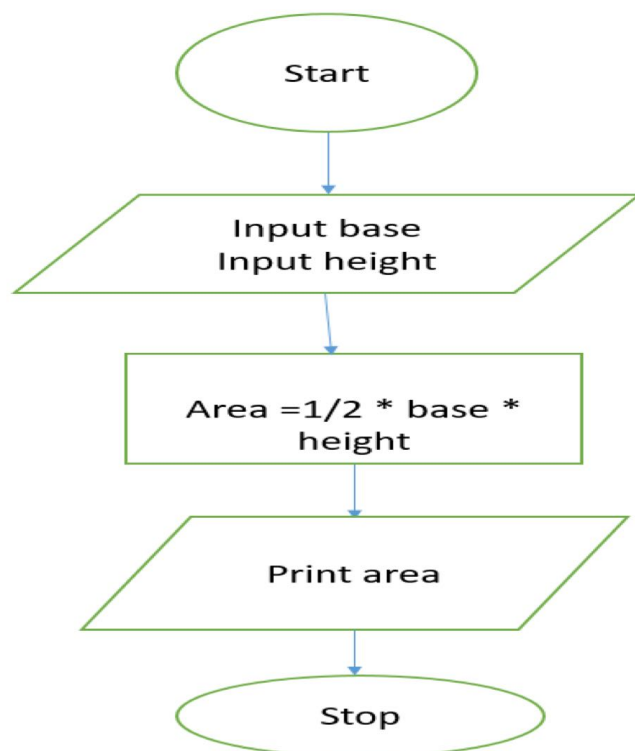
Input 1: Read the first value from the user and store it as base.

Input 2: Read the second value from the user and store it as height.

Calculation: Calculate the area using the formula = $Area = 0.5 \times base \times height$

Output: Print the calculated area, formatted to exactly two decimal places.

Stop



1.1.5. 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

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.

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

57
Pass
== YOUR PROGRAM HAS ENDED ==

Start

Input: Read the marks from the user.

Process: Convert the input to an integer.

Decision: Check if marks is greater than or equal to 40.

If Yes: Print "Pass".

If No: Print "Fail".

Stop

