

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.

circlearea...

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

Average time
0.004 s
4.50 ms

Maximum time
0.010 s
10.00 ms

2 out of 2 shown test case(s) passed

2 out of 2 hidden test case(s) passed

Test case 1 

Expected output

3.14

35.4493

Actual output

3.14

35.4493

Test case 2 

Terminal Test cases

Sample Test Cases

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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.

areaOfRe...

```
1 l=float(input())
2 w=float(input())
3 a = l * w
4 print(f'{a:.2f}')
```

Average time: 0.004 s Maximum time: 0.006 s
3.00 ms 6.00 ms

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

Test case 1 3 ms

Expected output	Actual output
10.5	10.5
5.2	5.2
54.60	54.60

Test case 2 3 ms

Terminal Test cases

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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.

Editor: **AreaSqua...**

```
1 side_length = int(input())
2 area = side_length ** 2
3 print(area)
4
5
6
```

Average time: 0.002 s / Maximum time: 0.003 s
2.25 ms / 3.00 ms

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

Test case 1 (ms)
Expected output: 5
Actual output: 25

Test case 2 (ms)
Expected output:
Actual output:

Sample Test Cases +

Terminal Test cases

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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.

File: triangleA...

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

Average time: 0.003 s Maximum time: 0.005 s

3.25 ms 5.00 ms

2 out of 2 shown test case(s) passed

2 out of 2 hidden test case(s) passed

Test case 1 (5 ms)

Expected output	Actual output
6.54	6.54
1.23	1.23
4.92	4.92

Test case 2 (2 ms)

Terminal Test cases

1.1.6. 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

Sample Test Cases

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

Average time: 0.002 s Maximum time: 0.002 s
1.86 ms 2.00 ms

3 out of 3 shown test case(s) passed

4 out of 4 hidden test case(s) passed

Test case 1 7 ms

Expected output:

Pass

Actual output:

Pass

Test case 2 7 ms

Test case 3 7 ms

Terminal Test cases

2.1.1. Roots of a Quadratic Equation

Write a program to find the roots of a quadratic equation, given its coefficients a , b , and c . Use the quadratic formula:

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

The discriminant $D = b^2 - 4ac$ determines the nature of the roots:

- If $D > 0$: Roots are real and different.
- If $D = 0$: Roots are real and the same.
- If $D < 0$: Roots are imaginary.

Input Format:

- Three space-separated integers representing the coefficients a , b , and c , respectively.

Output Format:

- If roots are real and different, print:

```
root1 = <Root1>
root2 = <Root2>
```

- If roots are the same, print:

```
root1 = root2 = <Root1>
```

- If roots are imaginary, print:

```
root1 = <RealPart>+<ImaginaryPart>i
root2 = <RealPart>-<ImaginaryPart>i
```

- All values should be formatted to two decimal places.

Sample Test Cases

quadratic...

```
1 import math
2 a, b, c = map(int, input().split())
3
4 D = b * b - 4 * a * c
5
6 if D > 0:
7     root1 = (-b + math.sqrt(D)) / (2 * a)
8     root2 = (-b - math.sqrt(D)) / (2 * a)
9     print(f"root1 = {root1:.2f}")
10    print(f"root2 = {root2:.2f}")
11
12 elif D == 0:
13     root = -b / (2 * a)
14     print(f"root1 = root2 = {root:.2f}")
15
16 else:
17     real_part = -b / (2 * a)
18     imaginary_part = math.sqrt(-D) / (2 * a)
19     print(f"root1 = {real_part:.2f}+{imaginary_part:.2f}i")
20     print(f"root2 = {real_part:.2f}-{imaginary_part:.2f}i")
```

Average time: 0.006 s Maximum time: 0.021 s
6.17 ms 21.00 ms

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

Test case 1  
Expected output:  1.00
root1=3.00
root2=3.00

Actual output:  1.00
root1=3.00
root2=3.00

Test case 2  
Terminal 

3.1.1. Largest of Three Numbers

Write a Python program that prompts the user to enter three integers. Print the largest of the three integers.

Input Format:

- The program will prompt the user to enter three integers, one per line.

Output Format:

- The output will display the largest integer among the three integers.

largestNu...

```
1  a = int(input())
2  b = int(input())
3  c = int(input())
4
5  largest = a
6  if b > largest: largest = b
7  if c > largest: largest = c
8
9
10 print(largest)
```

Average time

0.008 s

8.29 ms

Maximum time

0.013 s

13.00 ms

2 out of 2 shown test case(s) passed

2 out of 2 hidden test case(s) passed

Test case 1 10 ms

Expected output

5
6
7
7

Actual output

5
6
7
7

Debug

Run

Stop

...

Sample Test Cases

+

Test case 2 10 ms

Terminal

Test cases

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3.1.2. Celsius to Fahrenheit

Write a Python program to convert temperature from Celsius to Fahrenheit.

Formula:
$$\text{Fahrenheit} = (\text{Celsius} \times \frac{9}{5}) + 32$$

Input Format:

- Single line contains a float value representing the temperature in Celsius

Output Format:

- Print the temperature in Fahrenheit as a float value formatted to 2 decimal places.

Explorer temperat...

```
1 celsius= float(input())
2 fahrenheit =(celsius*9/5)+32
3 print(f'{fahrenheit:.2f}')
4 *
5
```

Average time: **0.003 s** Maximum time: **0.010 s**
3.10 ms 10.00 ms

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

Test case 1 **1 ms**
Expected output: **32.00**
Actual output: **32.00**

Test case 2 **7 ms**

Test case 3 **4 ms**

Terminal Test cases

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