



程式設計概論 Programming 101 —輸入的函數 (input function)

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Get user input data
use input() function

input() function

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► Example

- `a = input('Please enter 1st number: ')`
- `b = input('Please enter 2nd number: ')`
- `print(a + b)`

Result ?

input() function (cont.)

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- ▶ Any data entered by the user is defined as a string.

Python code

```
a = input('Please enter 1st number: ')\nb = input('Please enter 2nd number: ')\nprint(int(a)+ int(b))
```

type(a) and type(b)
→ <class 'str'>

=

```
a = int(input('Please enter 1st number: '))\nb = int(input('Please enter 2nd number: '))\nprint(a + b)
```

type(a) and type(b)
→ <class 'int'>

Practice

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- ▶ Please write a Python program that allows the user to input the top base, bottom base, and height of a trapezoid (梯形), calculates the area of the trapezoid, and prints this area
 - ▶ $\text{area} = (\text{top_base} + \text{bottom_base}) * \text{height} / 2$
 - ▶ Round the area to one decimal place



Student Exercise_3

Question 1

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2. Please write a Python program that allows the user to input the x and y coordinates of two points, then calculates the distance between them, prints it, and rounds it to two decimal places."

* The two point are (x_1, y_1) and (x_2, y_2) ,

$$\text{distance} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

Review

- ▶ Textbook: chapter 2: 2.6

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