

Python **input()** — Quick Notes

A beginner-friendly revision sheet

What is input()?

input() is a built-in Python function used to receive information from the user through the keyboard.

✓ Simple idea

input() lets a Python program ask the user for information.

Basic Syntax

```
input("prompt")
```

The text inside the parentheses is called the prompt. It tells the user what information the program is expecting.

Store User Input in a Variable

```
name = input("Enter your name: ")
```

The value entered by the user is assigned to the variable name, so the program can use it later.

Use the stored value:

```
print("Hello", name)
```

What Type of Value Does input() Return?

☆ Important

By default, input() returns the user's input as a string — even when the user enters a number.

```
age = input("Enter your age: ")
print(age)
print(type(age))
```

If the user enters 20, Python receives "20" as a string.

Example output:

```
20
<class 'str'>
```

Converting Input to Numbers

Use int() when you want a whole number and float() when you want a decimal number.

```
age = int(input("Enter your age: "))
```

```
price = float(input("Enter price: "))
```

⚡ Quick Reference

Data needed	Use	Example
Text	<code>input()</code>	<code>input("Enter name: ")</code>
Whole number	<code>int(input())</code>	<code>int(input("Enter age: "))</code>
Decimal number	<code>float(input())</code>	<code>float(input("Enter price: "))</code>

+ Why `int()` Matters

Without conversion, numeric-looking input is still text. Using `int()` allows Python to perform numerical operations.

```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
print(a + b)
```

📊 Example

If the user enters 10 and 20, the result is 30 — not 1020.

💰 Decimal Input with `float()`

```
price = float(input("Enter price: "))
quantity = int(input("Enter quantity: "))
total = price * quantity
print("Total =", total)
```

Use `float()` for values such as 25.50, 3.14, or 10.75.

🔊 `input()` vs `print()`

Function	Purpose
<code>input()</code>	Receives information from the user
<code>print()</code>	Displays information to the user

🚩 Complete Example

```
name = input("Enter your name: ")
age = int(input("Enter your age: "))
favorite_subject = input("Enter your favorite subject: ")

print("\n----- Student Information -----")
print("Name:", name)
print("Age:", age)
print("Favorite Subject:", favorite_subject)
```

Example output:

```
Enter your name: Gopal
Enter your age: 20
Enter your favorite subject: Computer Science

----- Student Information -----
Name: Gopal
Age: 20
Favorite Subject: Computer Science
```

One Rule to Remember

Ask yourself first

What kind of data do I want from the user?

- Text → `input()`
- Whole number → `int(input())`
- Decimal number → `float(input())`

Common Beginner Mistakes

- Forgetting that `input()` returns a string.
- Trying to add two numeric inputs without converting them to `int()`.
- Using `int()` for a value that contains a decimal point.
- Forgetting the closing parentheses in `int(input(...))` or `float(input(...))`.

30-Second Revision

Remember

`input()` takes information in. `print()` shows information out. `int()` converts input to a whole number. `float()` converts input to a decimal number.

Happy Coding!  | Keep practicing small programs.

