$ python3 day01.py

Python Day01

□□□□□□□□□□

```
>>> print("□□□□□□□□□□□□□")
□□□□□□□□□□□□□
```

LucasHsu.dev — 2026

□ 45 □□

```
$ cat agenda.md
```

□□□□

1. Python Day01 — □□□□□□□□□□□
2. □□□□
3. □□□□□□□□□
4. □□□□□□□
5. □□□□□□□□□□□□
6. □□
7. □□□□
8. □□□□□
9. □□□□□□□
10. Output
11. □□□□□□□□□□
12. □□□□□□
13. f-string □□□□□

PART 01

□□□□

□□□□□□□□□□□□□□□□□□

□□□□□□□□□□

Python □□□□□□□□□□□□□□□□(type)□□□□□□□□□□□□□□□□

10	12.3	'hi'	True	None
int	float	str	bool	NoneType
□□	□□□	□□	□□	□□

```
>>> type(10) # <class 'int'>
>>> type('hi') # <class 'str'>
```

□□□□□□□

□□□□□□

□□□□□□□□□□□□

□□□□□□□□□□——□□□□□□□□□□□□□□□□□□□□□

```
# □□□□□□
'123' ~ □□
123 ~ □□
'123' == 123 → False
```

'123'

□□□□□ → □□

□□□□□□□□□□□□□

123

□□□□ → □□

□□□□□□□□□□

```
>>> '123' == 123
False # □□□□□□□□□□□
```

🔑 □□□□□□□□□□□□ `input()` □□□□□□

PART 02

□□

□□□□□□□□□□□□□□□□□□

□□□□

□ = □□□□□□□□□□□□□□□□□□□□□□□□□□

```python
int_val = 10
float_val = 12.3
str_val = 'hello python'
boolean_val = True
nv = None

print(int_val, float_val, str_val, boolean_val)
print(type(int_val))   # <class 'int'>
print(type(str_val))   # <class 'str'>
print(nv)              # None
```

💡 □□□□□□□□□□□□□ Python □□□□□□□□□□□□□□□□□□

🤔 □□□□□□□□□□□□□□□□□□□□□□□□□□

```python
# ✏️ □□□□□□□□
int_val = 10
float_val = 12.3
str_val = 'hello python'
boolean_val = True
```

□□□□□

✅ □□□□

```
age = 18
user_name = 'Lucas'
total_price = 299
```

□□□□□□□□□□□□□

❌ □□□□

```
a = 18
x1 = 'Lucas'
data = 299
```

□□□□□□□□□□□

```
# □□□□□□□□□ + □□
>>> user_name ← snake_case□Python □□□
>>> userName ← camelCase□Python □□□□
```

⚠️ □□□□□□□□□□□□□□□□□□□ `_` □□□□□□□□□□ `if`, `for`, `while` □

□□□□□□□

□□□□□□□□□□□□□□□□□

□□□□ □□□□ □□□

```
a, b = 10, 20
print(a)  # 10
print(b)  # 20
```

✨ □□□□ Python □□□□——□□□□□□□□□□□□□□□□□□□□

PART 03

Output

□ print() □□□□□□

□□□□□□□□□□□

```
print('hi')
print('hi')       # □□□□□□□ hi □□□
```

□□□□□

```
hi
hi
```

□□□□□□□□□□□□□□□——□□□□□□□□□□□□□□

```
# 😵 □□□ — □□□
name = 'Lucas'
age = 18
print('Hello,', name, 'you are', age, 'years old')
```

```
# 😊 □ f-string — □□□□
name = 'Lucas'
age = 18
print(f'Hello, {name}! You are {age} years old.')
```

```
# 🤯 f-string □□□□□□□□
name = 'Lucas'
age = 18
print(f'Hello, {name}! Next year you will be {age + 1
```

□□□□□□

`print()` □□□□□——□□□□□□□□□□□□

□□□□ □□□□ □□□□ □□□□

```
print('hi')
print('hi')
# □□:
# hi
# hi
```

🔑 □□□□□ `end` — □□□□□□□ `'\n'` □· `sep` — □□□□□□□ `' '` □

f-string □□□□□

f-string □□□□□□□□□□□□□□□□□□□□

```
# □□□□
print(f'{□□}')

# □□□□□□□□□□□□□
pi = 3.14159265
print(f'π ≈ {pi:.2f}')   # π ≈ 3.14
print(f'π ≈ {pi:.4f}')   # π ≈ 3.1416

# □□□□
print(f'{42:05d}')        # 00042
```

□□□□

{□:□□}

:.2f — □□□□

:05d — □□□□

✏️ □□□□

□□□□□□□□□□□□□□

```
pi = 3.14159265
print(f'π ≈ {pi:.2f}')
print(f'π ≈ {pi:.4f}')
print(f'{42:05d}')
```

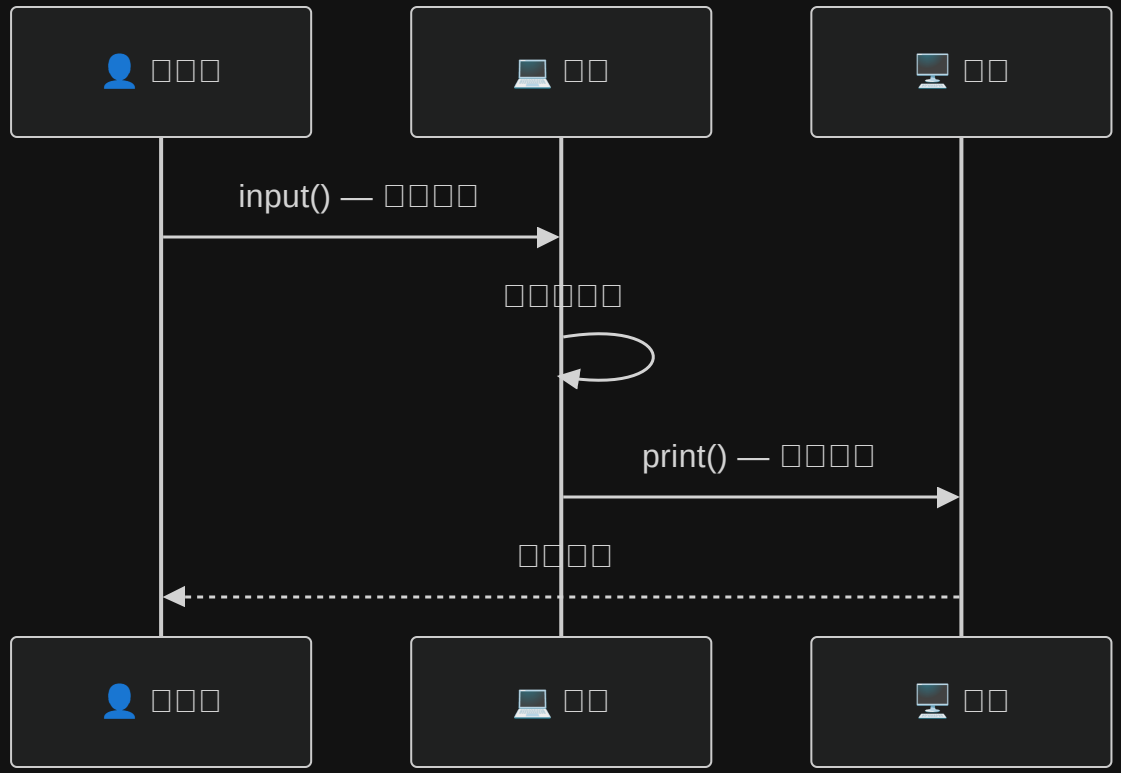
PART 04

Input

□□□□□□□□□□□□□□

□□□□□

□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□


□□□
□□
□□
input() — □□□□
□□□□□
print() — □□□□
□□□□
□□□
□□
□□

□□□□

input() □□□□□□□□□□□□□□

```
n = input()
nn = input('□□□□□□□')
```

⚠️ input() □□□□□□□□□□□□□□□□□□

□□□ '123' != 123 □□□

□□

```
# ✏️ □□□□□□□□□□□
name = input('□□□□□ ')
print(f'Hello, {name}!')

# input() □□□□□□□□
age_str = input('□□□ ')
print(type(age_str))  # <class 'str'>

age = int(age_str)     # □□□□
print(f'□□□□ {age + 1} □□')
```

□□□□

□□□□□□□□□□□□□□□□□□□□□

sys.stdin | while + try | □□□□

```python
import sys

for line in sys.stdin:
    line = line.strip()
    print(line)
```

📂 **sys.stdin**
□□□
□□□□□□□

🔄 **while+try**
□□□□
□□□□□□□

📋 **□□□□**
□□□
□□□□□□□

[illegible] < [illegible]

[illegible] `a.py` [illegible]

```python
a = input()
b = input()
print(a, b)
```

[illegible] `in.txt` [illegible]

```
Everything will get better
12345
```

[illegible]

```
python a.py < in.txt
```

[illegible]

```
Everything will get better 12345
```

💡 `<` [illegible]

⚠️ [illegible]

□□□□□□□□□□

□□ `in.txt` □□□□□□□□□□□□□□□□□□□□

```python
import sys

# □□□□ UTF-8 □□
sys.stdin.reconfigure(encoding='utf-8')

for line in sys.stdin:
    line = line.strip()
    print(line)
```

□□□□□□□□□□

```bash
python a.py < in.txt > out.txt
```

⚠️ □□□ UTF-8 □□□□□□□□□□□□□□□□ Windows□□□□□□□□

PART 05

□□□□□

□□□□□□

□□□□□

□□	□□□	□□	□□□□
□□	`n + 2`	Addition	`n=10 → 12`
□□	`n - 2`	Subtraction	`n=10 → 8`
□□	`n * 2`	Multiplication	`n=10 → 20`
□□	`n / 2`	Division□□□□□ float□	`n=10 → 5.0`
□□□□	`n // 2`	□□□□□□□□□	`n=10 → 5`
□□	`n ** 6`	Power	`n=10 → 1000000`
□□□	`n % 6`	Modulo□□□□□□□□□□□□□	`n=10 → 4`

🧠 □□□□□□□□□□ `/` □□□□□□□ · `//` □□□□□□□ · `%` □□□□□

□□□□

```
1   n = 10
```

n + 2 → **12**

n - 2 → **8**

n * 2 → **20**

n / 2 → **5.0** ← float□

n // 2 → **5**

n ** 6 → **1000000**

n % 6 → **4** ← 10 ÷ 6 □□□

💡 / □□□□ `float` □ // □□□□□□□□□□□

□□□□□□□

□□□□□□□□□□□□□

□□□□ □□ □□□□□

```
x = 10
x = x + 5   # x □□ 15
x = x * 2   # x □□ 30
print(x)
```

⚡ `x += 1` □□□□□□□——□□□□□□□□□□□□□□□□□□□□□

PART 06

□□□□□□□

□□□□□□□□□

□□□□□□□□□□

□□□□□□□□□□□□□

- ✓ `True` □□□
- ✗ `False` □□□

□□□	□□
`<`	□□
`<=`	□□□□
`>`	□□
`>=`	□□□□
`==`	□□
`!=`	□□□

□□

```
10 <= 60       # True
123 == 123     # True
20 == 40       # False
'123' == 123   # False ⚠️
```

⚠️ □□ `'123'` □□□ `123`
□□□□□□□□□□□□ `False`

□□□□□□□Logical Operators□

□□□□□□□□□□□

□□□	□□
`and`	□□□□□□□□□
`or`	□□□□□□□□□
`not`	□□□□□

```
age = 18
has_id = True

age >= 18 and has_id      # True
age < 18 or has_id        # True
not has_id                # False
```

🧠 `and` = [redacted] · `or` = [redacted] · `not` = □□

Truthy / Falsy□□□□□□

□ Python □□□□□ True / False □□□□□□

```
bool(0)        # False
bool(1)        # True
bool("")       # False
bool("hi")     # True
bool(None)     # False
bool([])       # False
```

Falsy□□□ False□

- `0`
- `""`
- `None`
- `[]`
- `{}`

Truthy□□□ True□

- □ 0 □□
- □□□□
- □□□□

if □□□□

□□□□□□□□□□

```
age = 18

if age >= 18:
    print("□□□□")
```

⚠️ Python □□□□□□□□□□□□□□□□□□

if / elif / else

□□□□□□

```
score = 85

if score >= 90:
    print("A")
elif score >= 80:
    print("B")
elif score >= 70:
    print("C")
else:
    print("F")
```

💡 [redacted]

□□□□□□□

```python
username = input("□□□")
password = input("□□□")

if username == "admin" and password == "1234":
    print("□□□□")
else:
    print("□□□□")
```

🔑 □□□□input + □□ + and □□□□

□□□□□□□□□

```
n = int(input("□□□□□□□□"))

if n % 2 == 0:
    print("□□")
else:
    print("□□")
```

□□□□□□□□□□□ 3 □□□□

□□□□□□

- Python □□□□□□int / float / str / bool / None
- `input()` □□□□ □□
- `print()` □□□ f-string □□□
- `/` □ `//` □ `%` □□
- □□□□ + □□□□
- `if / elif / else` □□□□

□□□

□□□□□□

- □□□□
- □□□
- □□□□□
- □□□□

👉 NO GRAPH NO GRAPH NO GRAPH NO GRAPH□□□□**Loop**□□□□□□□