$ python3 day01.py

Python Day01

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

LucasHsu.dev — 2026

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```
$ cat agenda.md
```

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

PART 01

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transition: slide-up

Python (type)

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

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

transition: slide-up

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transition: slide-up

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

'123'

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123

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

PART 02

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```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
```

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🤔 □□□□□□□□□□□□□□□□□□□□□□□□□□

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

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

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

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

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

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

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

PART 03

Output

□ print() □□□□□□

transition: slide-up

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```
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'
```

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`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 — □□□□

✏️ □□□□

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

PART 04

Input

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transition: slide-up

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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} □□')
```

□□□□

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sys.stdin | while + try | □□□□

```python
import sys

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

📂 **sys.stdin**
□□□
□□□□□□□

🔄 **while+try**
□□□□
□□□□□□□

📋 **□□□□**
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transition: slide-up

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NO GLYPH NO GLYPH a.py □

```
1  a = input()
2  b = input()
3  print(a, b)
```

NO GLYPH NO GLYPH in.txt □

```
1  Everything will get better
2  12345
```

□□□□□□

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

□□□□□

```
1  Everything will get better 12345
```

💡 < NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH NO GLYPH

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□□ `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

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transition: slide-up

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□□	□□□	□□	□□□□
□□	`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` □ // □□□□□□□□□□□

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

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

PART 06

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- ✓ `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 □□□□

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```
age = 18

if age >= 18:
    print("□□□□")
```

⚠️ Python □□□□□□□□□□□□□□□□□□

if / elif / else

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```
score = 85

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

💡 [redacted]

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```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("□□")
```

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

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