# Week 2

## Introduction to Programming

12.9.2024

# Last Week

- Outputting data
- Inputting data
- Variables
- Reading integer type data
- Formatting output, part 1
- Simple conditional statement

Feedback:

- Do we have Moodle page → no
- Other questions about 1st week?

# Programming terminology
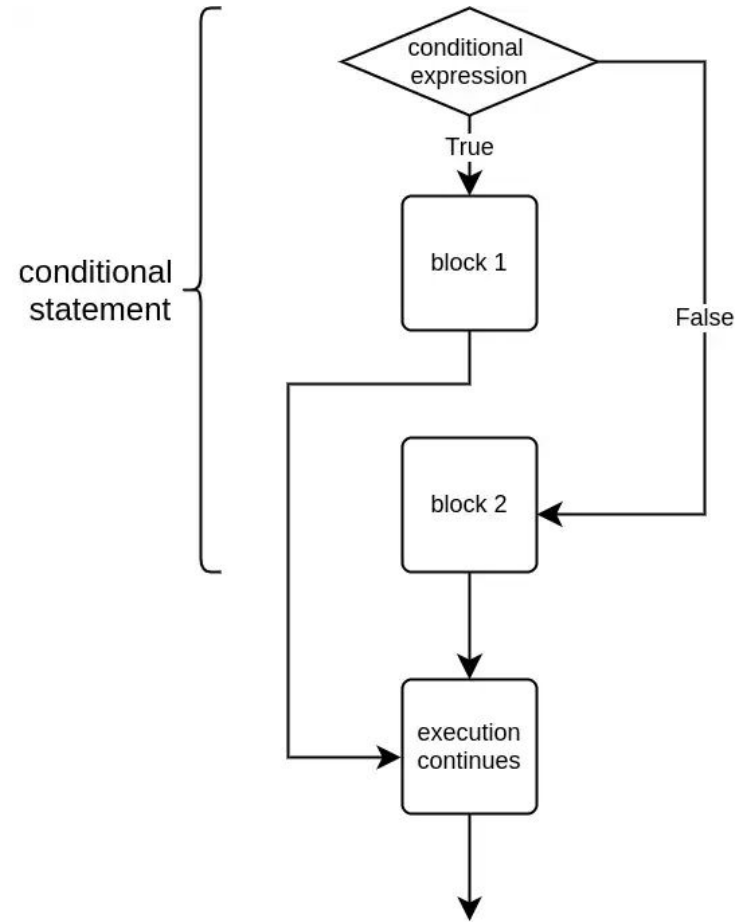
Statement

Block

Expression

Function

Type

Syntax (semantics)

Debugging

# More conditional statements

Optional branch with else statement

# Logical operators

| a | b | a and b | a or b |
|---|---|---------|--------|
| False | False | False | False |
| True | False | False | True |
| False | True | False | True |
| True | True | True | True |

| a | not a |
|---|-------|
| False | True |
| True | False |

# Chaining conditions in Python

$$a > 1 \text{ and } a < 10 \longleftrightarrow 1 < a < 10$$

# Nested conditions

Be careful with indentations!

```
number = int(input("Give a number: "))

if number >= 0:
    if number % 2 == 0:
        print("Number is even")
    else:
        print("Number is odd")
else:
    print("Number was negative")
```

# Simple loop

Repetition with while(True) statement

Continued until **break** is encountered


Next week: more about defining conditions of repetition

# Next week

More loops

String operations

Own simple functions