

# Week 2

Introduction to Programming

11.9.2025

# Last Week

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

# Feedback from week 1

- How to format floating point numbers neatly?

```
num = 1 / 3  
print(f"{num:.2f}")
```

- How to join conditions / when to use elif etc.
  - More about this today!
- Quadratic Equations exercise was difficult
  - Be careful with the order of calculations
  - + and - need to be calculated separately
  - Doing this in small steps probably helps!

# Programming terminology

Statement

Block

Expression

Function

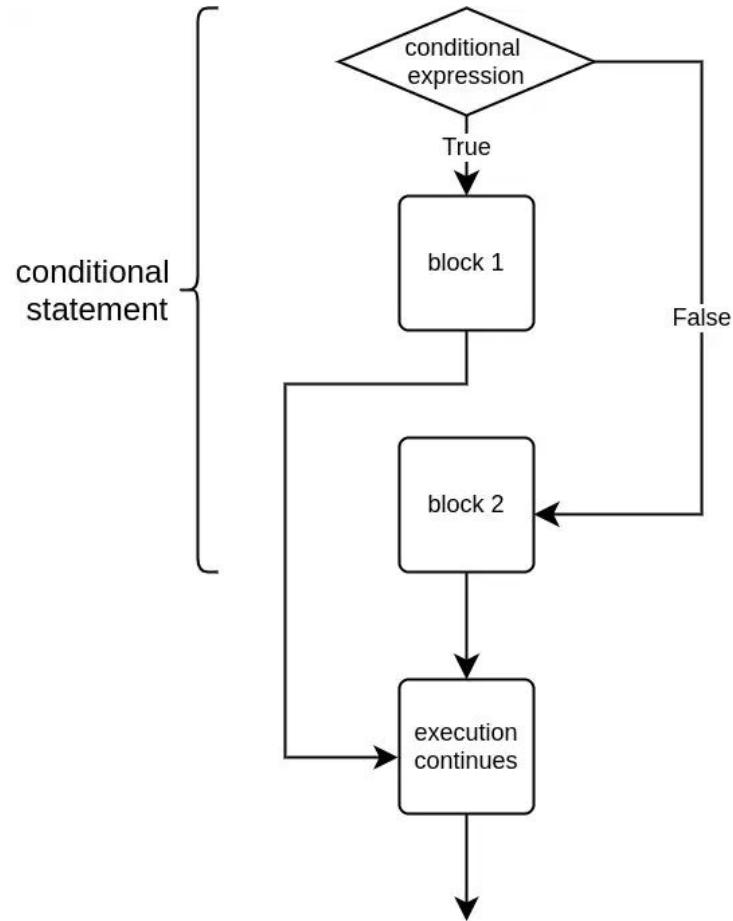
Type

Syntax (semantics)

Debugging

# More conditional statements

Optional branch with else statement



# Logical operators

<b>a</b>	<b>b</b>	<b>a and b</b>	<b>a or b</b>
False	False	False	False
True	False	False	True
False	True	False	True
True	True	True	True

<b>a</b>	<b>not a</b>
False	True
True	False

# Chaining conditions in Python

```
a > 1 and a < 10 ↔ 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

# Using AI

These are OK:

- Asking more information about a topic
- Asking for information about an error message
- Asking what's wrong with code (but this with caution)

Not OK:

- Asking AI to generate code
- Copying and pasting code from AI (or anywhere else)

# Next week

More loops

String operations

Own simple functions