

FIRST STEPS WITH PYTHON

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WRITING PROGRAMS

- ✱ Computers don't understand your problem. You must explain everything to them in a precise language. Details matter.
- ✱ A computer program is targeted at
 - ✱ a computer that runs it
 - ✱ people that read it, including your colleagues and your later self
- ✱ Try to explain your programs to a colleague (or your neighbour in this room), and improve it until it's clear.

WHEN THINGS GO WRONG

- ✱ Writing programs means making mistakes: typos, wrong assumptions, faulty algorithms, etc.
- ✱ A mistake leads to an error message or to a wrong result.
- ✱ Finding and fixing mistakes (“debugging”) is an art that is learned through practice. You *will* become better at this with time.
- ✱ Today you will make lots of mistakes. That’s a great way to learn programming. Don’t hesitate to discuss your mistakes and ask for help. Everyone can learn from everybody else’s mistakes.
- ✱ Try to understand your programs from the computer’s point of view, i.e. the point of view of the dumb executor.

Let's get to work!