

Intro to C++

C++ is a programming language that you can use to **control** your computer. A programming language is just like a regular language --- it has a vocabulary, and a set of rules for how to make commands. A **program** is nothing more than a list of **commands**, or instructions, that you give to the computer. When we write a program, we first begin by thinking very carefully about what we want the computer to do, and create a step-by-step plan for how the computer will do it. This step-by-step plan is called an **algorithm**. For example, an algorithm for making a bowl of cereal might look like the following:

- Take out a bowl from the cabinet
- Place the bowl on the counter
- Take out a box of cereal from the cabinet
- Open the box
- Pour the cereal from the box into the bowl until it almost reaches the top of the bowl
- Close the box
- Put the box back in the cabinet
- Open the fridge
- Take out the milk
- Open the milk
- Pour the milk into the bowl until the cereal reaches the top of the bowl
- Close the milk
- Put milk back in the fridge
- Take a spoon from the silverware drawer
- Put spoon in the bowl

When you write an algorithm, you want to be as **detailed** and specific as possible, because computers are **really stupid**. They only know as much as you tell them, so if you want the computer to do something correctly, you'd better tell it exactly how and give it enough information to complete the task.

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