



Programming: Beginner Building Blocks

Welcome to the Programming Building Blocks! Once your team has installed electronics the robot, you'll need code to help it run!

1. Picking a Programming Language: Java, C++, or LabVIEW

- **Java** is a textual language that is very commonly taught at high schools and is used for the AP exams. It is a “safe” language that runs in its own virtual environment. Teams that use Java include [125](#), [503](#), [4911](#), and [1241](#).
- **C++** is a very efficient textual programming language. It is used in industry for real time systems because of its efficiency, but the learning curve is often much steeper than Java. Teams that use C++ include [971](#) and [1678](#).
- Unlike Java and C++, **Labview** is a graphical programming language developed by NI. The programming languages used for FLL are derivatives of Labview, so students coming from Lego programs may be more comfortable starting off with this. Additionally, NI provides extensive debugging tools for Labview. Teams that use Labview include [624](#)

2. Once your team has picked a programming language, the WPI Screen Steps are a good resource on how to set up your development environment and begin learning how to program. They are linked below.

- [Java](#)
- [C++](#)
- [LabVIEW](#)

3. The entire WPI Screen Steps are also a good resource. [It is linked here.](#)