

CS 445

Laboratory 1

In EPS 259 the systems have the Lego Mindstorm SDK 2.5 installed. In the Programs menu it will be under **Lego Software**. Under that menu you will find submenus for Documentation, Samples, Tools, Browse and a Readme file. The examples are mostly for Visual Basic. The Documentation has data for the Ghost API, the RCX2 LASM byte codes, script programs and the Virtual PBrick Reference manual. Some of this we will use, and some we won't.

We are primarily interested in the **ScriptEd** tool. Open that tool. I have provided two documents that describe the use of the tool and some documentation on the scripting language. The tool itself can work with MindScript, LASM and Raw programs, but we will take a look at the MindScript usage today.

The first thing you need to do is attach your tower and set up your RCX so that they can communicate. You can use the Open or Find choices under Main Menu > Port to set up the correct port. You can test the connection with the button on the toolbar that has a picture of an RCX with a red question mark over it. Spend some time with the interface learning how to execute commands directly and how to download and execute programs.

Your assignment is to create a script that will start a robot moving in some fashion with varying speeds and some turns, and then use a touch switch to change the behavior. This is pretty open-ended, but it's really just an initiation exercise. Have Fun!

There will be some handouts in the lab, but you can look at the documents at [Lego Script Language Manual](#) and [Script Programming Tutorial](#)