

# MicroC Parser

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Overview of the files:

- Inside the **lib** folder you can find the latest version of antlr (<http://www.antlr.org/>)
- Inside the folder **parsing** you can find the file MicroC.g4, which contains the grammar rules for our parser. You are free to modify the grammar if you think that it does not fit with your ast data structure, however you have to make sure that your new grammar goes along with the syntax of MicroC. Antlr provides two walkers that visit the parsing tree; the Listener and the Visitor. You will need one of those two to build the abstract syntax tree of a program. You are free to go with one that you like the most, however for this project it is more intuitive to use the Visitor. If you do not have any experience with antlr before come and ask me so I can help you with it (Panagiotis).
- Inside the folder **MicroC\_language** you can find the main program MicroC.java, which is used to parse a program written in MicroC.
- Inside the folder **tests** you can put your example programs written in MicroC. The example programs should have a .microC extension.

If you are a windows user you can run the parser on the command line using the command "antlr MicroC yourprogram.microC", where yourprogram.microC is your example program. For mac users there is also an .sh file with which you can run antlr similarly, however since I am not a Mac user I do not give any strong guarantees about it. In any case you can find instructions about antlr here <http://www.antlr.org/>.