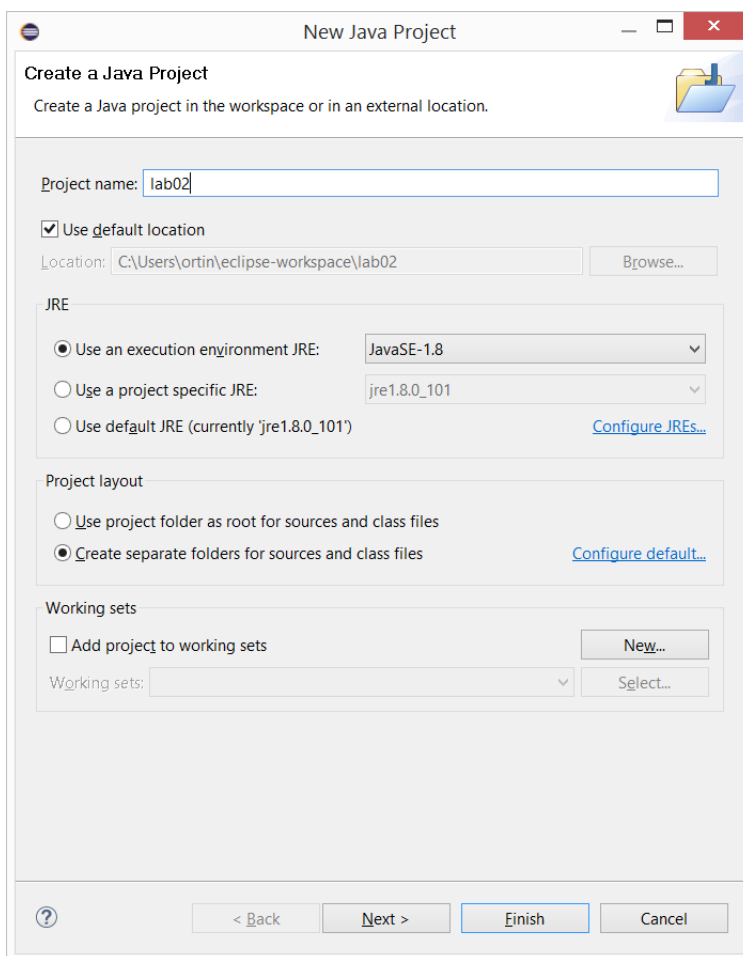# IntelliJ configuration to run ANTLR

ANTLR (ANother Tool for Language Recognition) is a lexer and parser generator for reading, processing and translating source code and binary files. This document shows you how to configure IntelliJ to run ANTLR. Any other Java IDE could be used.
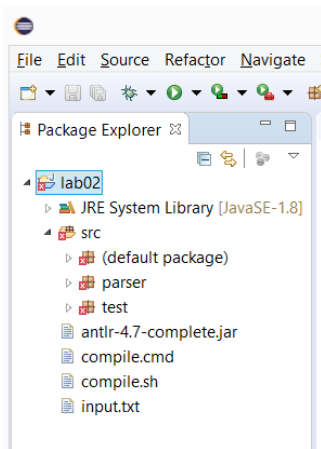
How to create our first lexer / parser in IntelliJ using ANTLR

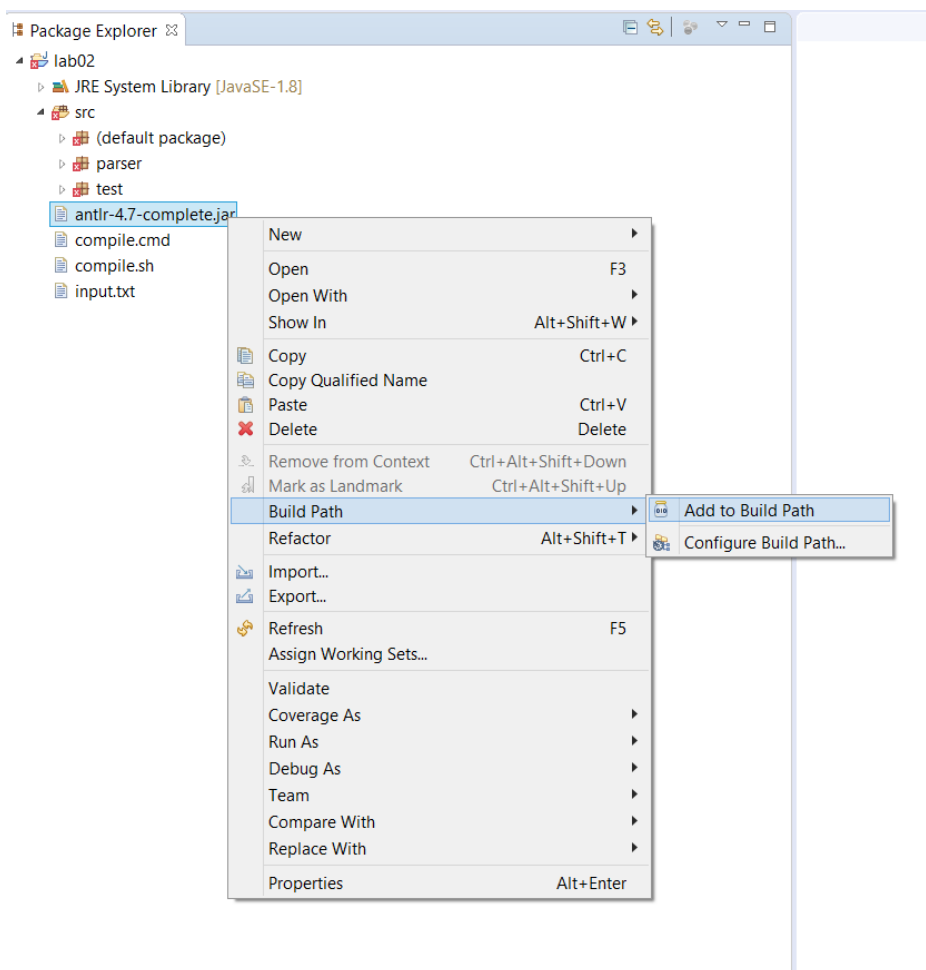Create a new Java project in Eclipse.

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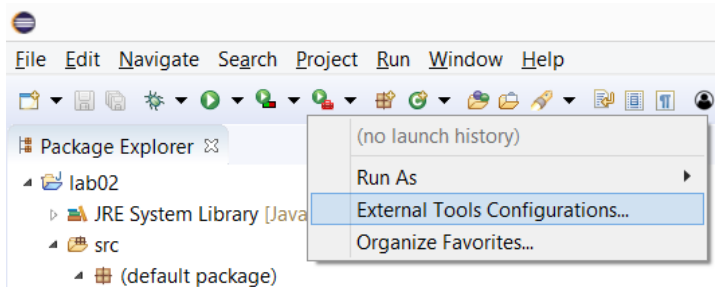Copy the given files in the project directory (copy and paste, or drag and drop).

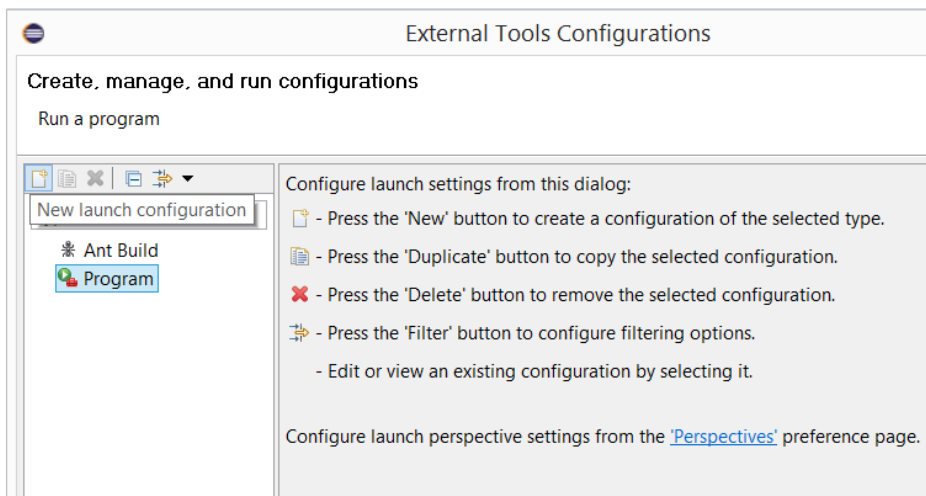Add antlr-4.*x*-complete.jar to the build path.
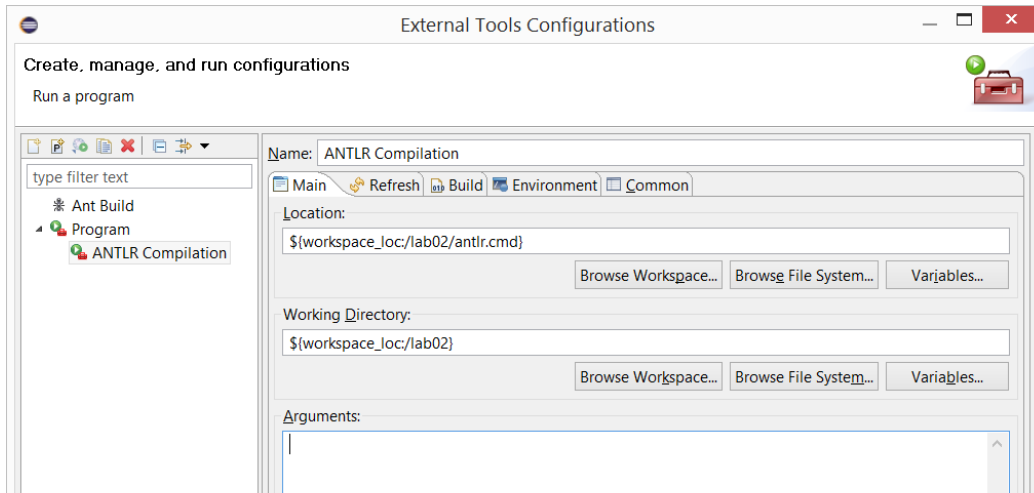
Open the External Tools Configurations menu.

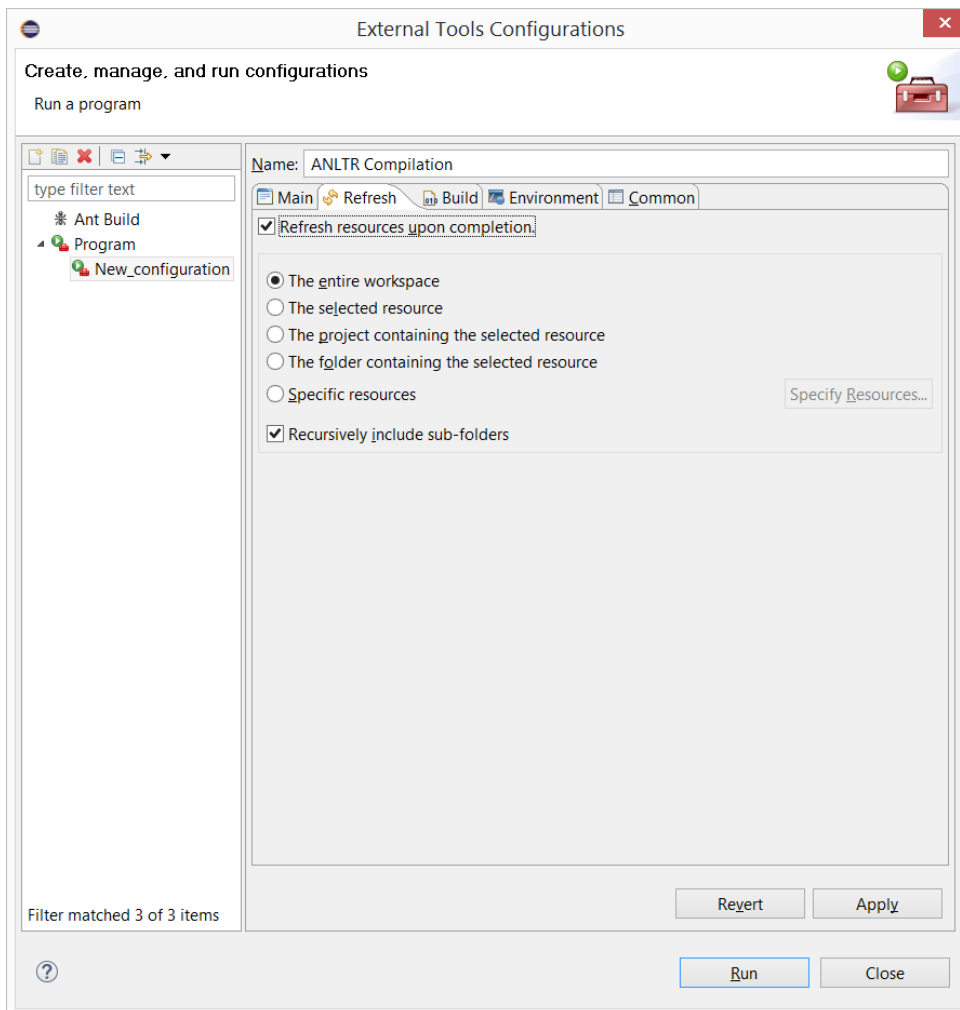Select Program and click on New Configuration.

Name the new configuration "ANLTR Compilation".

For Location, select antlr.cmd (antlr.sh in Mac OS or Linux) after clicking on Browse Workspace.

For Working Directory, select the project (lab02) after clicking on Browse Workspace.

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Click on the Refresh tag and select Refresh resources upon completion.

Click on Run to run ANTLR and see the generated files.

Run the Main Java class, passing small-input.txt as a parameter.

Complete Cmm.g4 to recognize all the lexical patterns described in description.txt.

Complete the LexerHelper class to obtain the semantic values of real and char constants.

To test the implementation, run the test.LexerTest class enabling assertions (pass –ea to the VM upon execution).