



Tutorial AST Generation from ANTLR

Question 1.

Download the AST exercise 2 code, unzip it, and copy `external/antlr-4.6-complete.jar` from initial folder into folder `external`. Open `src/main/mc/utis/AST.scala` and `src/test/scala/AstSuite.scala` and fix the value of "expect" in all tests according to the corresponding "input".

Question 2.

Modify `src/main/mc/astgen/AstGeneration.scala` to make it generate the AST for the MC?

Question 3.

Change rule of `manyindex` as follows:

`manyindex` \rightarrow `oneindex` +

Rewrite `AstGeneration.scala` to generate AST?

Question 4.

Change MC.g4 as follows:

`arrayDecl` \rightarrow `LP exp DOTDOT exp RP nextdecl`
`nextdecl` \rightarrow `arrayDecl` | `elementtype`
`elementtype` \rightarrow `INT` | `REAL`
`exp` \rightarrow `INTLIT` | `SIGN INTLIT`

Modify `AstGeneration.scala` to generate the corresponding AST?