

CSEN1002 Compilers Lab, Spring Term 2021

Task 5: ANTLR Lexical Analysis

Due: Week starting 01.05.2021

## 1 Objective

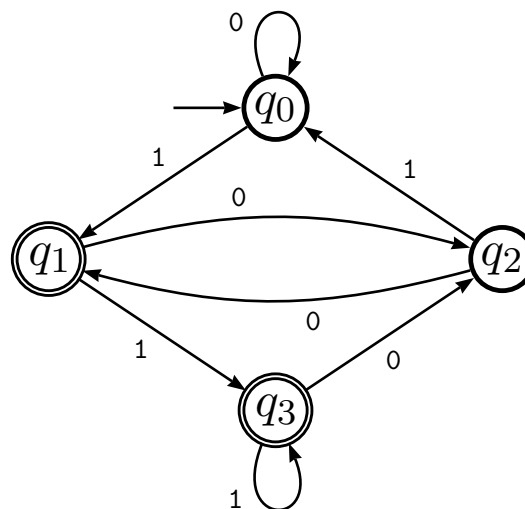
For this task you need to implement a simple lexical analyzer using ANTLR ([www.antlr.org](http://www.antlr.org)). Your tutor will introduce you to ANTLR during the session, but you are urged to prepare by taking a look at the ANTLR documentation:

[github.com/antlr/antlr4/blob/master/doc/index.md](https://github.com/antlr/antlr4/blob/master/doc/index.md)

## 2 Requirements

- You will implement an ANTLR lexical analyzer for the following fallback DFA. (The fallback DFA is encoded as in the Task 4 description document.)

0,0,1,;1,2,3,00;2,1,0,;3,2,3,11#1,3



- For example, running the lexical analyzer implementing the above FDFA on the string 100101 produces the output 1100.

## 3 Evaluation

- Your implementation will be tested on ten input strings.
- You get one point for each correct output; hence, a maximum of ten points.

## 4 Online Submission

- You should submit your code at the following link.

<https://forms.gle/xsBwVVBpMk5HR7Jp6>

- Please make sure that the java file that runs your parser and lexer is named “**Main.java**”.
- Please export your entire IntelliJ IDEA project to a Zip file using the “**File > Export to Zip File...**” option.
- The filename should be of form <LabNo\_ID\_Name>; for example,

**P13\_40\_1234\_John\_Smith.zip**

- Online submission is due on Thursday, May 6th, by 23:59.