German University in Cairo
Department of Computer Science
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CSEN1002 Compilers Lab, Spring Term 2021
Task 10: ANTLR Parsing 2

Due: 29.06.2021 by 23:59

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1 Objective

For this task you will use ANTLR to implement an SDT or an SDD for checking converting a binary number to a decimal number.

2 Requirements

- The grammar of your SDT/SDD should generate all binary strings, where a binary string is a string over the alphabet $\{0, 1\}$.

- In your SDT/SDD, the start variable should have an attribute `val` whose value is the decimal representation of the input binary number. For example, on input `1101`, the output should be `13` and, on input `00011`, the output should be `3`.

3 Evaluation

- Your SDD will be tested using ten inputs. Each correct output is worth one point, hence a total of ten points.

- You may evaluate your work with Task 9 during the week starting June 21st, if you like. Otherwise, your online submission (see below) will be used for evaluation.

4 Online Submission

- You should submit your code at the following link.

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https://forms.gle/LiwBXNWpT2XGAT177

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- Submit one only one grammar file named after your tutorial number, ID, and name (with the extension "`.g4`") using the following format.

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T*XX_YY_ZZZZ_Name*.g4

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For example, the following is a possible file name.

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`T07_37_0000_John_Smith.g4`

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- Online submission is due on Tuesday, June 29, by 23:59.