README.md

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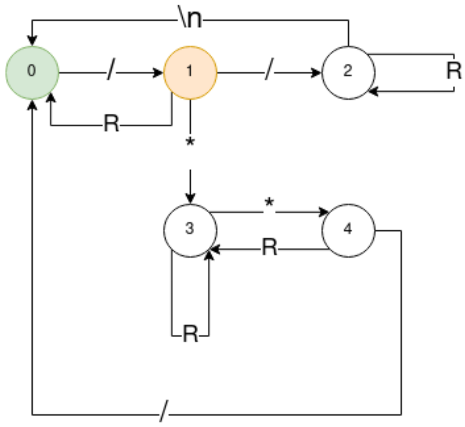
3rd homework from KIV/FJP subject - Implementace jednoduchého lexikálního analyzátoru

Solution description

- in order to remove C-like comments from a given file, I have designed a DFSA, where some transitions between states are colored based on whether the current character that is being processed should be printed out:



  - a green colored route means, that the current character should be printed to the standard output
  - an orange colored route means, that the current character is to be added to a buffer, that will be printed to the standard output only if the transition from the next state has a green colored background
  - a purple colored route means, that the current character should be printed out only if any other character on the current line has been printed out
    - this could have also been implemented by adding more states and routes, but for the sake of simplicity of this DFSA I have decided to implement it in the program that will use this DFSA
- a simple program program (`comments.py`) that implements the designed DFSA was written in the Python language

Usage

- `python3 comments.py <file path>` , where the `<file path>` argument contains the path to the file, which should be transformed
  - if the provided path does not lead to any readable file, an error is printed out
  - if no file path is provided, an error is printed out
  - the result of the transformation is printed to the standard output
- it is recommended to forward the output of the program to another file
  - `python3 comments.py lex.yy.c > lex.yy.cless.c`
    - `lec.yy.cless.c` now contains contents of `lex.yy.c` without C-like comments

Example

- `test_cless.c` contains contents of `test.c` but without C-like comments