Homework 3: Parser for the PyC programming language.

2024 Compiler MUST FIE
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Tasks

- Write a parser for the language PyC.   Some features of the Parser.
  - The input: a sequence of tokens produced by a PyC scanner after scanning a PyC source-code file.
  - The output:
    - When the program is correct, a parse tree is produced, and the tree is printed to verify its correctness.
    - When some syntax errors in the PyC source code exist, at least one error message is printed explaining one of the errors discovered.
- Test your parser with some correct PyC program files and some PyC program files with syntax errors.
  - You can design your own PyC programs files. For example, you can use the sample PyC programs uploaded on Moodle, and add some syntax errors into files to test your parser.

Hint: The provided "helpful code" at the Moodle site of this course can be helpful, which includes examples of data structure and functions for a parser (for a different source language). For example, there is a function for printing a parse tree.

Submission

- The following files should be submitted on Moodle:
  - The source code of the complete parser program.
  - A report file (.docx) describing:
    - The **names** of the members in your group (at most three) that did the homework together.
    - How did the group members cooperate? What are the contributions of each group member?
    - What aspects of your parser work correctly, and what are the troubles?
    - How do you compile and run your program? Show some output record of your running your program and explain it.
  - Only one member must submit the files in a group (at most three students).
- Due date: refer to the setting on Moodle.