



T-603-THYD Compilers

Project: A *lexer* for ChocoPy

Objective

The objective of this project is to get you starting with writing a compiler/interpreter. The focus of this part of the project is on lexical analysis.

You should work on the project in a group of two. You need the instructor's permission to do the project individually.

Description

Your task is to write a lexical analyzer for the ChocoPy programming language (in Python). Please study section three in the *ChocoPy language reference* carefully (found in Canvas/Modules/Project) to get a complete understanding of the tokens your lexer needs to recognize. We will follow the specifications there faithfully.

You have been provided with an incomplete skeleton code for the lexer in Python. You are free to modify it as you see fit; however, you are not allowed to change the interface (i.e., the class interfaces for the *Lexer* and the *Tokentype*, *Location*, and *Token* classes).

In *Canvas*, submit *both your Python lexer code and the test cases* you used for testing your program, more specifically:

- A Python file called *lexer.py*.
- One or more text files with your test cases (using any names you see fit).