

In the name of Allah

How CPython Compiler Works

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Abstract Syntax Tree

Compiling

Overview

Overview

- Which steps does CPython takes to compile your source code?
- Why these steps?
- How they are done?

Diagram

- -----
| Decoding -> Tokenizing -> Parsing -> AST | -> Compiling |

- Front-end: Decoding, Tokenizing, Parsing and AST
- Back-end: Compiling

Why front-end and back-end?

- We've got a front-end and a back-end part in this process.
- front-end: getting down to the AST
- back-end: to get the generated AST and compile it down to something
- good example is [PyPy](#) which is a front-end for Python

Decoding

Tokenizing

Parsing

Abstract Syntax Tree

Compiling