Front end:

Source code stream of text

Analysis (parsing)

Synthesis (code generation)

Target code stream of target instructions

Error-free syntax trees

Stream of syntax trees

Evaluates (traverse) code optimization

All error detection takes place here

Analysis (parsing) phase:

Input text (lexing)

Lexical analysis (tokenizing)

Stream of tokens

Recognizing hierarchical structures

Examples: integer constants

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+, -, ++, --, =, =

; , >, >=, =, ,

Identifiers: foo, bar

Symbol Table communicates with lexer & parser

Code generator