

Source string (source code)

Parser

Lexical analysis

Tokens

Syntactic analysis
(semantic analysis)

Parse tree (AST)

Compile/interpret/translate

Output (machine code,
relational algebra, ..)

```
graph TD; A[Source string (source code)] --> B[Lexical analysis]; subgraph Parser; B -- Tokens --> C["Syntactic analysis (semantic analysis)"]; end; C -- "Parse tree (AST)" --> D[Compile/interpret/translate]; D --> E["Output (machine code, relational algebra, ..)"];
```

The diagram illustrates the compilation process. It begins with a 'Source string (source code)' box. An arrow points down to a large gray box labeled 'Parser'. Inside the 'Parser' box, there is a 'Lexical analysis' box. An arrow labeled 'Tokens' points from 'Lexical analysis' to a 'Syntactic analysis (semantic analysis)' box. An arrow labeled 'Parse tree (AST)' points from the 'Syntactic analysis' box to a 'Compile/interpret/translate' box. Finally, an arrow points from the 'Compile/interpret/translate' box to the 'Output (machine code, relational algebra, ..)' text.