

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]; B -- Tokens --> C["Syntactic analysis (semantic analysis)"]; 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 are two white boxes: 'Lexical analysis' and 'Syntactic analysis (semantic analysis)'. An arrow points from 'Lexical analysis' to 'Syntactic analysis', with the label 'Tokens' placed to the right of the arrow. An arrow points from the bottom of the 'Parser' box to a white box labeled 'Compile/interpret/translate'. This arrow is labeled 'Parse tree (AST)' to its right. Finally, an arrow points from the 'Compile/interpret/translate' box to the bottom of the diagram, labeled 'Output (machine code, relational algebra, ..)' to its right.