



### SEMANTIC ANALYSIS = CONTEXTUAL ANALYSIS

- Purpose: check that program conforms to the source language's contextual constraints.
- For a typical programming language these constraints consist of:
  - Scope Rules: rules governing declarations and use of identifiers.
  - Type Rules: rules governing the use of variables and constants of specific types.
- Some syntax checking is also performed at this time for syntax rules that may have been too difficult to enforce grammatically. (e.g. return statements only allowed inside function declarations.)
- Pseudo-stage, often integrated with other stages such as evaluation or intermediate code generation → output depends on requirements of next stage.