Abstract Syntax

concrete

\(<\text{while}\> ::= \text{while}\<\text{bool}\_\text{expr}\>\text{do}\<\text{command}\>\text{od}\)

— BNF productions or syntax charts
— non-terminals, terminals including keywords
— describes appearance; structure inferred
— other languages may have same structure, different appearance, e.g., ADA

\(<\text{while}\> ::= \text{while}\<\text{bool}\_\text{expr}\>

\quad \text{loop}\<\text{command}\>\text{end loop}\)

abstract

\text{Command} ::= \text{while}\ \text{Expression} \text{do} \text{Command}

— productions focus on structure
— order of components irrelevant
— terminal keywords dispensible: only mnemonic
— could well be \text{Command} ::= 

\quad \text{whilebody:Command;whiletest:Expression}