* Sematic Analysis : (Also called phase bridge)

⇒ Analysis phase of syntax.

⇒ Last phase of translation is code generation.

Tools :

* LEX - Lexical Analyser.
* YACC - Yet Another Compiler.

Sematic Analysis makes sure that declarations and statements of programs are semantically correct. It is a collection procedures which is called by parser as and when required by grammar.

Both syntax tree of previous phase and symbol table are used to check the Consistency of the given code. Type checking is an important part of sematic analysis where Compiler makes sure that each Operator has matching Operands.

LEXICAL ANALYSIS: (Also called scanner)

⇒ Reach the successive line
⇒ Breaks into items like Identifier, Operator, De-limiter
⇒ constructs symbol table.
⇒ symbol table allocates memory.

Lexical Analysis is the first phase of the compiler also known as a scanner. It converts the high level input program into a sequence of tokens.

* Lexical Analysis can be implemented with the Deterministic finite Automata.
* The output is sequence of tokens that is sent the parser for syntax analysis.

Syntactic Analysis:- (Also called parsing)

⇒ expression, statement, decleration identified.
⇒ Aided by formal grammer of programming language.

Syntactic analysis (or) parsing a syntax analysis is the third place of NLP. The purpose the text. syntax analysis cheeks the text for meaningfulness. Comparing to the rules of formal gramer.

For example, the Sentence like " hot icecream " would be rejected by sematic analyzer.