

Assignment 1

1. Consider the following while-statement:

while $A > B \ \& \ A < 2 + B * 5$ do $A := A + B$

List the output generated by the first two phases of the compiler for the above statement.

2. Construct Operator Precedence Parsing table for the grammar given below and find the precedence table if one exists.

$S \rightarrow E \$$

$E \rightarrow (E) / \{E\} / [E] / ab$

3. Write a predictive parser for the following grammar.

$S \rightarrow ABC a$

$A \rightarrow a / ab/CD$

$B \rightarrow a / \in$

$C \rightarrow b / \in$

$D \rightarrow c / \in$
