

CS 445 02/19/19

Dragon project: Pascal Appendix A

+ Lex scanner: complete the lexical specifications

+ Parser: — the additional features from the grammar

+ Syntax tree: start building the module (ex: calculator example)

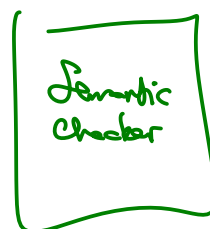
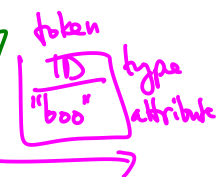
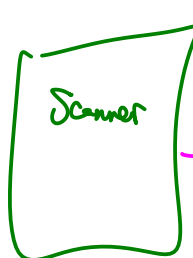
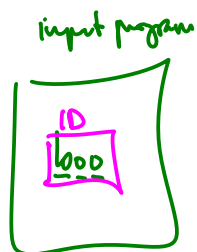
→ Symbol table:

- Code generator: Chapter 9-10

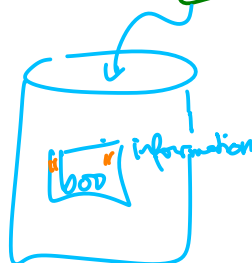
issue with the sign rule
daying FUSE (Ch 4)

Semantic analysis

Symbol Table:



Symbol
Table

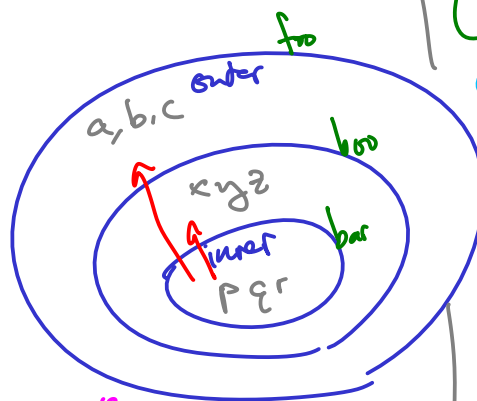
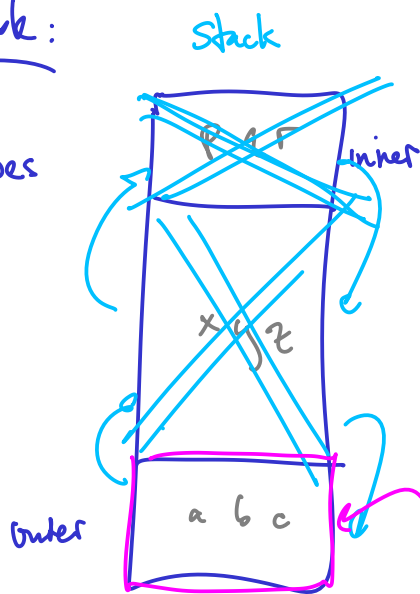


database of names

variable name → type
array name → type, "dimension"
function name → type, arguments/types
procedure name →

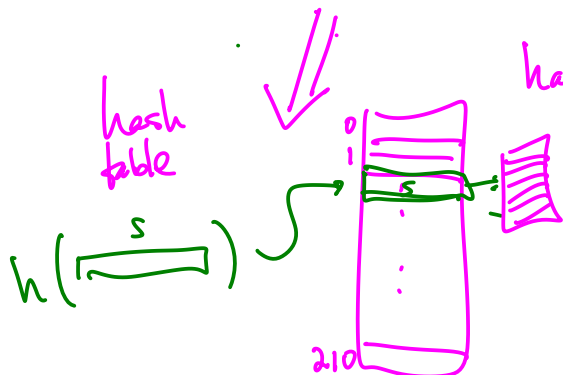
Symbol Table:

Scopes



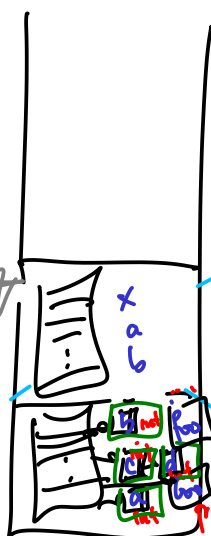
names that belong to the same scope

hashpjwr() (Ch 7)



Symbol Table

top



foo scope

main scope (outer)

Stack

Program main

var a, b, c: integer;

procedure foo(a: real);

var e, b: integer;

begin

b := d

function foo(x: integer): integer;

var a, b: real;

begin

end

begin

end