

## 1.1 Names in the Symbol Table

1. “Lexemes for all tokens are acquired into ST by the lexical analyzer. ” [?] The ST has a operator called lookup necessary for finding these lexemes.
2. Semantic actions has an operation called emit (gen\_quad). This operation implants basic operations into the quad table.
3. When the statement forming a procedure body is examined, a pointer to the symbol table for the procedure appears on top of the table stack.
4. Given a production for a procedure:

$$D \rightarrow \mathbf{proc\ id\ ;} ND_1; S$$

“An names in an assignment generated by  $S$  must have been declared in either the procedure that  $S$  appears in, or in some enclosing procedure. ” [?] In other words, the scope of statement determines the relevant symbol table paths.

5. There are critical semantic actions to take in the case of statements involving assignments, and Turing Essential Operations. Ordering is determined by syntax, and the calls then determine the semantics. (Reference figure 8.15 [?].