

the subprogram number. That is, when we look up a newly scanned identifier, a match only occurs if the identifiers match character for character and the associated number in the symbol-table entry is the number of a currently active block or subroutine. (10)

Scope rules required a more complicated form of symbol table than simple list of associations between names and attributes. One of the techniques that can be used to take care of scope rules is to keep multiple symbol table one for each active block. Each table is list of names and their associated attributes and the tables are organized into stack. Whenever a new block is entered, a new empty table is pushed onto the stack for holding the names declared local to this block and when declaration is compiled, the table on the stack is searched for a name, if not found is inserted.