

1. Study *Computer Systems*, Sixth edition Chapter 7, Section 7.3.
2. The FSM of Figure 7.71 extends the Pep/10 lexical analyzer to support pseudo-operations, like `.WORD` and `.EQUATE`. Add a new token class in `pep10/tokens.py`, named `PseudoOp`. The token's value must be a `str`, like a `Comment`.

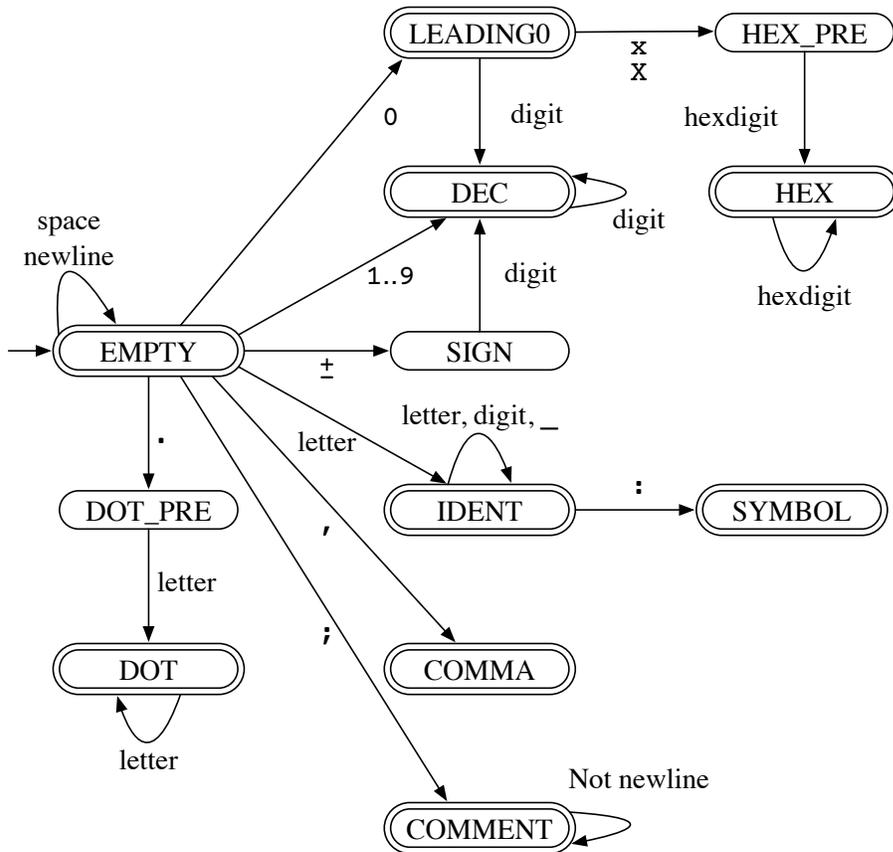


Figure 7.71 The lexical analyzer of Figure 7.30 with added states for pseudo-operations.

Extend the lexical analyzer in `pep10/lexer.py` to support the additional states of Figure 7.37 for pseudo-operations. On successfully scanning a pseudo-operation, return an instance of the newly-created token type `PseudoOp`. A leading `.` should not be included in the token's value.

To hand in your programming assignment, you must zip the entire project you downloaded from github. Name your file `xxprob0722.zip` (all lowercase) where `xx` is your assigned two-digit number. For example, if your two-digit number is 99 you would name it `99prob0722.zip`.

Hand in your file as an attachment in Canvas under Assignment 22.