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The context-free grammar(CFG) has to move to the next state according to the current
    input(since CFG can be converted to DFA). It's depending on the current pattern(in
    other words, local to productions). The rule applied will change depends on the
    local value(or local input).

In the Parser file ANTLR generate for HW1, I find that the value for EOF is -1, and
there's a function "match(EOF)" to make sure when the scanning complete, it will
land to match the EOF value to let the program know the scanning is completed.

If there's no EOF for rule, ANTLR will think my other ending input is still part of
the input and keep waiting for next input. The program will never terminate.