



N.B DFA alphabet is tokens  
{IF, THEN, ELSE, END, NUM, ID, SEMICOLON, ASSIGN}

N.B. Assume that empty if and/or empty else is not accepted.  
  
(nested ifs not considered)

**RegEx**  
IF NUM THEN  
( [(ID ASSIGN (ID | NUM)) | ID ] SEMICOLON )+  
  
( ELSE  
( [(ID ASSIGN (ID | NUM)) | ID ] SEMICOLON )+ )?  
END

**RegEx cont.**  
IF = {if | IF | iF | If}  
THEN = {(t | T) (h | H) (e | E) (n | N)}  
ELSE = {(e | E) (l | L) (s | S) (e | E)}  
END = {(e | E) (n | N) (d | D)}  
SEMICOLON = {;}  
ASSIGN = {:=}  
ID = {[a-z A-Z]+ ([a-z A-Z 0-9] | - | \_ )\*}  
NUM = {[0-9]+ | [0-9]+.[0-9]+ | - [0-9]+}