

### Detailed description of the code sequence

The code sequence:-

1-I open a file named "tiny\_sample\_code.txt" and go through every line on it

2-I initialized the first state to START

3-I make a check on each element of the input

if it is space:-

Then I move to the next element if it continues to have spaces then i will loop till i reach the end of the blank text and then assign state to done

else i'll return to start again and check

if it is '{' :-

i will go to the INCOMMENT state and i will keep moving until i reach the closing bracket '}' and assign the sentence within brackets to be a comment

if it is letter :-

Then i will go to state INID and add the letters to a string "tokens\_out" until i reach a space so that i know the word is finished then check on the word to find out if it is one of the reserved

words or not and if it doesn't represent anyone of them then I'll assign it to identifier

if it is digit :-

i will go to the INNUM state and print it out with the word number

if it represent any special symbol :-

I will print it out with the word special symbol attached to it

For all the states I'll keep checking through the whole input length till i reach its end

then return to state Done