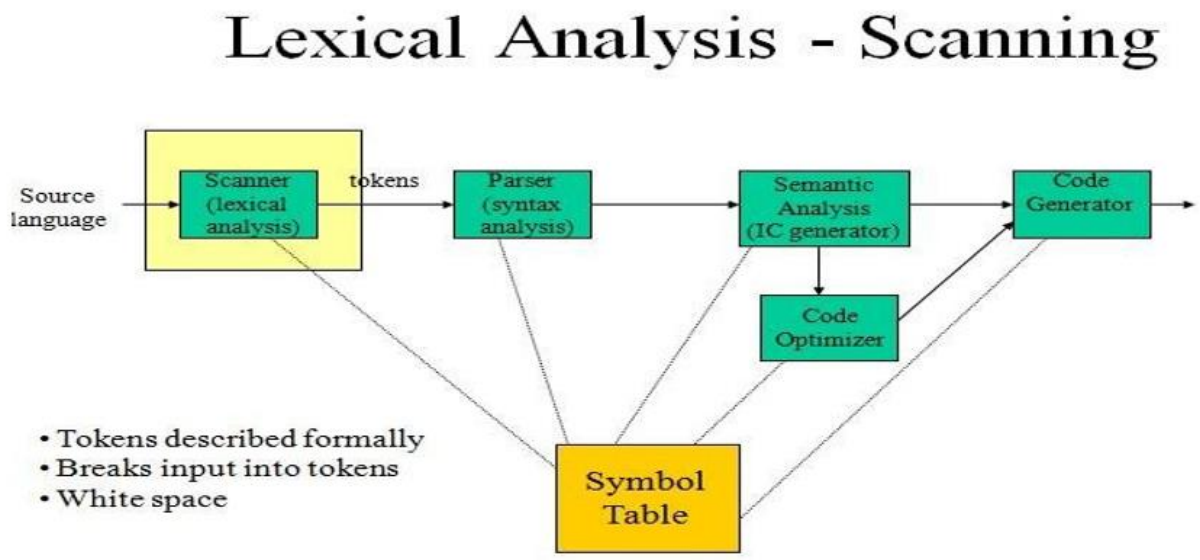
Problem Statement: Write a C program to develop a lexical analyzer to recognize a few patterns in C.

AIM: To Write a C program to develop a lexical analyzer to recognize a few patterns in C.

Lexical analysis is the process of converting a sequence of characters (such as in a computer program of web page) into a sequence of tokens (strings with an identified "meaning"). A program that perform lexical analysis may be called a lexer, tokenize or scanner



Tokenized and represented by the following table:

Lexeme	Token category
Sum	"identifier"
=	"assignment operator"
3	"integer literal"
+	"addition operator"
2	"integer literal"
;	"end of the statement"

ALGORITHM / PROCEDURE:

1. Start the program
2. Include the header files.
3. Allocate memory for the variable by dynamic memory allocation function.
4. Use the file accessing functions to read the file.
5. Get the input file from the user.

6. Separate all the file contents as tokens and match it with the functions.
7. Define all the keywords in a separate file and name it as key.c
8. Define all the operators in a separate file and name it as open.c
9. Give the input program in a file and name it as input.c
10. Finally print the output after recognizing all the tokens.
11. Stop the program.