**CSA1443-COMPILER DESIGN FOR INTRAPROCEDURAL ANALYSIS**

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**PROGRAM 2**

**Develop A Lexical Analyzer To Identify Whether A Given Line Is A Comment Or Not Using C**

**Aim:**  
To ignore spaces, tabs, newlines, and comments (// for single-line comments and /\* \*/ for multi-line comments) while processing the input.

**Code:**

#include <stdio.h>

#include <string.h>

#define MAX\_LEN 100

int isSingleLineComment(char \*str) {

if (str[0] == '/' && str[1] == '/') {

return 1;

}

return 0;

}

int isMultiLineComment(char \*str) {

if (str[0] == '/' && str[1] == '\*') {

int len = strlen(str);

if (str[len - 2] == '\*' && str[len - 1] == '/') {

return 1;

}

}

return 0;

}

int main() {

char input[MAX\_LEN];

printf("Enter a line of code: ");

fgets(input, MAX\_LEN, stdin);

if (isSingleLineComment(input)) {

printf("This is a single-line comment.\n");

} else if (isMultiLineComment(input)) {

printf("This is a multi-line comment.\n");

} else {

printf("This is not a comment.\n");

}

return 0;

}

Output:

