2.Develop a lexical Analyzer to identify whether a given line is a comment or not using C

#include <stdio.h>

#include <string.h>

void checkComment(char \*line);

int main() {

char line[256];

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

fgets(line, sizeof(line), stdin);

checkComment(line);

return 0;

}

void checkComment(char \*line) {

if (strncmp(line, "//", 2) == 0) {

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

} else if (strstr(line, "/\*") != NULL && strstr(line, "\*/") != NULL) {

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

} else {

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

}

}

