

# Develop a lexical Analyzer to identify whether a given line is a comment or not.

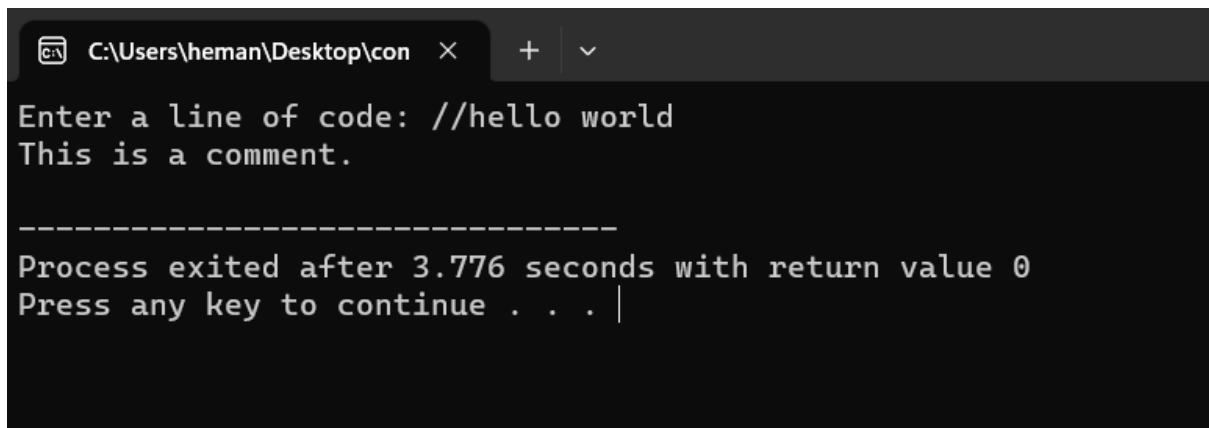
```
#include <stdio.h>

#include <string.h>

int is_comment(char *line) {
    int length = strlen(line);
    if (length >= 2 && line[0] == '/' && line[1] == '/') {
        return 1;
    } else if (length >= 2 && line[0] == '/' && line[1] == '*') {
        for (int i = 2; i < length - 1; i++) {
            if (line[i] == '*' && line[i + 1] == '/') {
                return 1;
            }
        }
    }
    return 0;
}
```

```
int main() {
    char line[100];
    printf("Enter a line of code: ");
    fgets(line, 100, stdin);
    if (is_comment(line)) {
        printf("This is a comment.\n");
    } else {
        printf("This is not a comment.\n");
    }
    return 0;
}
```

}



A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\heman\Desktop\con' with a close button and window controls. The prompt displays the text 'Enter a line of code: //hello world' and 'This is a comment.' followed by a separator line of dashes. Below the dashes, it shows 'Process exited after 3.776 seconds with return value 0' and 'Press any key to continue . . . |'.

```
C:\Users\heman\Desktop\con > Enter a line of code: //hello world
This is a comment.

-----
Process exited after 3.776 seconds with return value 0
Press any key to continue . . . |
```