Bonus Homework (+4)

- Write a procedure called Str_nextWord that scans a string for the first occurrence of a certain delimiter character and replaces the delimiter with a null byte.
- There are two input parameters: a pointer to the string, and the delimiter character.
- After the call, if the delimiter was found, the Zero flag is set and <u>EAX contains the offset of the next character</u> beyond the delimiter.
- Otherwise, the Zero flag is clear.
- For example, we can pass the address of target and a comma as the delimiter.

Irvine, Kip R. Assembly Language for x86 Processors 7/e, 2015.

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```
Str_nextWord PROTO,
        pString:PTR BYTE, ; pointer to string
        delimiter:BYTE  ; delimiter to find

.data
testStr BYTE "ABC\DE\FGHIJK\LM",0

.code
main PROC
        call Clrscr
        mov  edx, OFFSET testStr ; display string
        call WriteString
        call Crlf
```

```
; Loop through the string, replace each delimiter, and
; display the remaining string.

        mov     esi, OFFSET testStr

L1:     INVOKE Str_nextword, esi, "\" ; look for delimiter
        jnz     Exit_prog ;quit if not found
        mov     _____  ; point to next substring
        mov     _____
        call WriteString    ; display remainder of string
        call Crlf
        jmp     L1

Exit_prog:
        call WaitMsg
        exit
main ENDP
```
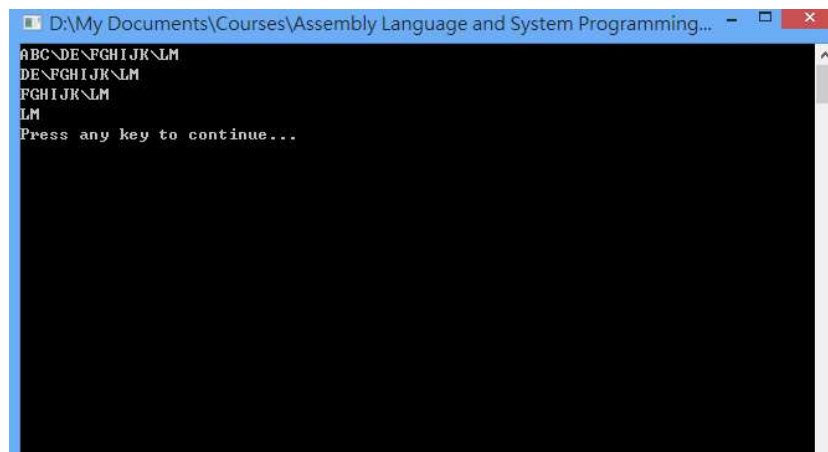
Required Output