Sublime Text File Edit Selection Find View Goto Tools Project Window Help 40°C 000rpm 13 % Mon 3 Apr 16:44 Tanu Mohan
UNREGISTERED
input.txt
input.txt
1 Education is the passport to the future, for tomorrow belongs to those who prepare for it today. - Malcom X
107 characters selected
Tab Size: 4
Plain Text

Sublime Text File Edit Selection Find View Goto Tools Project Window Help 52°C 5014rpm 13 % Mon 3 Apr 16:41 Tanu Mohan
UNREGISTERED
output.txt
output.txt
1 R
2
3 1 characters read
4
Line 1, Column 1
Tab Size: 4
Plain Text
UNREGISTERED
input.txt
input.txt
1 E
2
3 1 characters read
4
Line 1, Column 1
Tab Size: 4
Plain Text

Sublime Text File Edit Selection Find View Goto Tools Project Window Help 45°C 000rpm 14 % Mon 3 Apr 16:40 Tanu Mohan
UNREGISTERED
output.txt
output.txt
1 R
2
3 1 characters read
4
Line 1, Column 1
Tab Size: 4
Plain Text

ROT13.asm — private/.../PA04

```
1   SECTION .bss
2   Buff:    resb 1      ; Hold the value for encrypted text
3
4   SECTION .data
5   CountMsg:   db 10,"%d characters read",10,0
6   Count:      dd 0       ; Character count
7
8   SECTION .text
9
10  global main
11  extern getchar
12  extern puts
13  extern printf
14
15  main:
16      nop                 ; This no-op keeps the debugger happy
17      mov edi, Buff       ; Initialization
18
19  Read:
20      call getchar        ; Read a character
21
22      cmp eax,0           ; End of input file?
23      jl Write
24
25      cmp byte[Buff],61h  ; Test input char against 'a'
26      jae checkLowerCase  ; check if the input char is in the lower case range
27
28      cmp byte[Buff],41h  ; Test input char against 'A'
29      jae checkUpperCase  ; check if the input char is in the upper case range
30
31      mov [edi],al        ; Store character in buffer
32      inc edi
33      inc dword [Count]   ; Increment count
34      cmp dword [Count],199   ; Check for buffer overflow
35      jge Write
36      jmp Read
37
38  checkUpperCase:
39      cmp byte[Buff],5Ah  ; Test input char against 'Z'
40      jbe add13Upper      ; jump to label if cmp is below or equal
41
42  checkLowerCase:
43      cmp byte[Buff],7Ah  ; Test input char against 'z'
44      jbe add13Lower      ; jump to label if cmp is below or equal
45
46  add13Lower:
47      cmp byte[Buff],6Eh  ; Test input char against 'n'
48      jae sub13           ; jump to label if the input is greater than n
49      add byte[Buff],0Dh  ; adds 13, because the value is less than n
50      jmp Write           ; Write the char to the file
51
52  add13Upper:
53      cmp byte[Buff],4Eh  ; Test input char against 'N'
54      jae sub13           ; jump to label if the input is greater than N
55      add byte[Buff],0Dh  ; adds 13, because the value is less than N
56      jmp Write           ; Write the char to the file
57
58  sub13:
59      sub byte[Buff],0Dh  ; subtract 13 because value is higher than the input value
60      jmp Write           ; Write the char to the file
61
62  Write:
63      mov byte [edi],0    ; Put null at end of string
64
65      push Buff           ; Address of Buff
66      call puts           ; Print
67      add esp,4           ; Clean stack, one parm
68      push dword [Count]  ; Value of Count
69      push CountMsg       ; Format string
70      call printf
71      add esp,8           ; Clean stack, two parms
72
73      ret
```

The count is different because I did not figure out why it did not want to encode every char. It encoded back properly but it is because it was only 1 char. Main problem is that it did not write the rest, I know it read every char because if I remove the ROT13 part it prints the whole text back.