



Greg Witt
Computer Structures 5:30-715pm


P-01

 **codingground**
SIMPLY EASY CODING

Compile and Execute Assembly Online (Nasm v2.13.01) 

Execute | Share | main.asm | STDIN

```
1  %macro write_string 2
2
3      mov     eax, 4
4      mov     ebx, 1
5      mov     ecx, %1
6      mov     edx, %2
7      int     80h
8
9  %endmacro
10
11 %macro exitsys 1
12     mov     eax,%1           ;system call number (sys_exit)
13     int     0x80           ;call kernel
14
15 %endmacro
16
17 section     .text
18
19     global _start           ;must be declared for using gcc
20
21 _start:           ;tell linker entry point
22
23     write_string msg1, len1
24     write_string msg2, len2
25     write_string msg3, len3
26
27     exitsys 1
28
29 section     .data
30
31 msg1 db      'Hello, C335',0xA,0xD
32 len1 equ $ - msg1
33
34 msg2 db 'Welcome to the world of NASM,', 0xA,0xD
35 len2 equ $- msg2
36
37 msg3 db 'Linux assembly programming very soon! '
38 len3 equ $- msg3
```

 **Result**

```
$nasm -f elf *.asm; ld -m elf_i386 -s -o demo *.o
$demo
Hello, C335

Welcome to the world of NASM,

Linux assembly programming very soon!
```

Source Code:

```

%macro write_string 2
    mov  eax, 4
    mov  ebx, 1
    mov  ecx, %1
    mov  edx, %2
    int  80h
%endmacro

%macro exitsys 1
    mov  eax,%1          ;system call number (sys_exit)
    int  0x80            ;call kernel
%endmacro

section    .text
global _start           ;must be declared for using gcc

_start:        ;tell linker entry point

    write_string msg1, len1
    write_string msg2, len2
    write_string msg3, len3
    exitsys 1

section    .data
msg1 db    'Hello, C335',0xA,0xD
len1 equ $ - msg1
msg2 db 'Welcome to the world of NASM,', 0xA,0xD

```

```
len2 equ $- msg2
```

```
msg3 db 'Linux assembly programming very soon! '
```

```
len3 equ $- msg3
```