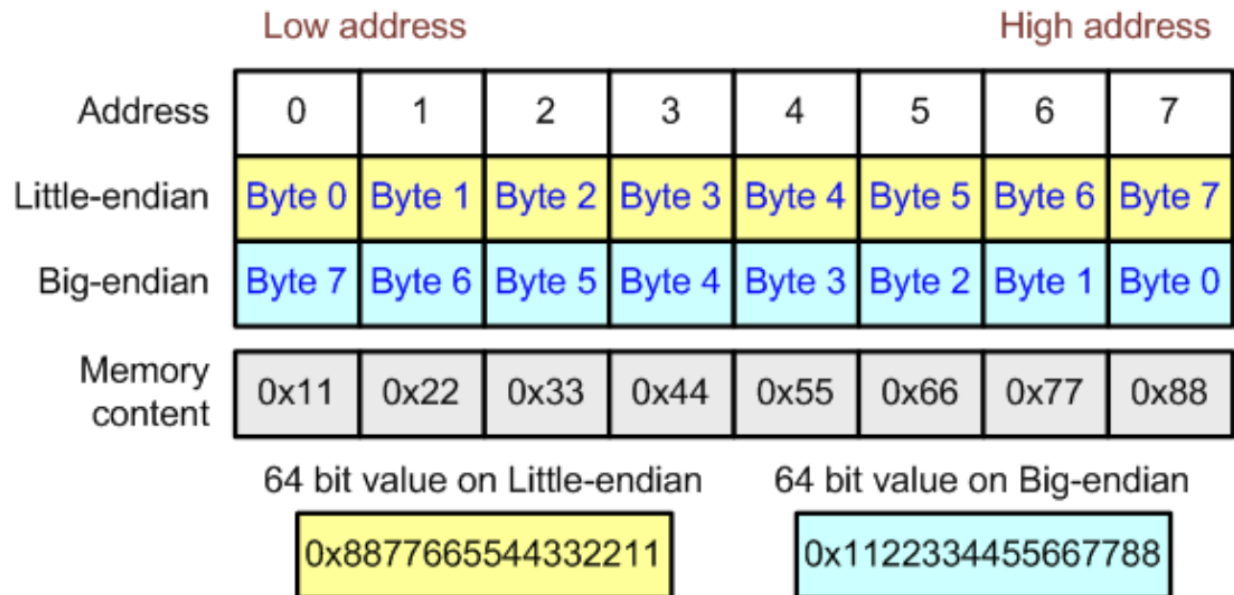# Endianness

- Order in which bytes are stored in memory.

- Our x86 and x86_64 Follows Little Endian

```
rbx                0x8877665544332211
rcx                0x1122334455667788
```

see rbx and rcx Registers According to the following code :

```
global _start

section .text

_start:

    ;print display

    xor rax,rax

    mov al, 1

    mov dil,1

    mov rsi,hello_world
```

```nasm
    mov dl,length

    syscall

    mov rbx,[var1]

    mov rcx,[var2]

    ;quit

    mov al ,60

    mov dil,11

    syscall
section .data

    hello_world:db 'hello from endianness',0xa

    length: equ $-hello_world

    var1 : db 0x11,0x22,0x33,0x44,0x55,0x66,0x77,0x88

    var2 : db 0x88,0x77,0x66,0x55,0x44,0x33,0x22,0x11
```