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; convert hex to ascii using offset values
; Jared Dyreson
; CPSC-240-09 TR @ 11:30 - 13:20

; some light -> https://stackoverflow.com/questions/36336045/print-register-value-to-console

; I also included a bash script that I was using to compile the ASM files, thought it might be
; useful for the class
; cmp function -> https://stackoverflow.com/questions/45898438/understanding-cmp-instruction
; jmp with conditions -> https://stackoverflow.com/questions/1123396/assembly-to-compare-two-numbers
; ^ https://en.wikibooks.org/wiki/X86_Assembly/Control_Flow
global _start
```

```
SECTION .text
```

```
_start:
    cmp byte[bval], 16 ; if a >= b; then move to the exit function
    jge _exit
    mov rdi, 1
    mov al, byte[bval]
    lea rbx, [xtable]
    xlat
    mov byte[bval], al
    mov rsi, bval
    xor rax, rax
    mov rax, 1
    mov rdx, 2 ; if you pass in length, it prints the content of the a.out bin for some odd, inexplicable reason
    syscall
    jmp _exit
_exit:
    mov rax, 60
    mov rdi, 0
    syscall
```

```
SECTION .data
```

```
length: equ $bval
xtable: db '0123456789ABCDEF', 10
bval: db 15, 10
```