```nasm
; Worksheet 3 Subroutine
; Written by Jared Dyreson

%define INGEST_NUMBER 15
section .data
variable: db INGEST_NUMBER, 10
hextable: db "0123456789ABCDEF"
section .text
global _start

_start:
jmp cast_int_to_hex
cast_int_to_hex:
cmp byte[variable], 16
jge exit_exceeds_bounds_exception
mov rdi, 1
mov al, byte[variable]
lea rbx, [hextable]
xlat
mov byte[variable], al
mov rsi, variable
mov rax, 1
mov rdx, 2
syscall

jmp exit_succesfully

exit_exceeds_bounds_exception:
mov rax, 60
mov rdi, 1
syscall

exit_succesfully:
mov rax, 60
mov rdi, 0
syscall
```