64 bit

rax (return value) -> str

rcx (4th argument to a function) ->

rdx(3rd argument to a function)-> i

rsi(2nd argument to a function)-> dest

rdi(1st argument to a function)-> LC3

rbp(callee saved)->

rsp(hardware stack pointer)->

32 bit

eax (return value) -> i

ecx (4th argument to a function) -> len

edx(3rd argument to a function)->

esi(2nd argument to a function)-> len

edi(1st argument to a function)->

ebp(callee saved)->

esp(hardware stack pointer)->