1) Write two lines of LC3 assembly code to push R3 onto the stack

2) Write two lines of LC3 assembly code to pop the top value off of the stack, placing it into R4

3) Without moving the stack pointer, write a line of LC3 assembly that moves the third element down from the top of the stack into R2.

4) Write a subroutine “sub” that doubles the value in R0. You might add more code to sub, and in particular, you might make a subroutine call to somewhere else. Include in your code for sub a few lines that saves R7 on the stack, and that restores R7 before you return.

5) Write a C subroutine called “sum” that takes two integer arguments, “a” and “b”, and returns the sum of these.

6) Now write the same subroutine in LC3 assembly that does the same thing. You will need to save any register that you change in the subroutine (except for R0, which will hold the return value from your subroutine).

7) Write a C subroutine “foo” that take a POINTER to an integer “a”, and adds 5 to it.