ECE 522 Lab 3 question1

Question 1:

1. Declare an array with 4 element 4-byte values, initialized to 10, 0, 12 ,32. (4x32-bit content)

2. align the stack (claim the next 16 bytes for the rsp register)

3. copies the whole list in .LCPI0_0 to the xmm0 register in one go

4. copies the content of xmm0 to the stack starting at where the rsp stack pointer points to (do it one by one)

5. set eax register to zero.

6. [rsp + 4] offset +4 bytes from the frame pointer value stored in rsp register.

The whole line compares the second element in the array to 32.

7. set the lower 8 bit in eax (al register) to 1 if if array[1] is greater than 32. (counter =1).

8. store 10 in the stack space [rsp + 8*0 +4]

9. release the allocated space on stack

10. return