

ESS: Exercise Set 2

C Language

Question 1:

Write a routine to count the number of bits that are set in a 32 bit unsigned int.

Question 2:

Write a routine to compute the n th Fibonacci number, up to the 30th.

Question 3:

Write functions to set and clear the n^{th} bit of a 16 bit value. As input, take the bit to set (0 to 15) and the original value. Return the new value.

★ Write two more functions, one to toggle a particular bit (i.e. flip it) and one to return the value of a particular bit position.