1. In a channel using (15,11) Hamming code a receiver receives the following sequence of 15 bits.
   1 1 1 0 1 0 1 0 1 1 0 1 1 1 0 1
   Assume that no more than one bit was in error. Did an error occur? If so where?

2. The following 15 bits,
   1 1 1 0 1 1 0 1 0 1 0 0 0 1 1
   are to be sent over a channel along with a CRC. If the generator used is 1011, how many CRC bits will
   need to be added to the 15 bit message? Compute the CRC.