Solutions 2nd Homework Networking

Problem 3:

If [1 0 1 1 0 0 0 1 1 1 0 1 1 0 1] is received, we multiply with H. As the result is the zero vector, we conclude that the message was received correctly and assume that 1011000111 was the intended message.

If [1 0 0 0 1 1 0 1 1 1 0 1 1 1 0] is received, we multiply with H and obtain (0 0 0 1). If we look through the columns of H, we see that this corresponds to the last column of H. We therefore flip the corresponding bit [1 0 0 0 1 1 0 1 1 1 0 1 1 1 1] and assume that the message 10001101110 was sent.