

## Networking Lab

### Assignment for Cyclic Redundancy Check (CRC)

1. Write a C code to encode a user provided dataword using CRC procedure.

#### Test Case 1:

##### Input:

Dataword: 100100

Coefficients of generator polynomial: 1101

##### Output:

Updated dividend: 100100000

The codeword is: 100100001

#### Test Case 2:

##### Input:

Dataword : 1010001101

Coefficients of generator polynomial: 110101

##### Output:

Updated dividend: 101000110100000

The codeword is: 101000110101110

2. Write a C code to decode a user provided codeword using CRC procedure.  
Provide the output along with original data (good/bad).

#### Test Case 1:

##### Input:

Codeword: 101000110101110

Coefficients of generator polynomial: 110101

##### Output:

Original data receive

Actual data: 1 0 1 0 0 0 1 1 0 1

#### Test Case 2:

##### Input:

Codeword: 100100001

Coefficients of generator polynomial: 1101

##### Output:

Original data receive

Actual data: 1 0 0 1 0 0