

Networking Lab (PCC-CS-692)

Assignment for Hamming Code

1. **Write a C code to encode a user provided dataword using Hamming Code procedure.**

Test case 1:

Input:

Dataword: 1100101

Output:

No of redundant bits: 4

The codeword is: 11000101100

Test case 2:

Input:

Dataword: 1011010

Output:

No of redundant bits: 4

The codeword is: 10101010000

2. **Write a C code to decode a user provided codeword using Hamming Code procedure.
[Input will be the generated codeword. If there is no error Output will be “Actual data received”. If there is any error in the codeword, output will be the position of the error and the original codeword]**

Test case 1:

Input:

Codeword: 10101010000

Output:

Actual data received

Test case 2:

Input:

Codeword: 10101000000

Output:

Wrong data received

Error at position 5

Corrected codeword is: 10101010000

