SSN College of Engineering, Kalavakkam
Department of Computer Science and Engineering
V Semester - CSE 'B'
UCS1511 NETWORKS LAB

Academic Year: 2020-2021 **Batch: 2018-2022**

Faculty: Ms. A. Beulah **Due Date: 13.9.20, 15.10.20**

Exercise 7: HAMMING CODE ERROR DETECTION AND CORRECTION

Implement hamming code error detection and correction using C socket program.

The sender should perform the following:

1. Read the input from a user (zero's and one's)
2. Find the number of redundant bits needed and introduce the redundant bits wherever needed.
3. Introduce error (single bit error or no error)
4. Send the data to receiver

The receiver should do the following:

1. Receive the data from the sender and check for any error.
2. If any error, correct the error and display the original message.

Sample Input and Output

Sender

Input data: 1010101

Number of redundant bits needed is: 4 (your program should find this number)

Data with redundant bits: 10100101111

Introduce error in data: 10101101111

Receiver

Data received: 10101101111

Calculated redundant bits: 0111

Corrected data: 1010101