

**CS2310: Digital Logic Design Lab**

**Experiment 8 Prof. Sukhendu Das**

**15 & 22 September 2015**

**Problem Statement**

In this lab, you will be designing and implementing circuits to solve the following two problems of converting numbers from one base to another.

(A) Convert a 4-bit number in GRAY CODE to 6-3-1-1

Design the circuit to convert number in gray code to 6-3-1-1 base. Handle all invalid cases. Use LEDs to trap any invalid case.

(B) Convert a 4 bit number in Excess-3 code to 2-out-of-5 code.

Design the circuit to convert Excess-3 code to 2-out-of-5 code. Handle all invalid cases. Use LEDs to trap any invalid case.