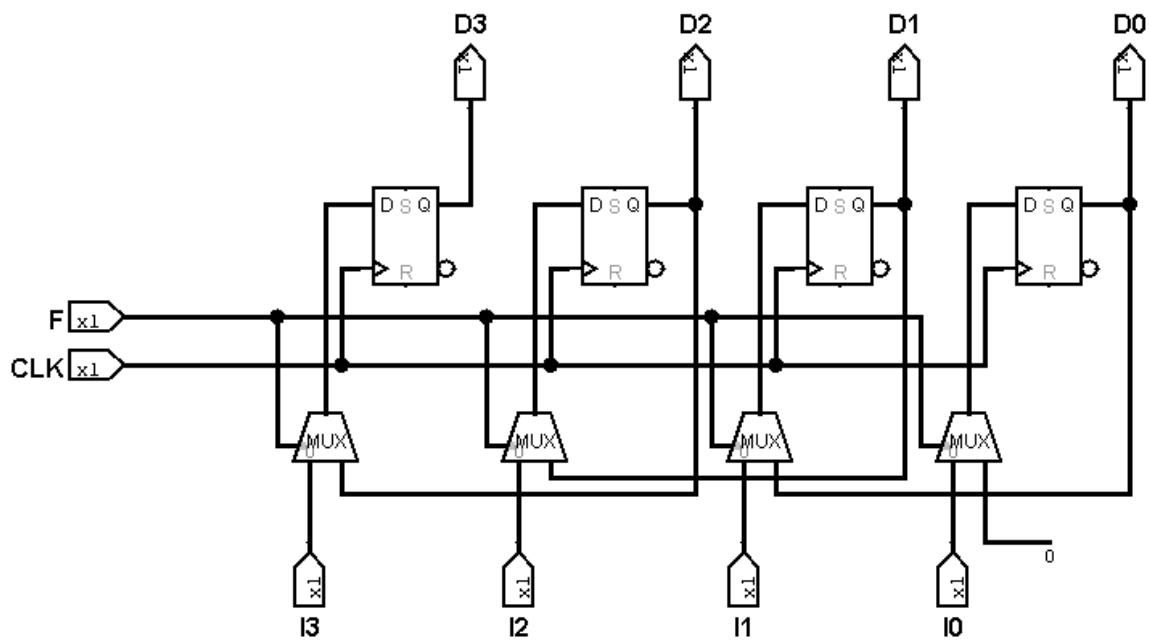# CS 215 Homework 5

Lucas Vas

October 14, 2024
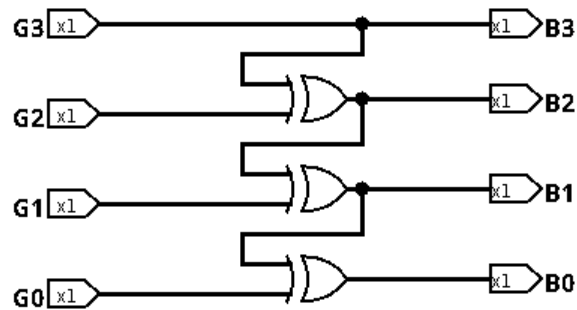
## Problem 1

Shift-Store Register circuit:

# Problem 2

Gray Code to Binary Converter circuit:



Truth Table from testing:

| Number | Gray Code | Binary Output |
|:------:|:---------:|:-------------:|
| 0 | 0000 | 0000 |
| 1 | 0001 | 0001 |
| 2 | 0011 | 0010 |
| 3 | 0010 | 0011 |
| 4 | 0110 | 0100 |
| 5 | 0111 | 0101 |
| 6 | 0101 | 0110 |
| 7 | 0100 | 0111 |
| 8 | 1100 | 1000 |
| 9 | 1101 | 1001 |
| 10 | 1111 | 1010 |
| 11 | 1110 | 1011 |
| 12 | 1010 | 1100 |
| 13 | 1011 | 1101 |
| 14 | 1001 | 1110 |
| 15 | 1000 | 1111 |

This looks like it works to me.