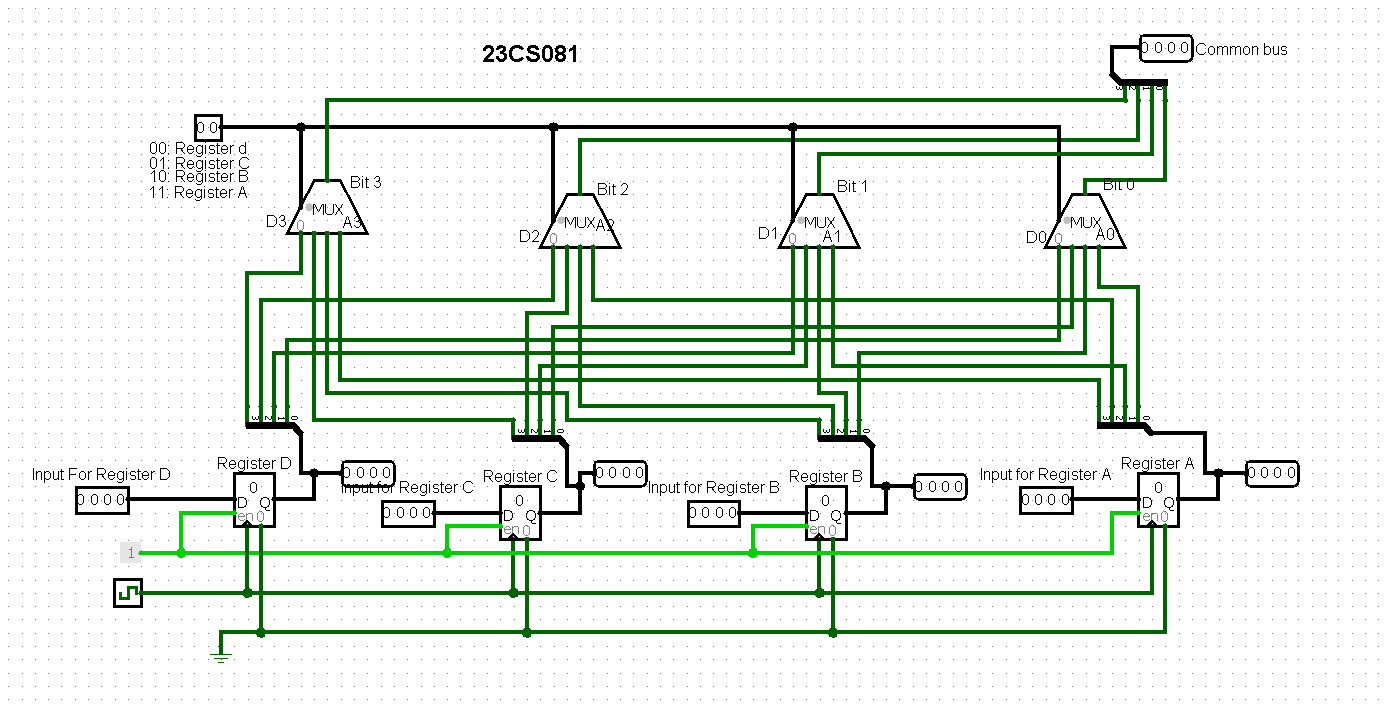
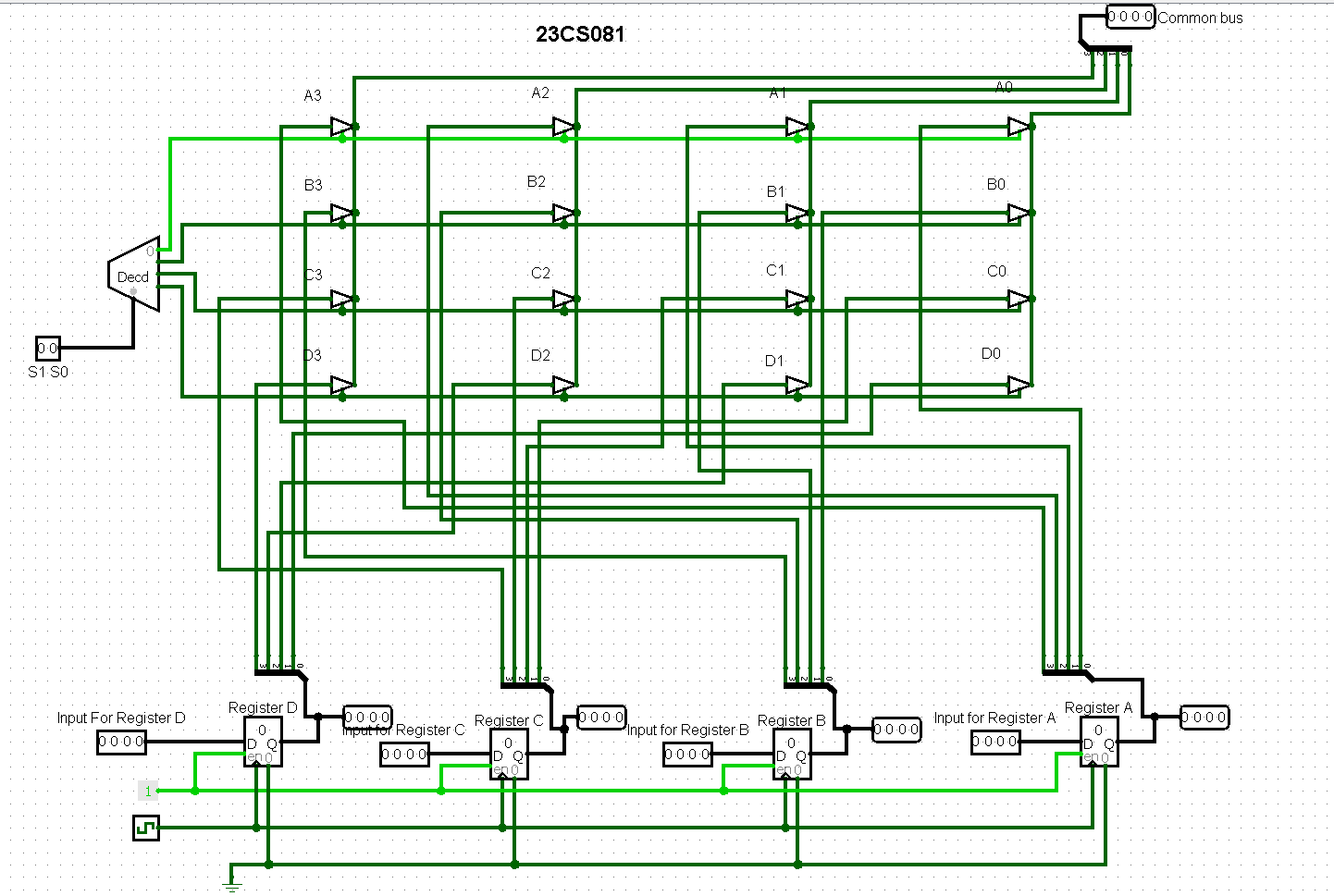
Date:

# EXPERIMENT NO. 3

#### AIM: Implement a 4-bit common bus system to interface four 4-bit registers with a common bus using i. Multiplexer and ii. Decoder and tristate buffers.

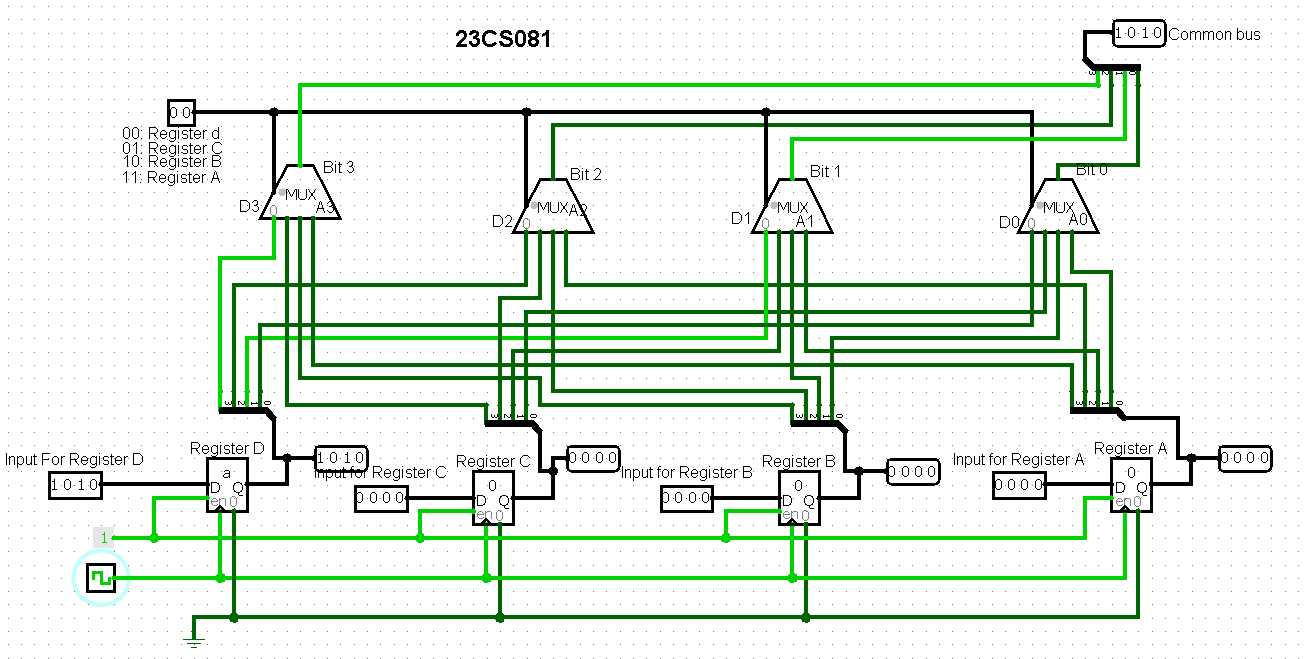
**CIRCUITS:**

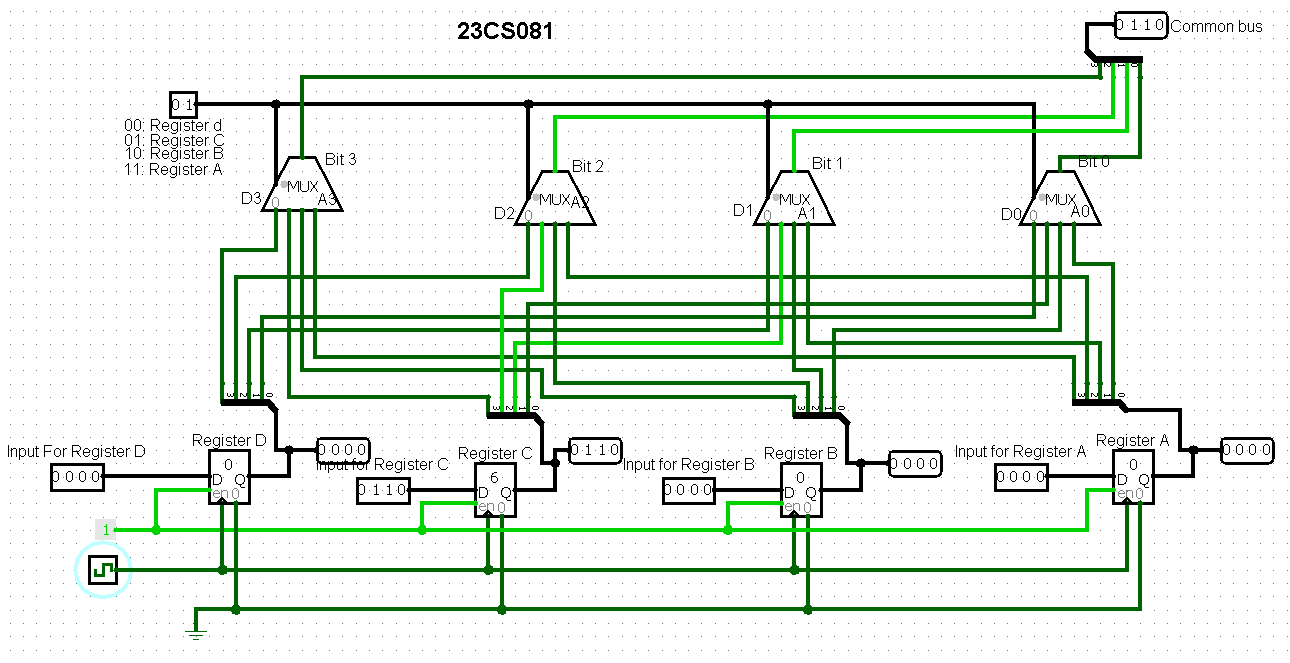
****

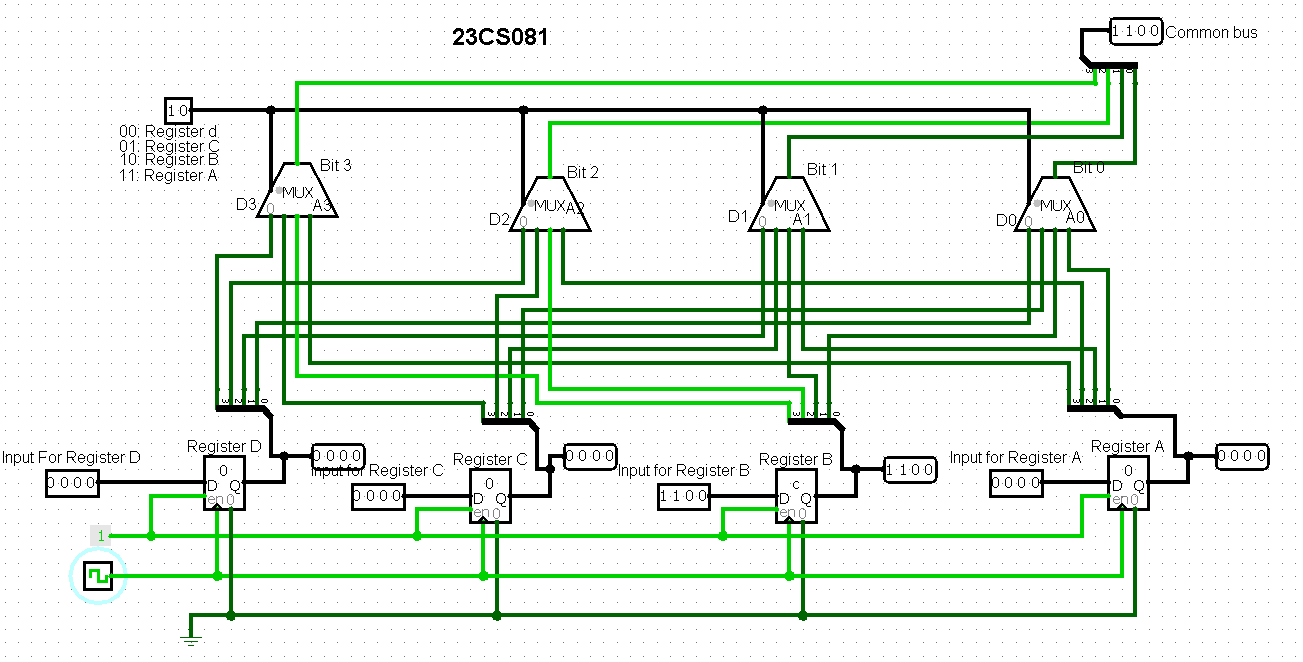
****

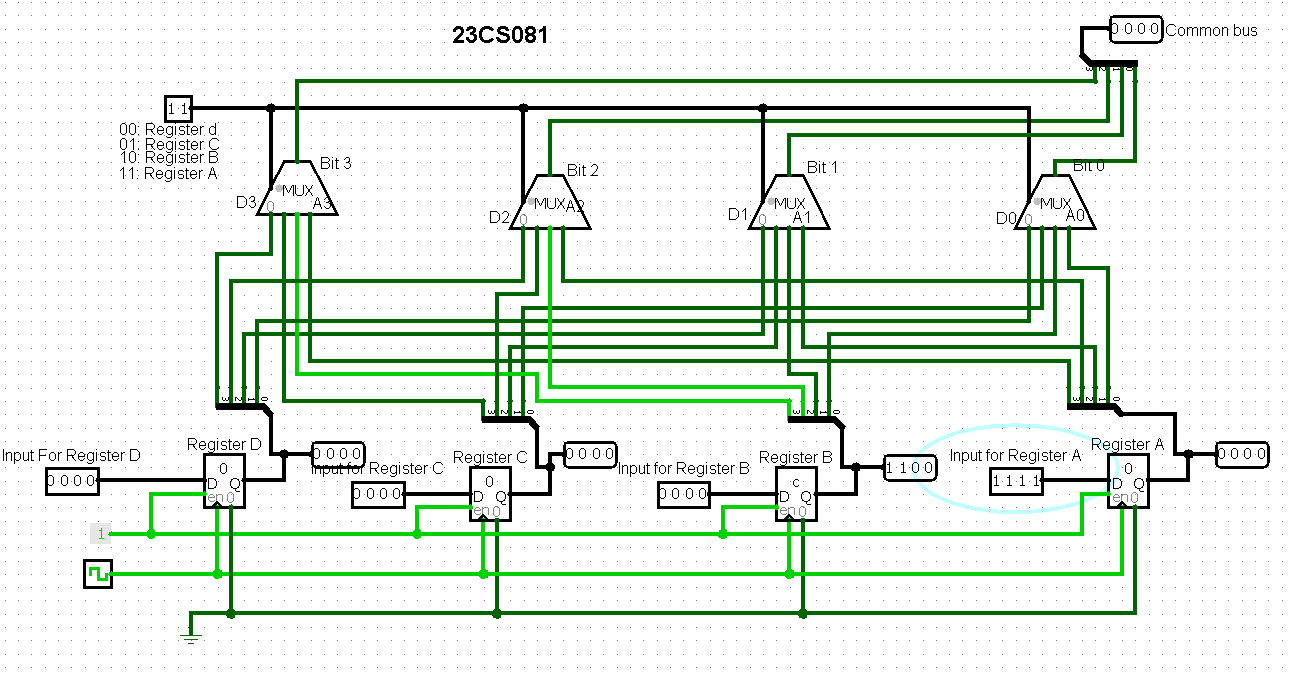
**OUTPUTS:**

**4 outputs for 1. Multiplexer:**

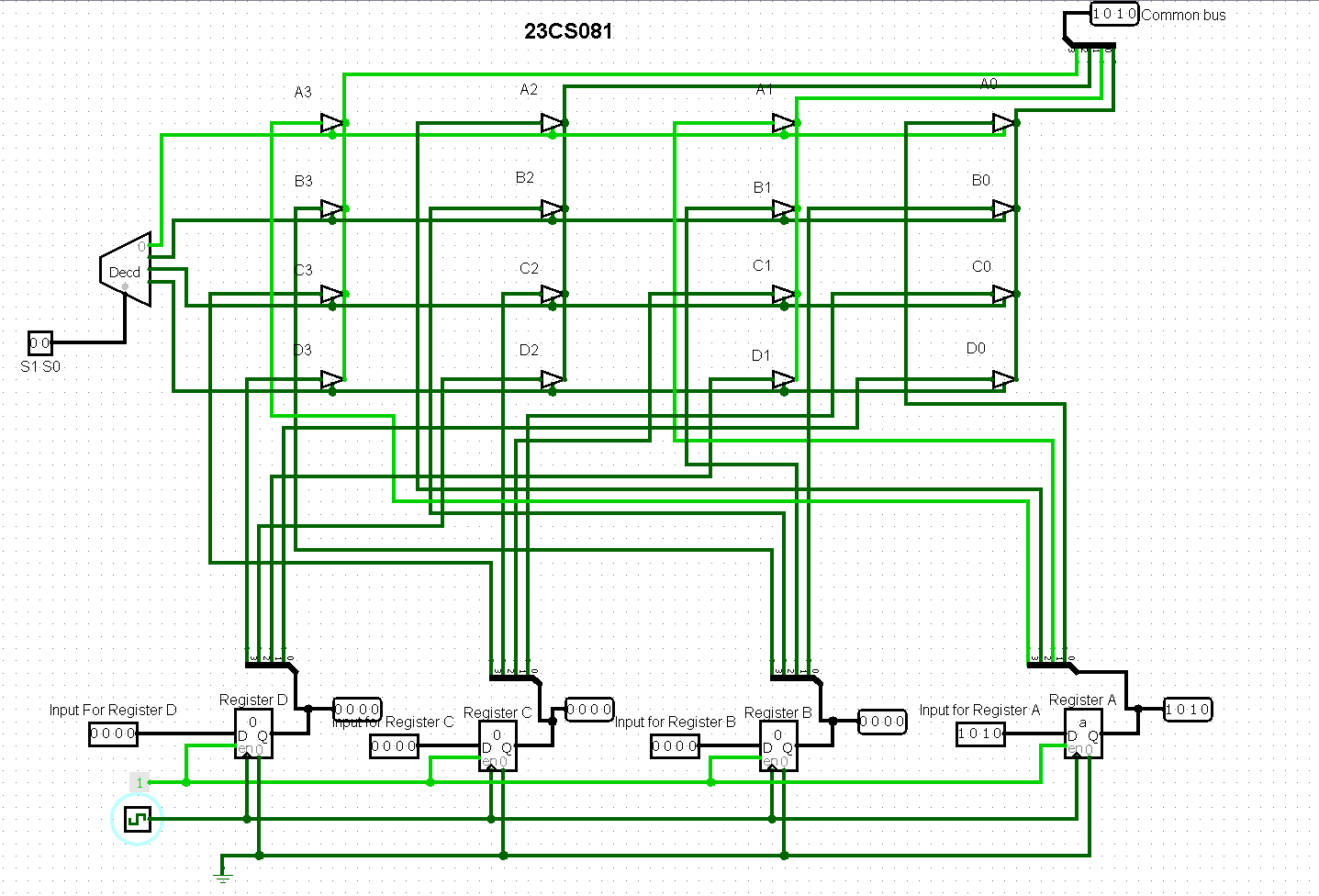
****

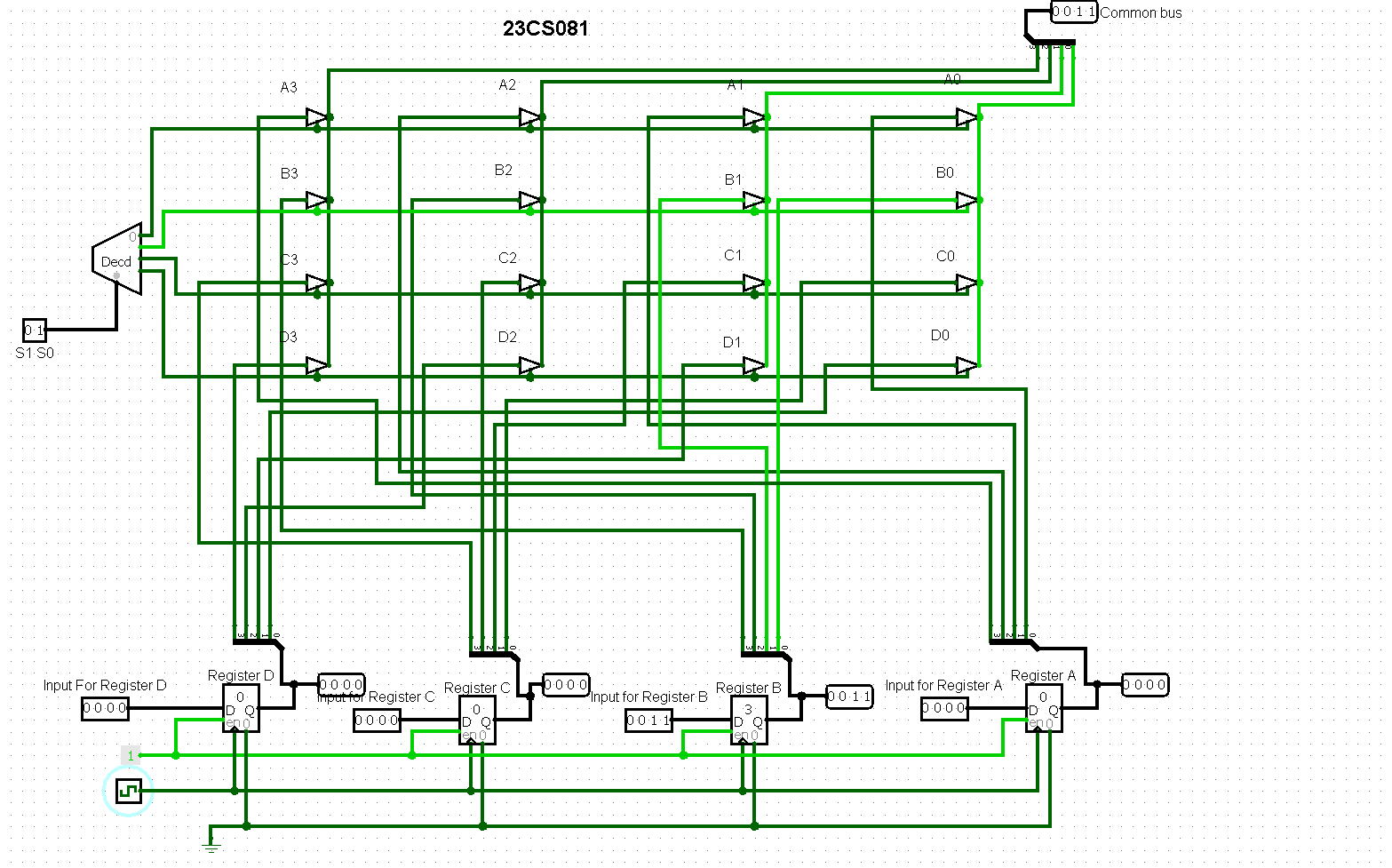
****

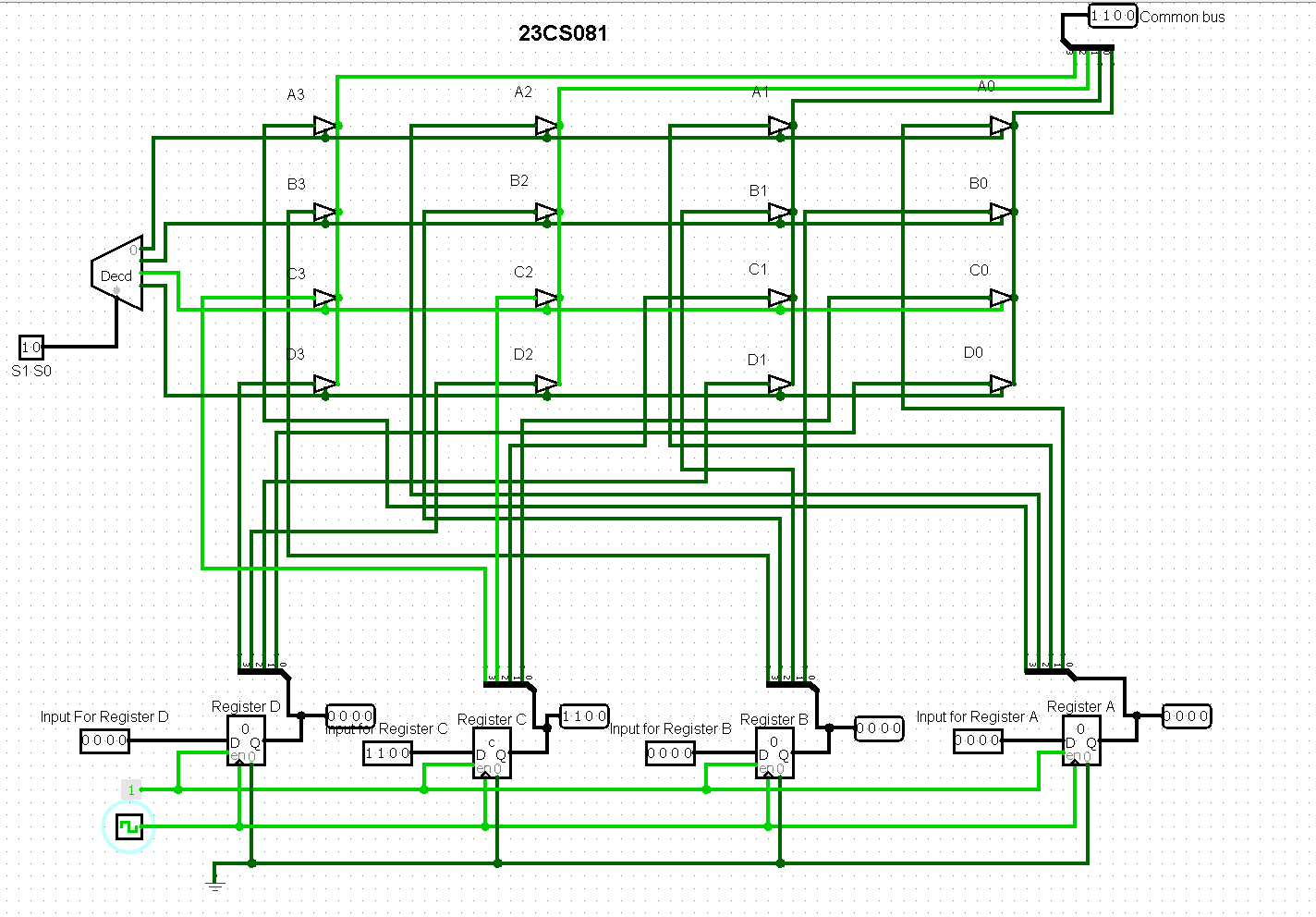
****

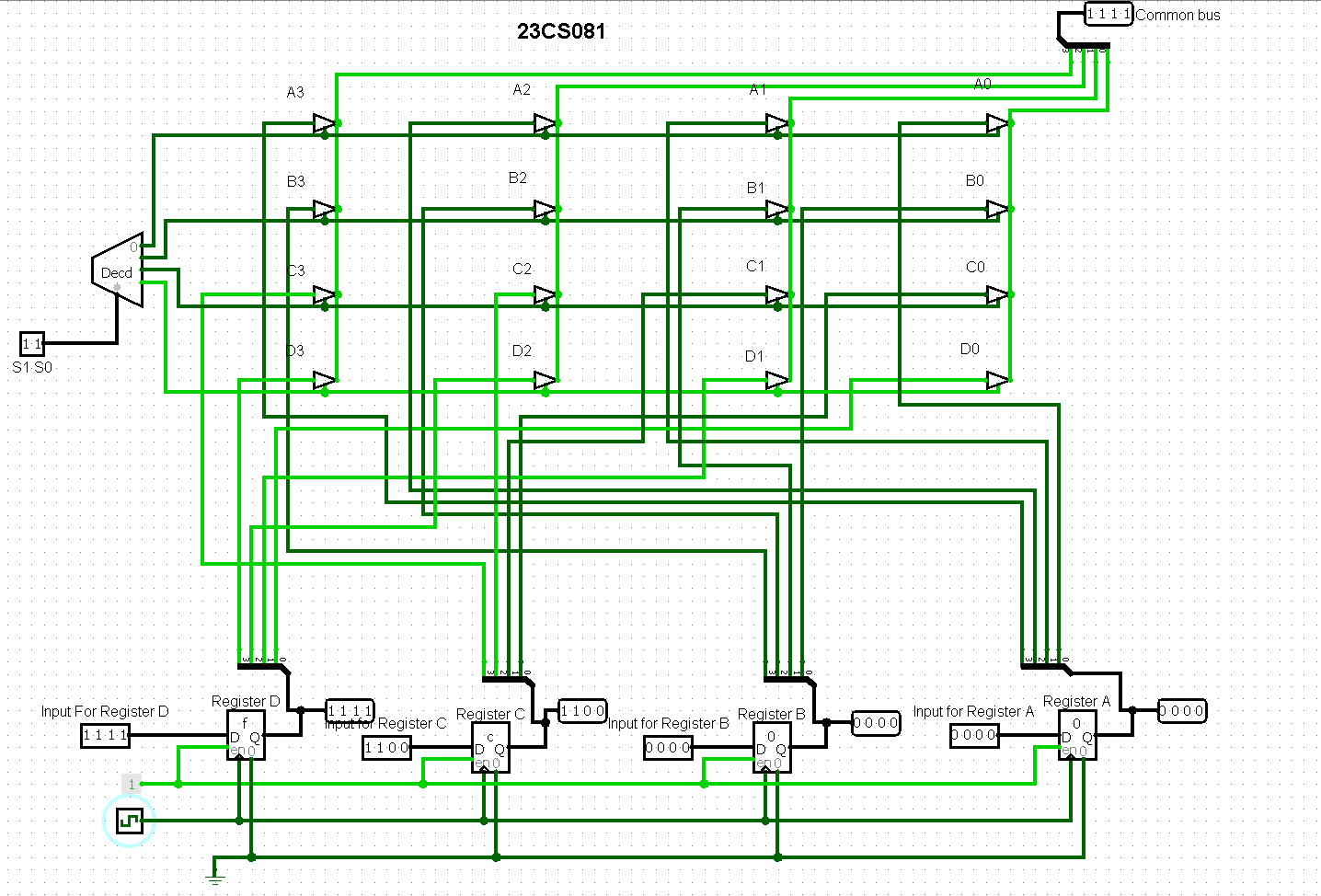
****

**4 outputs for 2. Decoder and tristate buffers:**

****

****

****

****

**CONCLUSION:**

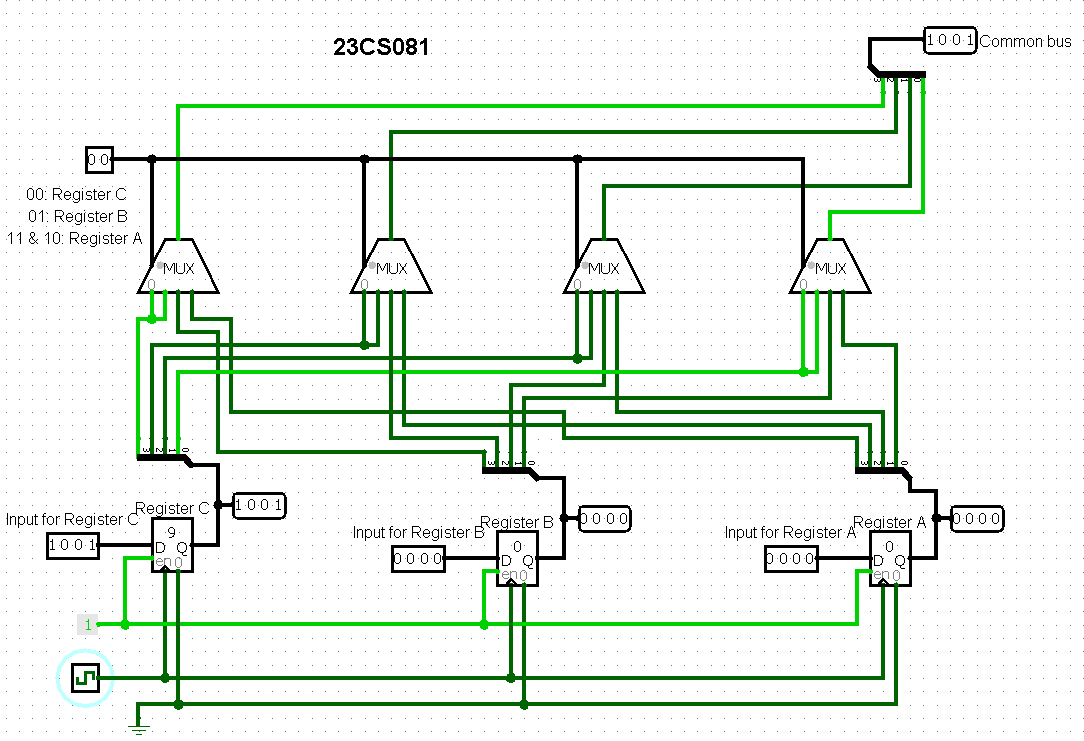
**POST SESSION EXCERCISES:**

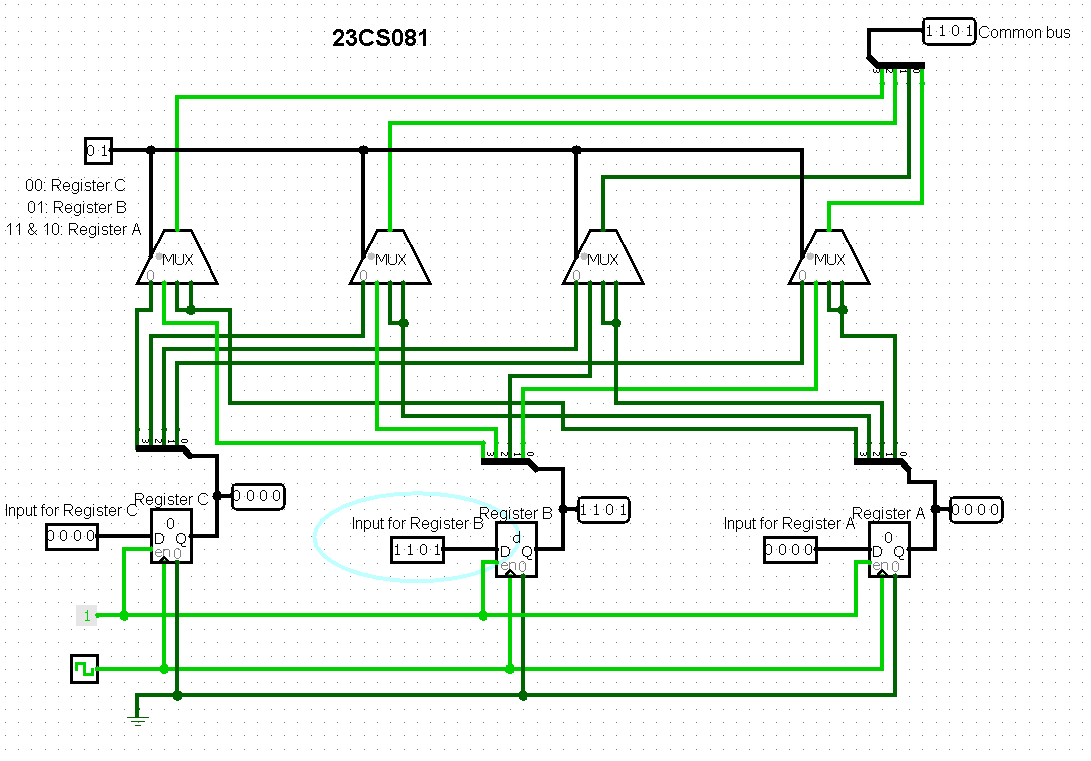
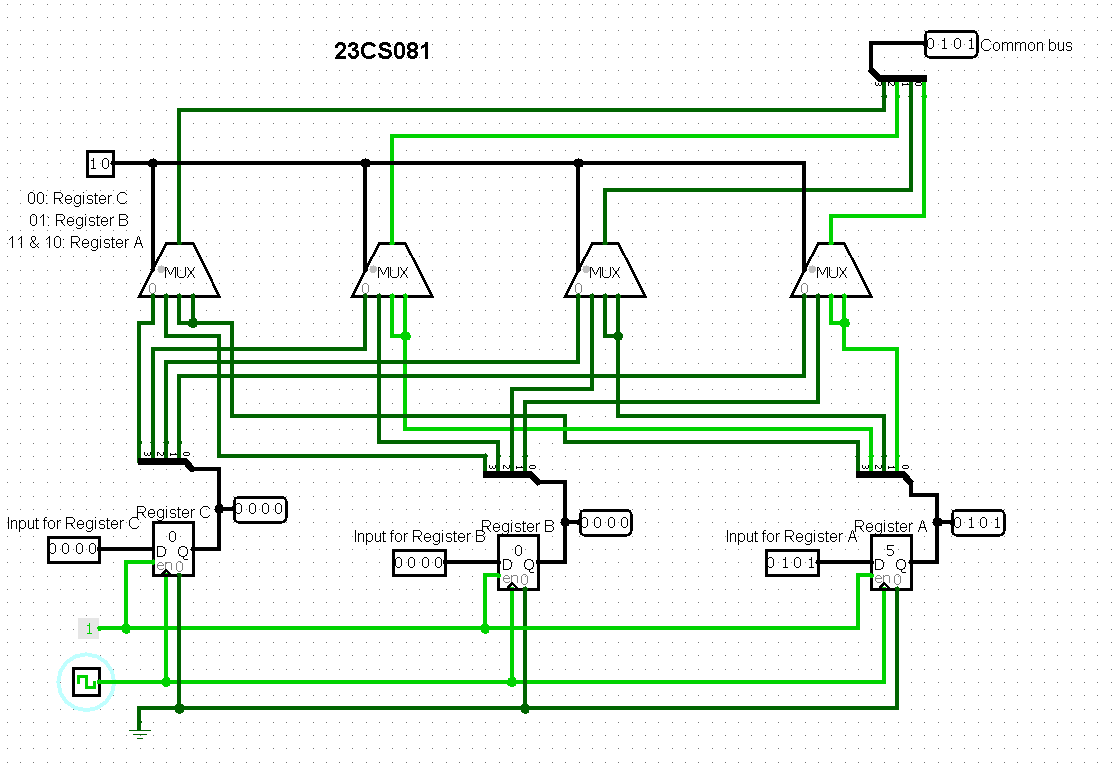
1. Find a number M=(MOD(Last Three Digits of your enrolment number, 5)+3) and find a number N=(MOD(Last Three Digits of your enrolment number, 3)+3). Implement a M-bit common bus system to interface N M-bit registers with a common bus using i. Multiplexer and ii. Decoder and tristate buffers.

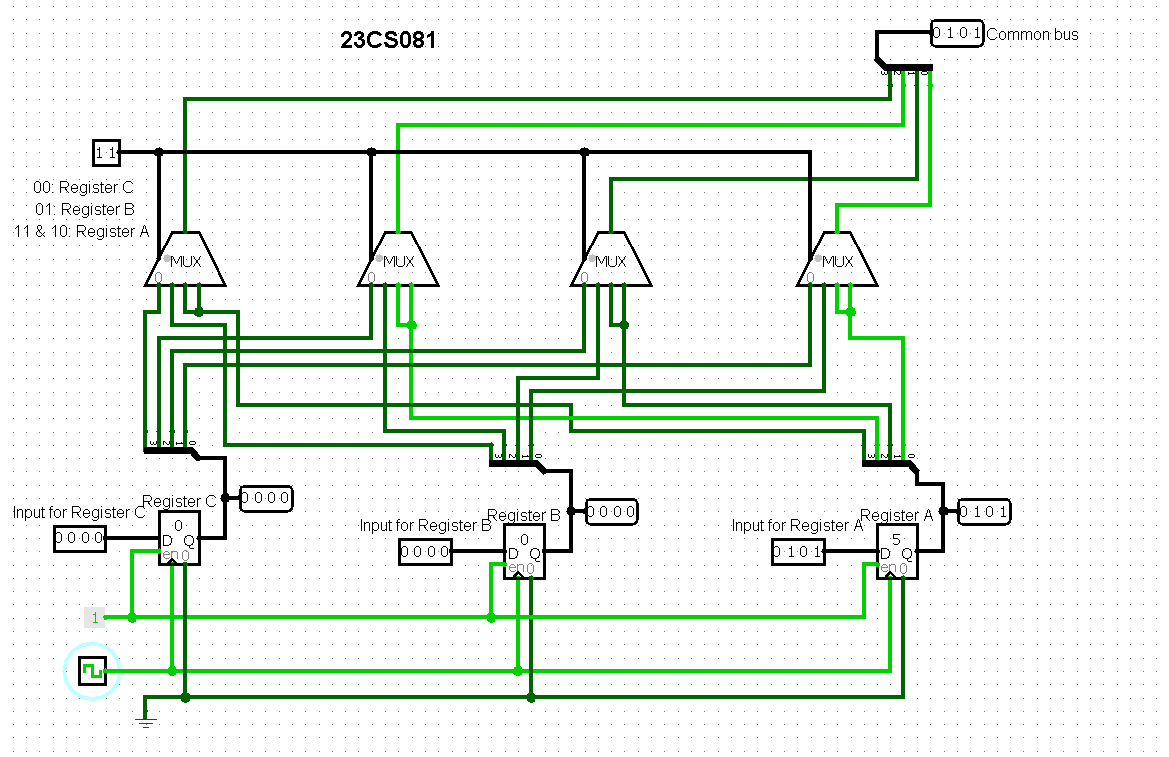
M= (81%5) + 3 = 1+3 = 4

And N = (81%3) + 3 = 0+3 = 3

**4 outputs for 1. Multiplexer:**





**4 outputs for 2. Decoder and tristate buffers:**

