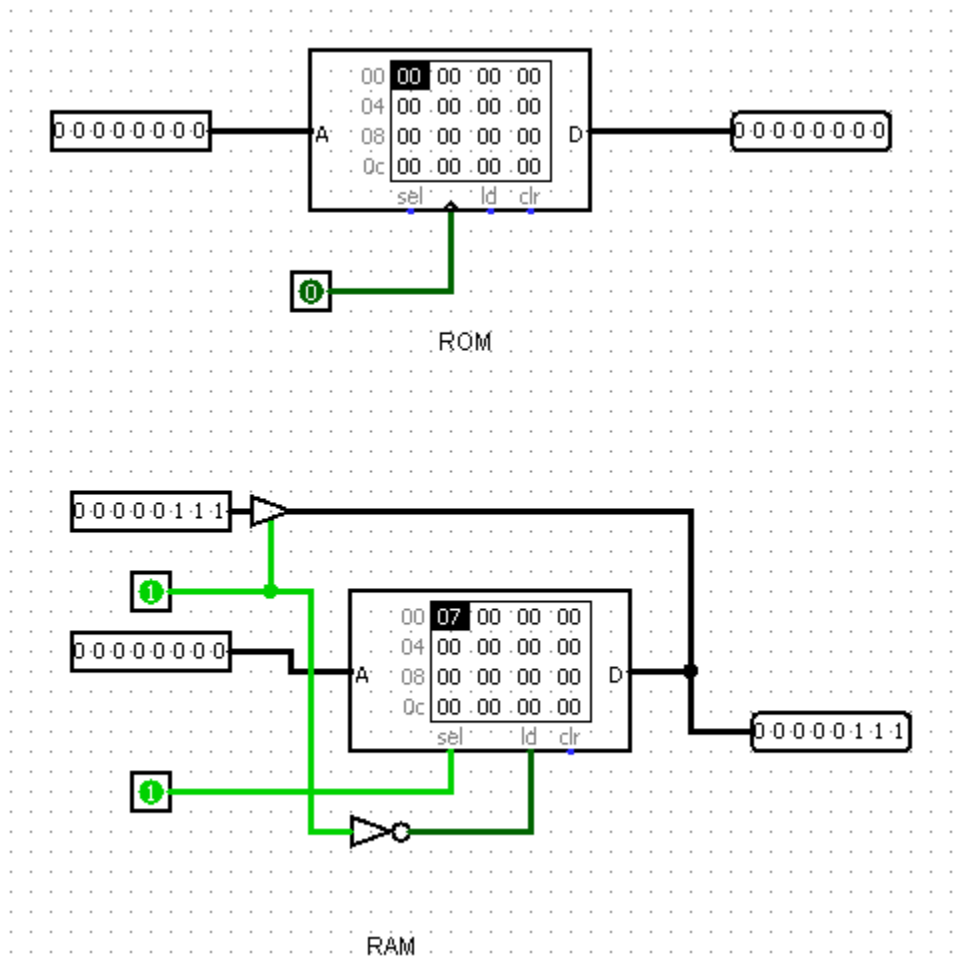


Q1: Simulate the following RAM and ROM modules using logic-sim. Simulate for various ROM/RAM sizes.

(10 points)



Q2: Design and simulate a $2M \times 32$ memory system using $512K \times 8$ memory chips?

(15 points)

Submit your .circ file containing your implementations. Show the simulations to TAs.

Email: The simulation files p1.circ, and p2.circ , to : cs225.iitp@gmail.com

(use email subject Lab10_Logicsim_your roll number).

This work is due on: : 12th April

Q3: Study 7489 Data sheet and perform the following write operation to the given 7489 memory module(64 bit RAM):

Data F (15) to 0 in addresses 0 to F (15)

Verify the data by performing a read operation. Use the following the schematic for read/write set up. Test each of the functionality by applying appropriate test data and test output using LEDs/ Seven segment displays.

(30 points)

