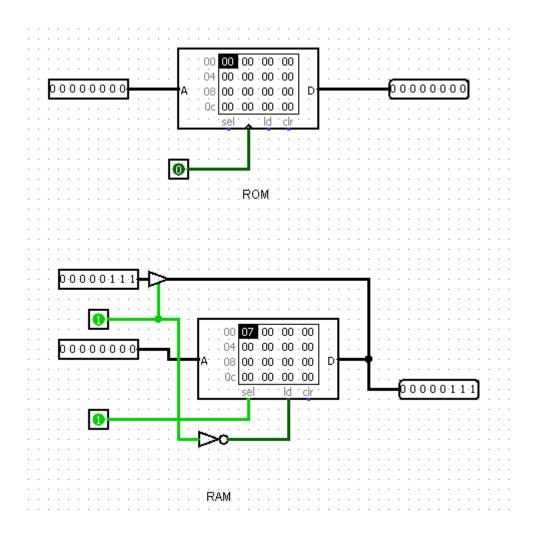
## INDIAN INSTITUTE OF TECHNOLOGY PATNA

## CS226-Lab10

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

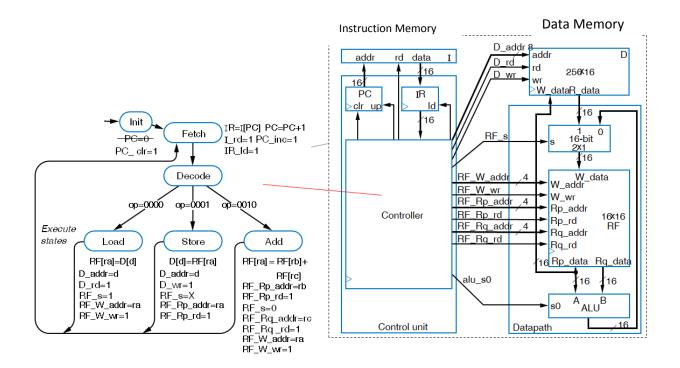
(10 points)



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

(15 points)

Q3: Design and simulate architecture shown below (combines ALU, Memory and FSM). Write a simple program to add two numbers and store the result in another memory location. Details in the ppt.



**(75 points)** 

Submit your .circ file containing your implementations

 $\underline{https://u.pcloud.com/\#page=puplink\&code=9nykZk5X2GpdktxJw4HjC7KDAS4unmP3X}$ 

This work is due on: : 18<sup>th</sup> April 11.30 PM