Birla Institute of Technology and Science Pilani CS F342 Computer Architecture Second Semester 2017-18 Lab Sheet- 5 (20th February 2018)

MEMORY

Pre-lab Work:

- **1.** What is a RAM? List its input output signals?
- **2.** Draw the timing diagram of read and write cycle?
- **3.** What is CAM? How does it operate? Where is it used?
- **4.** How can we improve the efficiency of digital systems through Look Up Tables?

Using Verilog HDL implement the following Implement a 64 Byte RAM using Verilog HDL. Initialize its content from a .txt file and using the *\$readmemeh* system task. Now read each memory location sequentially and replace it with its 2's complement. You can use dataflow, model to obtain the 2's complement.

*** The End ***