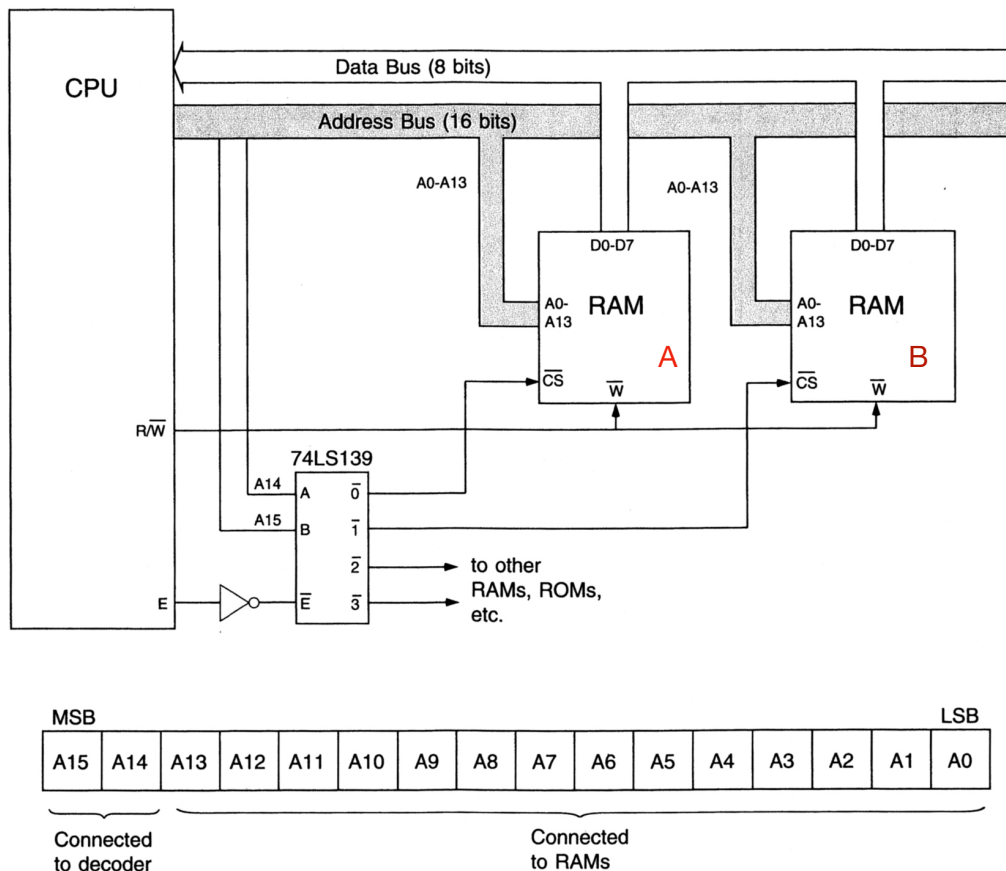# CPE 301 Homework 3, Fall 2020

Complete the questions on your own paper and scan and upload your solution.

1. Assume that the address bus in the diagram below has the value 0x6A3F.
   a) Which RAM IC is being accessed (A or B)?
   b) What memory location is being accessed in the active IC?
   c) What the the highest memory location that can be accessed in this system (in decimal)?



2. Assume that you wish to generate a 2.5 kHz 40% duty cycle waveform on pin PB6 on an Atmel AVR 2560 chip clocked at 16 MHz.
   a) Using the 16-bit timer1, calculate the values to load into the timer to generate the waveform, along with the prescaler setting if it is required
   b) Write the code to generate the wave (you may not use the built-in delay function).