

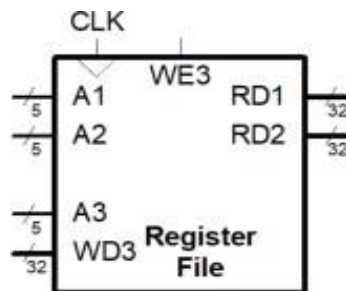
## EEL4768C Lab Assignment 6 (40 points)

**Due 7/24/2018, 11:59 pm on Canvas**

Register file is an important state element of the MIPS processor. Consider the register file shown below. The register file can read and write the data into the registers. The register file has two read ports (A1, A2) and one write port (A3). The width of A1, A2 and A3 is 5 bits.

Writing data into the register is synchronized with the clock signal. WE is the write enable control signal. WD contains the data for the write operation.

Implement the register file in VHDL/Verilog.



Demonstrate the simulation for the register file during class on 7/24 and please upload a lab report by 11:59 pm on 7/24.

Demonstration : 20 points

Lab report : 20 points