Project B Report

For Part one of project B, me and my lab patner used the test bench provided in the project zip file.

We had to test that all the 9 instructions in Mips single cycle processor work. We wrote a small program in the imem file in binary to test all the instructions. Then we basically used the test bench to test if all the instructions were working correctly or not. We imported the components of cpu and port mapped with it. We also port mapped with the imem and the dmem file. For the instruction memory we hard-wired the write mask to 0000 and set the write enable to 0. We also set the write data to 0. For data memory write mask is hard wired to 1111 and “data” and “q” are connected to dmen. At the rising edge CCT happens. At rising edge clock is 1 and at falling edge its 0. We print all the signal values right before the rising edge. Although there is a small delay before signal changes. Then reset the processor and then run for 5 clock cycles.

We also inspected the working for register and memory contents.

For Part two – We are doing that with project – C.