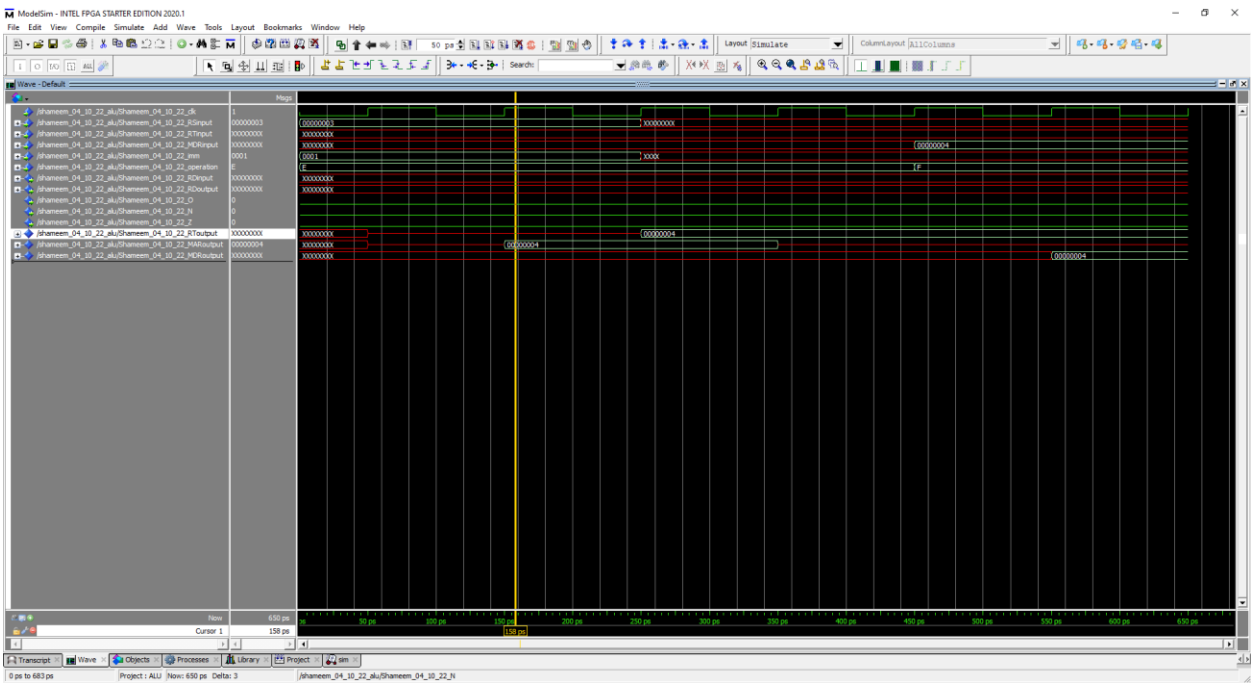
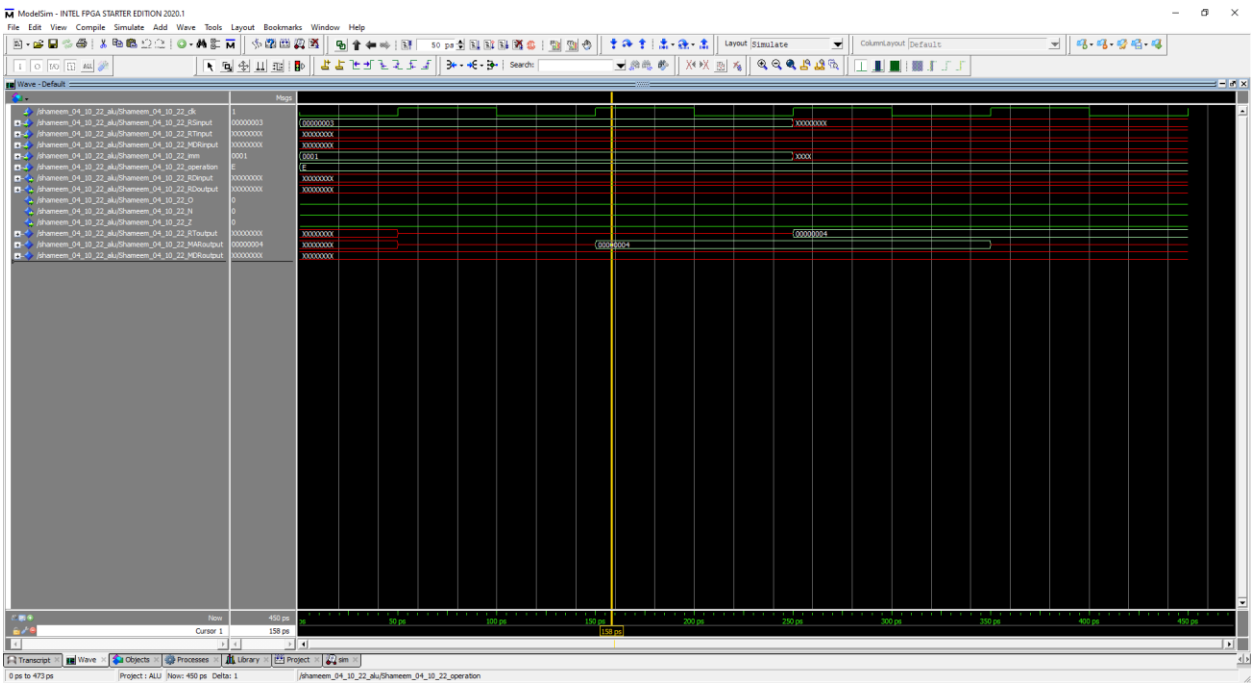
CS 342000 | CS343000
Instructor: Professor Izidor Gertner
Spring 2022
Azwad Shameem, 4/6/2022
Laboratory Project: Lab Submission

LW



The above waveform has all waves in radix hexadecimal. From 0 to 250 ps the simulation is first computing M[R[rs] + signExtImm] and the operation is 1110. This is working correctly because from 250 ps to 450 ps you can see the RToutput shows that the value is basically R[rs] + signExtImm and the fact that MARoutput also shows the same value. Then from 450 ps we have the operation as 1111, which means we are using MDR, which shows up at 550 ps that MDRoutput is still the generated value in R[rs] + signExtImm which is still correctly shown in RToutput.

SW



The above waveform has all waves in radix hexadecimal. From 0 ps to 250 ps we are computing M[R[rs] + signExtImm]. It is noticeable to see that when clk = 1 at 150 ps the value of MARoutput changes and becomes into the value of R[rs] + signExtImm. Furthermore at 250 ps we see the value of MARoutput reflected in RToutput which shows that the circuit is working properly since the value is still R[rs] + signExtImm.