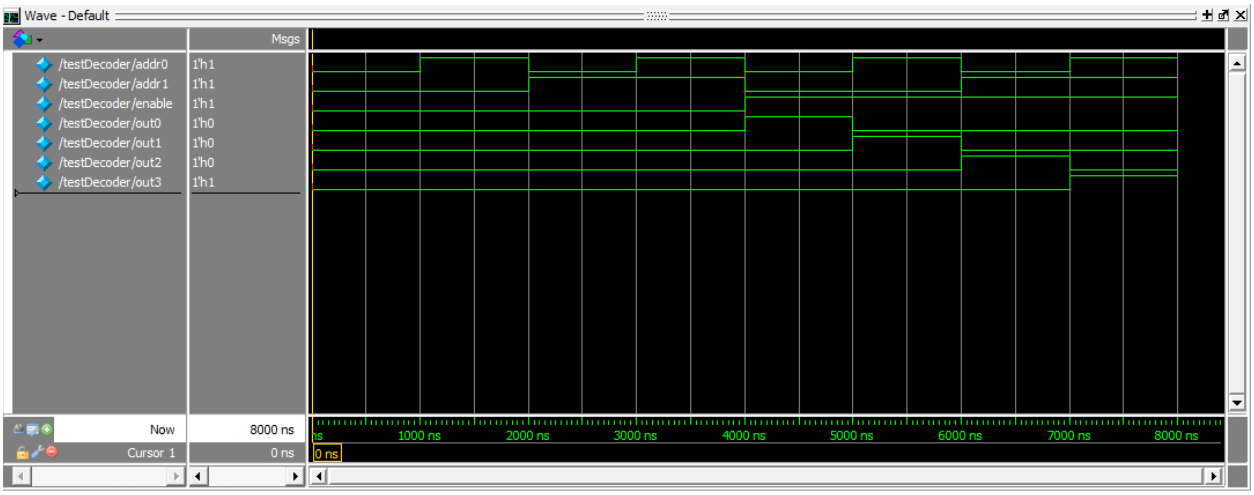
Computer Architecture HW2 RESULTS

Brenna Manning

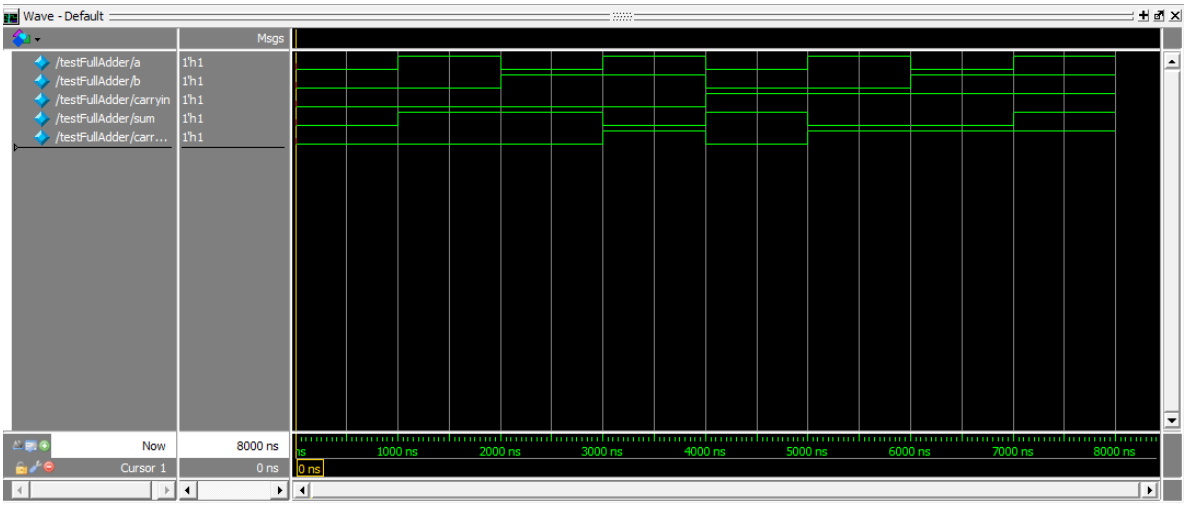
Decoder Waveform:



Decoder Test Bench Results:

```
# Loading work.testDecoder
# Loading work.structuralDecoder
# En A0 A1| O0 O1 O2 O3 | Expected Output
# 0  0  0 |  0  0  0  0 | All false
# 0  1  0 |  0  0  0  0 | All false
# 0  0  1 |  0  0  0  0 | All false
# 0  1  1 |  0  0  0  0 | All false
# 1  0  0 |  1  0  0  0 | O0 Only
# 1  1  0 |  0  1  0  0 | O1 Only
# 1  0  1 |  0  0  1  0 | O2 Only
# 1  1  1 |  0  0  0  1 | O3 Only
```

Full Adder Waveform:



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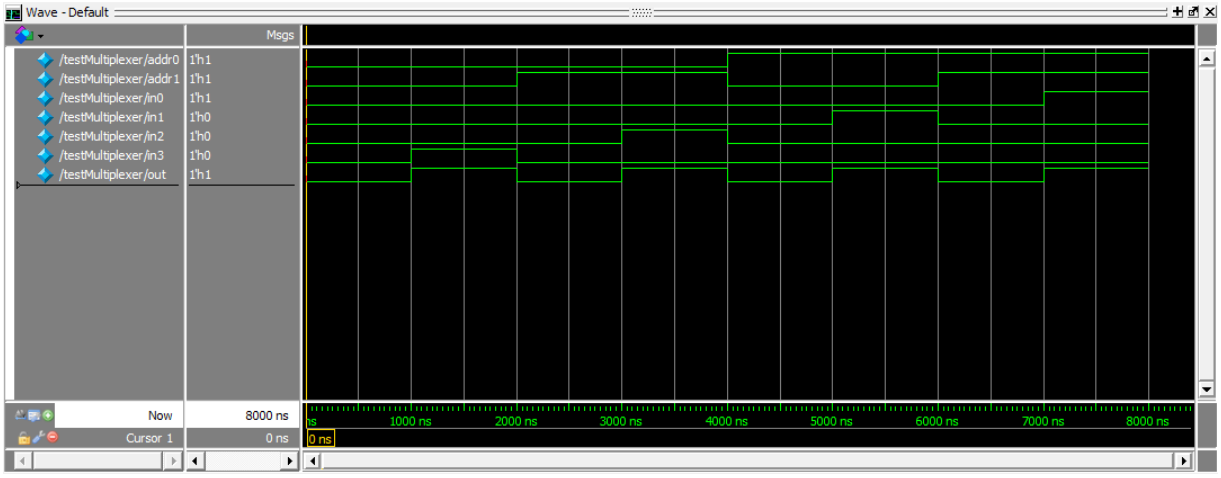
Full Adder Test Bench Results:

```
# Loading work.testFullAdder
# Loading work.structuralFullAdder
# A B  CIn|Sum COut| Expected Output
# 0  0   0 |  0   0  |  0   0
# 1  0   0 |  1   0  |  1   0
# 0  1   0 |  1   0  |  1   0
# 1  1   0 |  0   1  |  0   1
# 0  0   1 |  1   0  |  1   0
# 1  0   1 |  0   1  |  0   1
# 0  1   1 |  0   1  |  0   1
# 1  1   1 |  1   1  |  1   1
```

Multiplexer Waveform:



Multiplexer Test Bench Results:

```
# Loading work.testMultiplexer
# Loading work.structuralMultiplexer
# A0 A1 In0 In1 In2 In3 | Out | Expected Output
# 0  0  0   0   0   0   |  0  |  0
# 0  0  0   0   0   1   |  1  |  1
# 0  1  0   0   0   0   |  0  |  0
# 0  1  0   0   1   0   |  1  |  1
# 1  0  0   0   0   0   |  0  |  0
# 1  0  0   1   0   0   |  1  |  1
# 1  1  0   0   0   0   |  0  |  0
# 1  1  1   0   0   0   |  1  |  1
```