## Lab 2 Pre-lab Submission

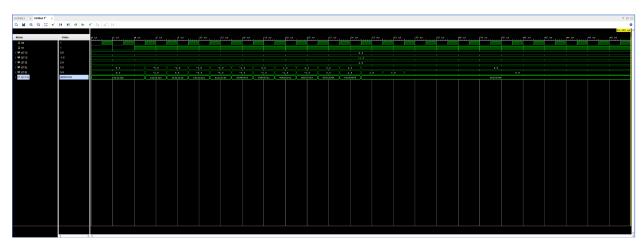


Figure 1 - Behavior Simulation of FIR Design

Figure 1 shown above, demonstrates the behavioral simulation of the FIR filter. The input signal ranges from -5 to 5 and the output signal y outputs the result for each interaction. Comparing the results with the Python reference file, we can see that the results are equivalent. See the below figure for comparison.

```
Referece for FIR:

y[0] = -2.5

y[1] = 5.5

y[2] = -5.5

y[3] = -4.5

y[4] = -3.5

y[5] = -2.5

y[6] = -1.5

y[7] = -0.5

y[8] = 0.5

y[9] = 1.5

y[10] = 2.5
```

Figure 2 - Output from ref\_FIRIIR.py