Branden Vara, 817207775, Section 2

UART: TX and RX Lab Week 5

My UART Tx and Rx work at this time. My baud rate for transmission is 9600 bits/sec. The baud rate that I am using to receive the data is clocked at 76804 bits/sec. My Tx and Rx run continuously, meaning any change you make to the Dip Switches will be transmitted out using the Tx and received through the Rx. The resulting data will be output to the IO LED's. I have not been able to demonstrate this to the lab instructor as of today. I plan on demoing my project in lab on 2/29/2017.

During the process of completing this lab I learned about clocking at certain baud rates through counters. I also learned that when receiving the bits from the output pin you must clock the pin by at least double the rate. In my document I clocked the pin on the receiving end by a factor of 8 to ensure the resulting data was correct and not a glitch in the signal. If I could do this report again I would have started by using modularization in my Verilog code to make the flow of data more readable and clear. I also would have written multiple test benches along the way of creating this project for testing purposes.