H.W. #18 CpE 100 Spring 2021

Show your work for credit (!) and put a box around each of your answers if possible!

1.  Show, using simulations, how to add two 4-bit two's complement numbers (of course a 4-bit two's complement number ranges from +7 to −8). Note that since the resulting sum may be larger than +7 or smaller than −8 you'll need to extend the bit of your inputs. Make sure that your examples clearly indicate that you know what you are doing. Also, please annotate your simulation output (hand writing on what you turn in is fine) to make the grading easier. In addition to simulation output, make sure you turn in your neat and organized schematic. (5 points)
2.  Repeat problem 1 but for subtraction instead of addition. Make sure that at least one of your simulation examples shows subtracting a negative number from a positive number. (5 points)