

Using the CircuitVerse simulator available at

<https://circuitverse.org/simulator>

to simulate a 3-bit adder. Inputs are to be entered using two 3-bit steppers, and the output is to be displayed using the HexDisplay. You will need to use the Splitter tool from the “Misc” menu to split the input data into their bits, and recombine them to feed into the HexDisplay (which takes a 4-bit input.) The adder is to be implemented using basic gates that include XOR, AND, and OR. The first stage may be a half-adder. The design might be a ripple carry adder, no “carry look ahead” circuit is required.

As your preliminary work, submit one file combining two screenshots showing your entire circuit with $2+2$ and $6+7$ as the input, and the associated result shown on the HexDisplay. (For the latter, the display will show “d”.)

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