AIM: To generate simple 12 digit calculator display with clear functionality.

SOFTWARE USED: Logisim-win-2.7.1

COMPONENT USED: 4 11-bit shifter, T-flipflops, D-flipflops, Counter circuits.

DESCRIPTION:

1. We have used buttons to take inputs from user and hex-display to show it as an output.

2. We have used D-flip flops to maintain the input provided by the buttons and tunnels for wiring.

3.For each input, we are supposed to move each digit to its left , for that purpose 11 4-bit left shift registers are made using D-flip flop. (Here we are dealing with BCD representation of decimal number , so we need 4 bit shifter…!)

4. If user enters more than 12 numbers, then 13th input should be ignored, this has also been considered in our circuit.

5. Last task we have done is to CLEAR all the digits when clear button is pressed. This is achieved by applying 0 as an input of CP to each flip flop when user press CLEAR button.