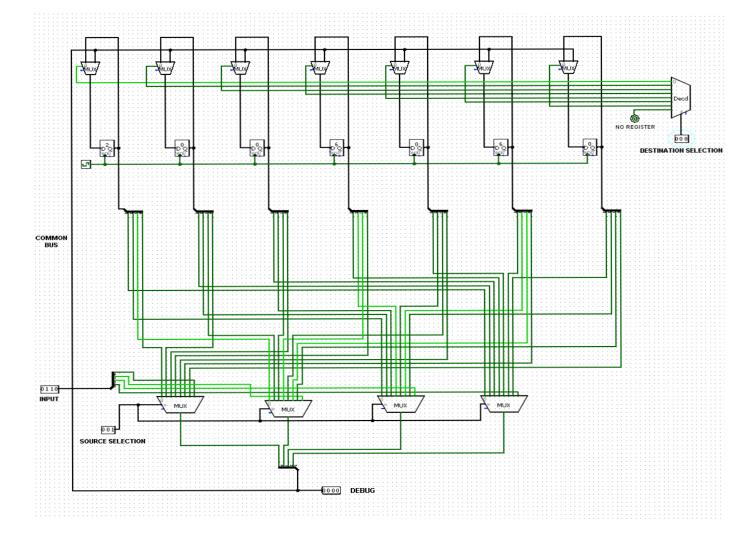
Common BUS System

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Circuit Diagram:



Components Used:

7 - D Flip flop

- 4 8*1 Multiplexers
- 1 3*8 Decoder

Splitters and wires

I/p and o/p Pins etc.

Working of Circuit:

Steps to Load the Registers and Transfer the content using the Bus:

- Using Input button as shown above enter bits you want to load to register.
- Set Selection input as 111 while loading the values to register.
- Select target Register to load input by Destination Decoder(0-7)
 And press clock to load to destination flip flop.

Eg: you want to load 2 to 4th register than in input select 0010 and in destination selection 0100 and press the clock.

- Once all the register are loaded with intial values you can use the System for bus transfer.
- To transfer the the data from one register to another select the source register through selection input and destination register through destination selection.
- Press Clock to next time to load to bus (you can see the data loaded to bus though **Debug**)
- The data from source is loaded to Destination.