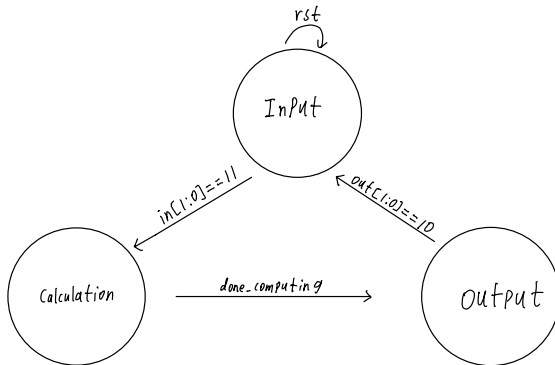
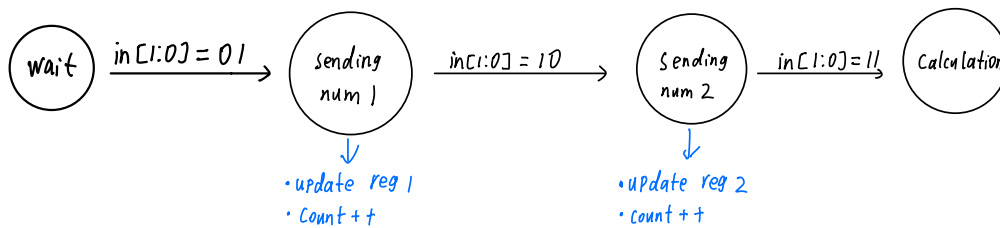


High Level FSM:

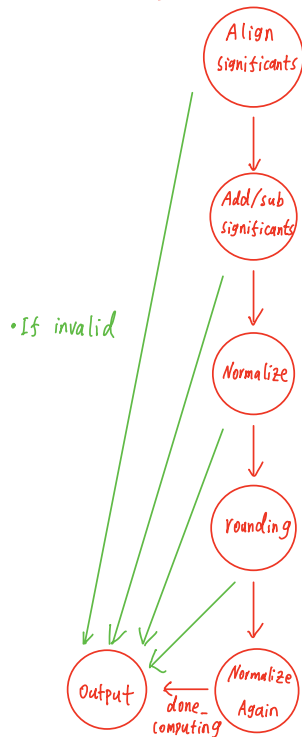


Inside input state:

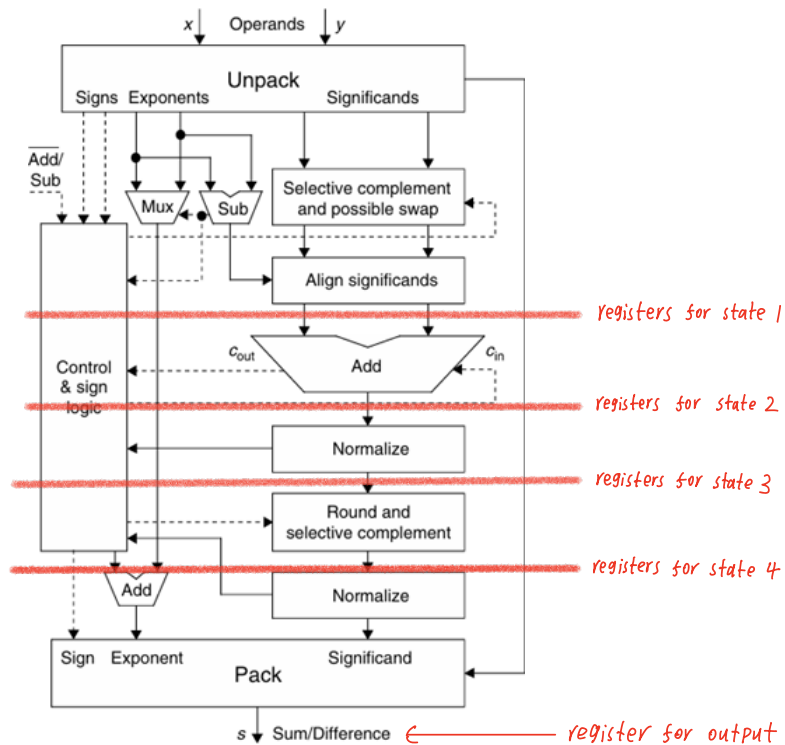


Inside calculation state:

• If add/sub



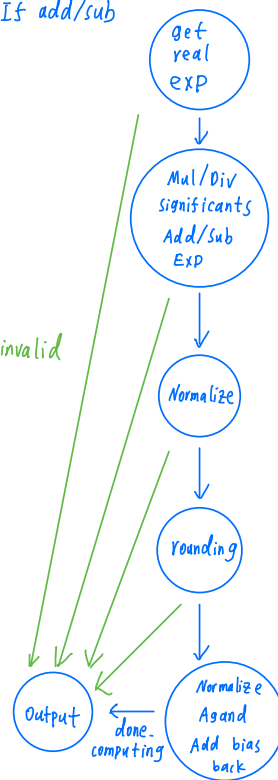
• Datapath for add/sub



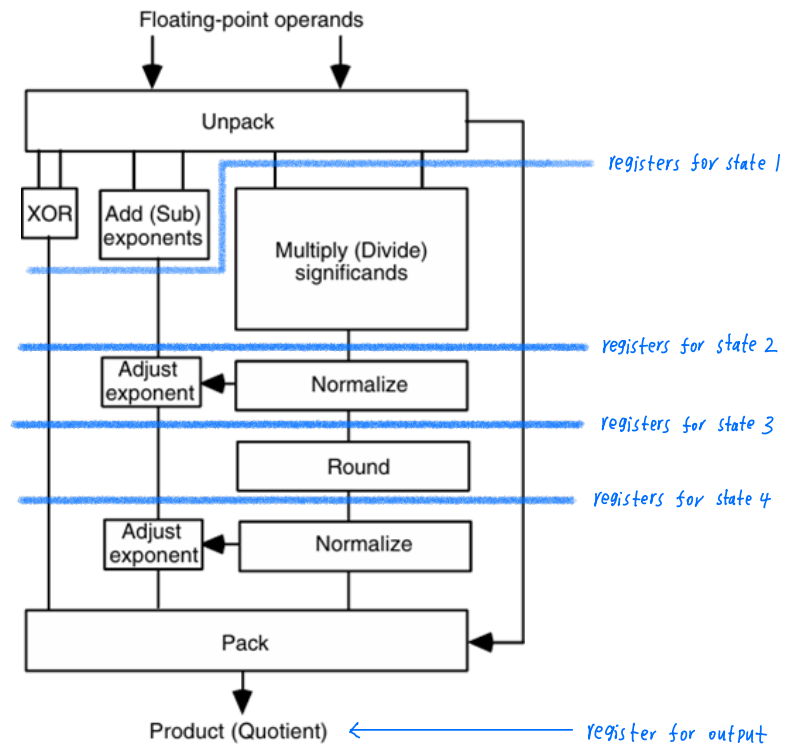
• If mul/div

• If add/sub

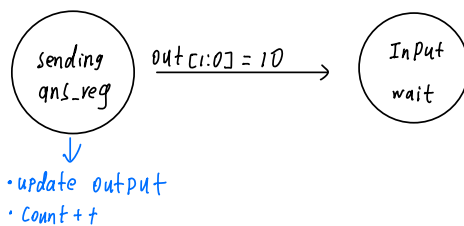
• If invalid



• Datapath for mul/div



Inside output state



• Testing :

I have written a python code for converting numbers into floating points and then do a floating point operation. It will be incorporated into a CoCoTB test bench as a golden model for generating inputs and comparing outputs.

The rest of the CoCoTB test bench should involve 1. Sending the inputs in stages (9 cycles in total)

2. Waiting for the output 3. Receiving the output in stages (4 cycles in total)