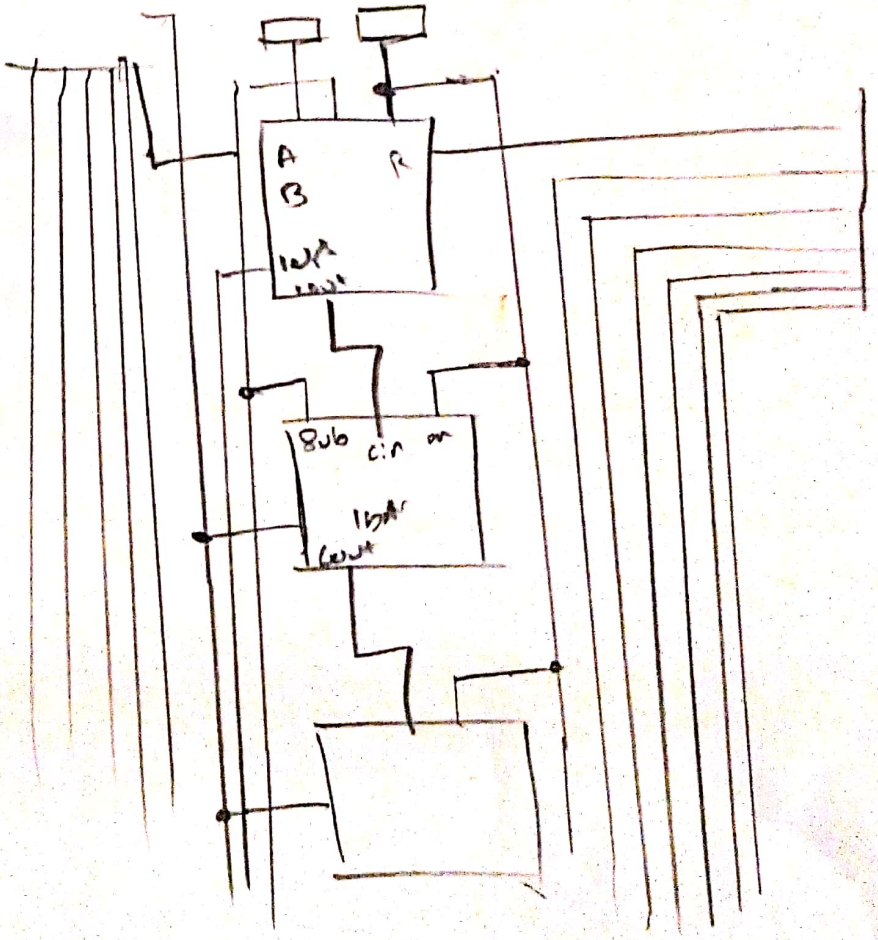
Name :- Kudlur Nikhil
USN :- 1MS19CS405

Activity :- 5

List out the steps in designing ALU

1. Add the two i/p pins, name them A and B
2. Add or, and, ex-or, not gates and 1-bit adder
3. Connect the A's and B's of all the gates to their respective pins
4. add an output pin and name it result
5. Add a 1-bit multiplexer with select bit
6. Connect outputs of all the gates to the mux
7. Connect 3-bit input pin to mux
8. add i/p pin to cin, and output pin to cout
9. add another i/p and name it less. Connect it to the mux
11. Add an output pin and name it set. Connect it to the multiplexer o/p of adder unit



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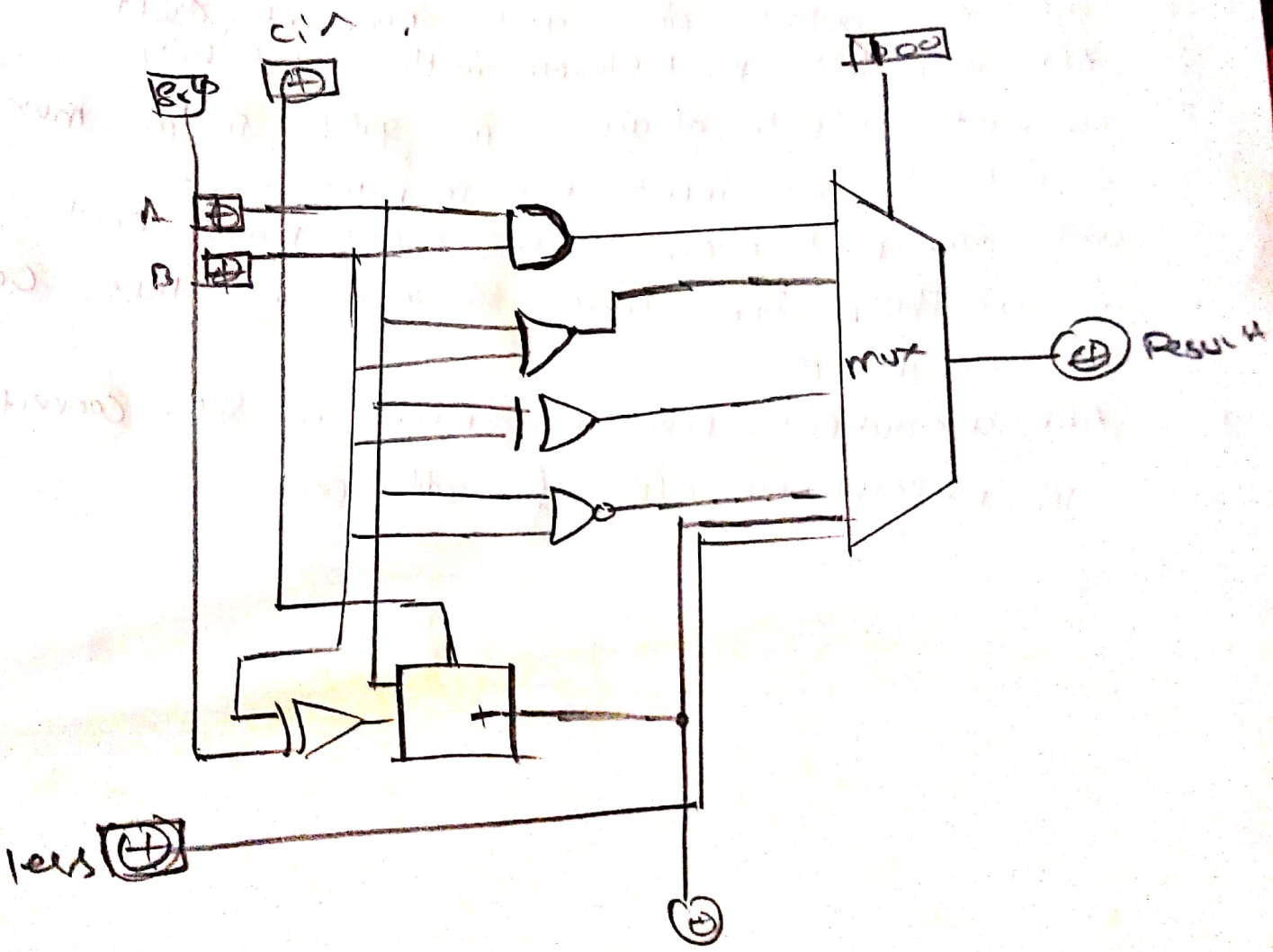

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Name :- KUDLUR NIKHIL
USN :- 1MS19CS405

Activity - 6

Write out the steps in designing ALU.

1. Add the two i/p pins. name.
1. Add a RAM with Separate load and store selected
2. add counter and connect to i/p of the RAM
3. Add a controller buffer and connect its o/p to the RAM.
4. add a clock and connect to the i/p of the buffer
5. add a try unit with 32 rows and columns make connection with RAM
6. add a 7-bit Random number generator. con a to p.
7. connect o/p of the second buffer to the counter
9. connect a button to the counter

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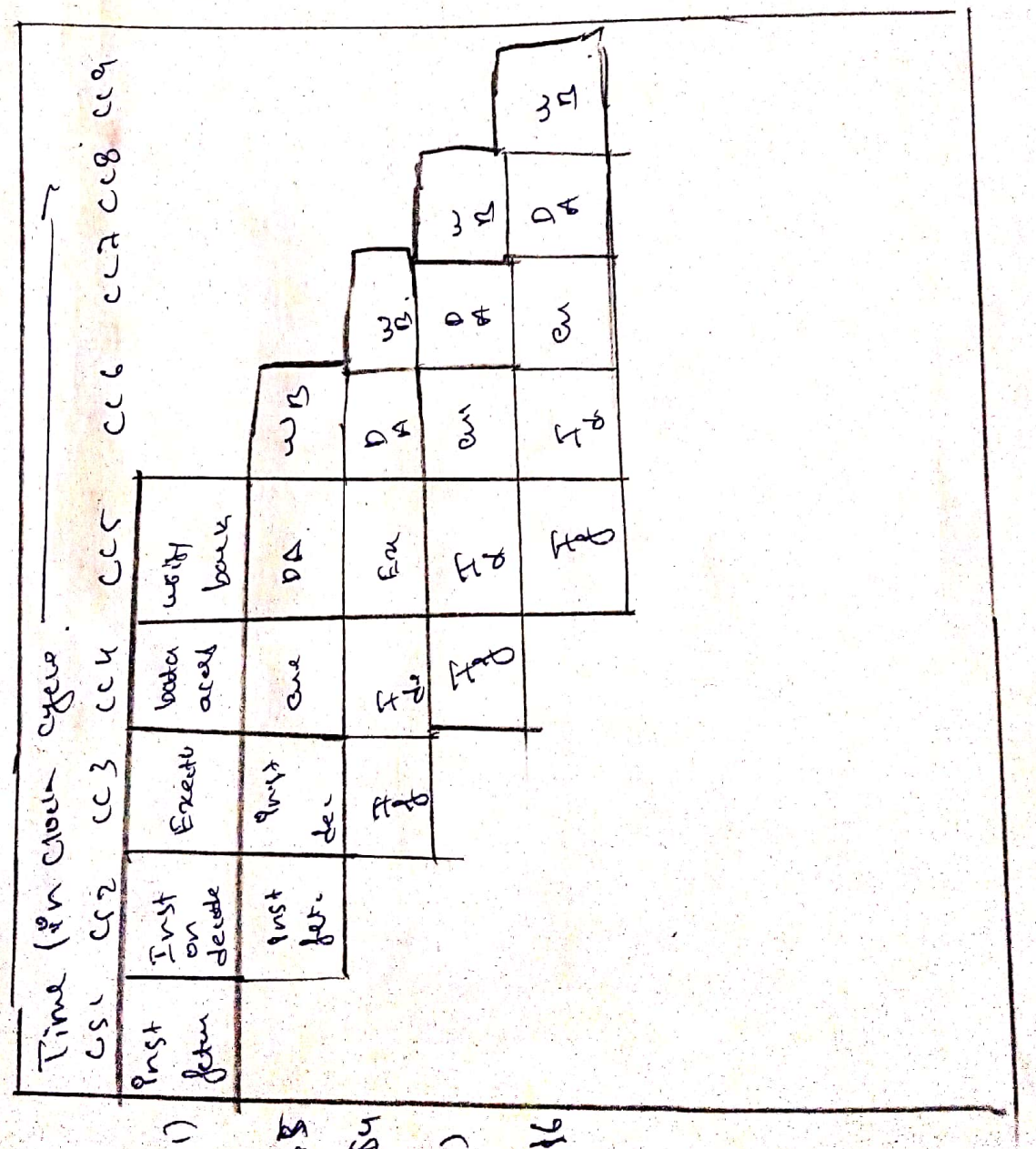
USN :- 1MS19CS405 Activity - 7

with diagram demonstrate the execution of the following instructions using pipeling technique.

lw $10, 20($1)
sub $11, $2, $5
add $12, $3, $4
lw $13, 24($1)
add $14, $5, $6



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