**Name-Ujjawal Mandhani**

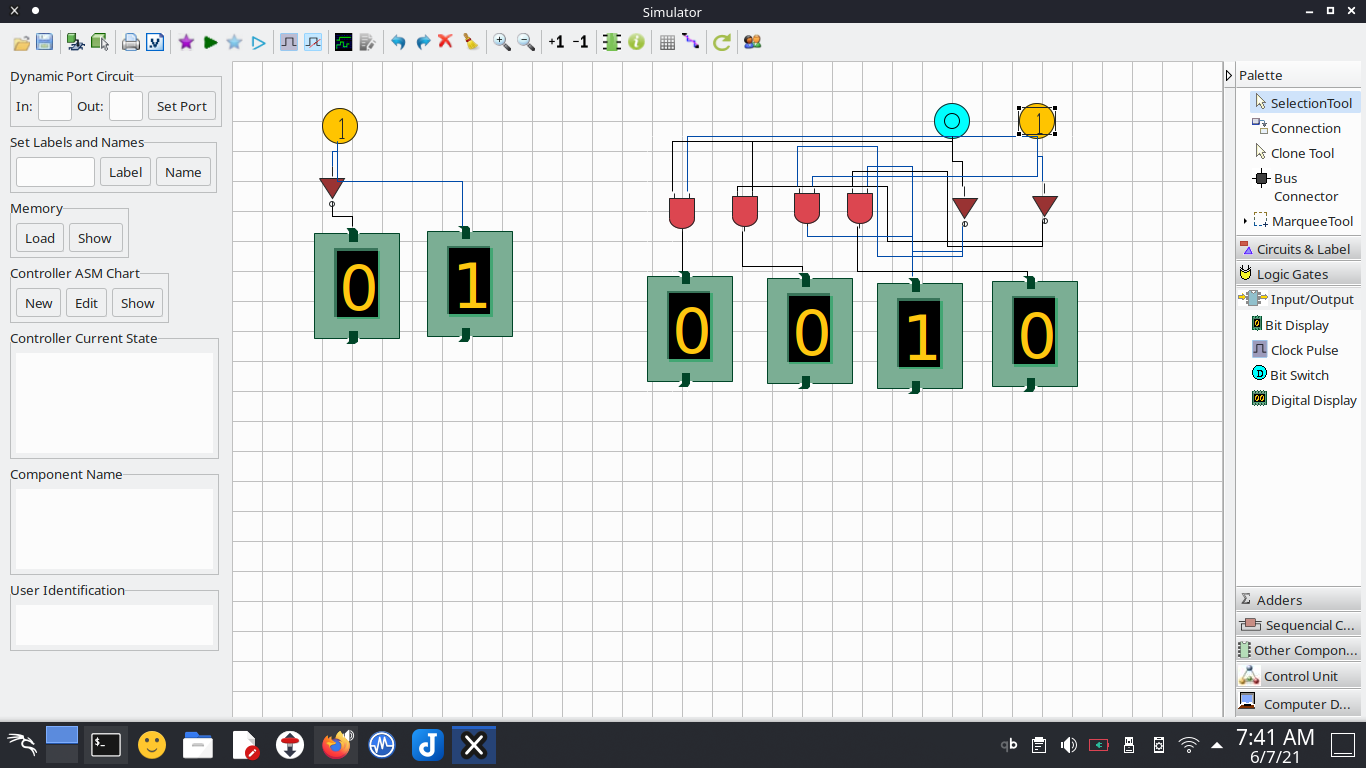
**Batch-F6**

**Enroll No.-9918103237**

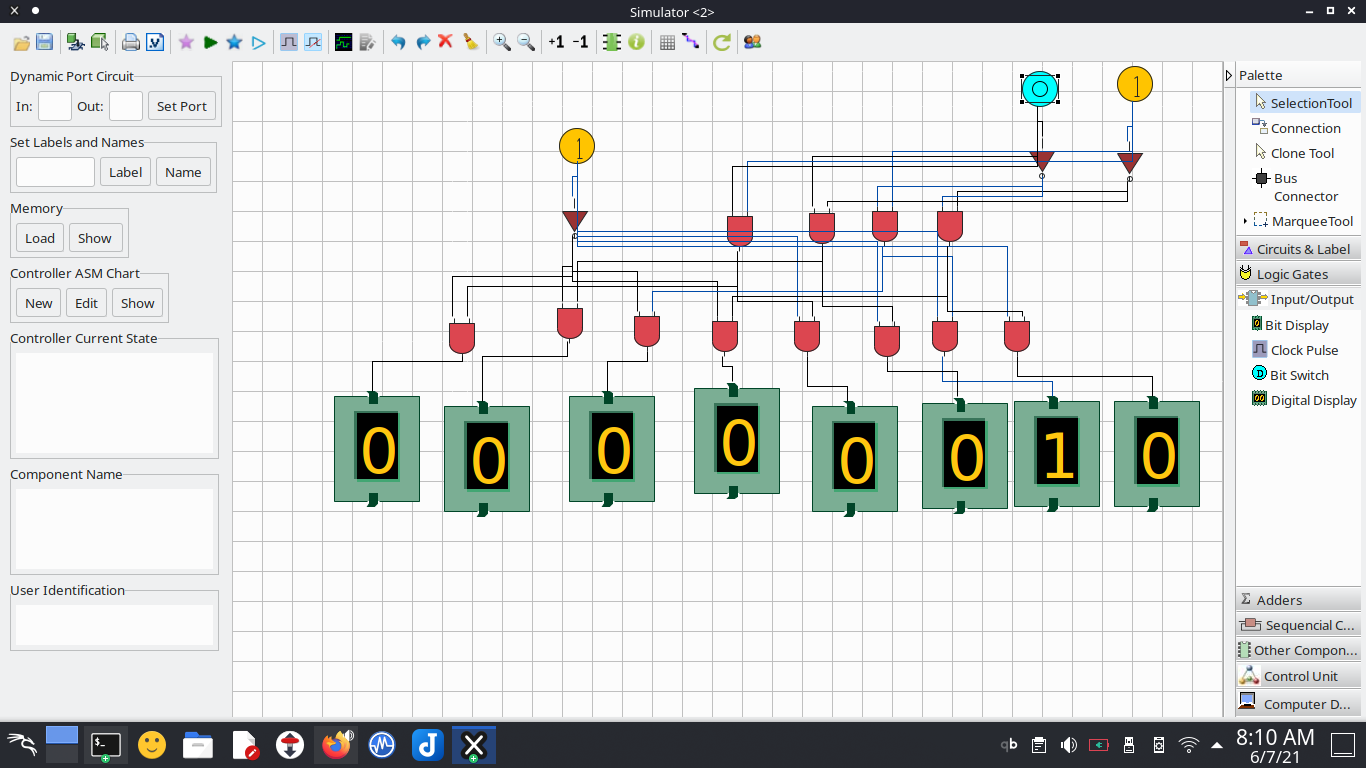
**COA Lab – 4**

**Question 1:** Design the decoder circuits with defined logic.

**1 to 2 AND 2 to 4 DECODER**

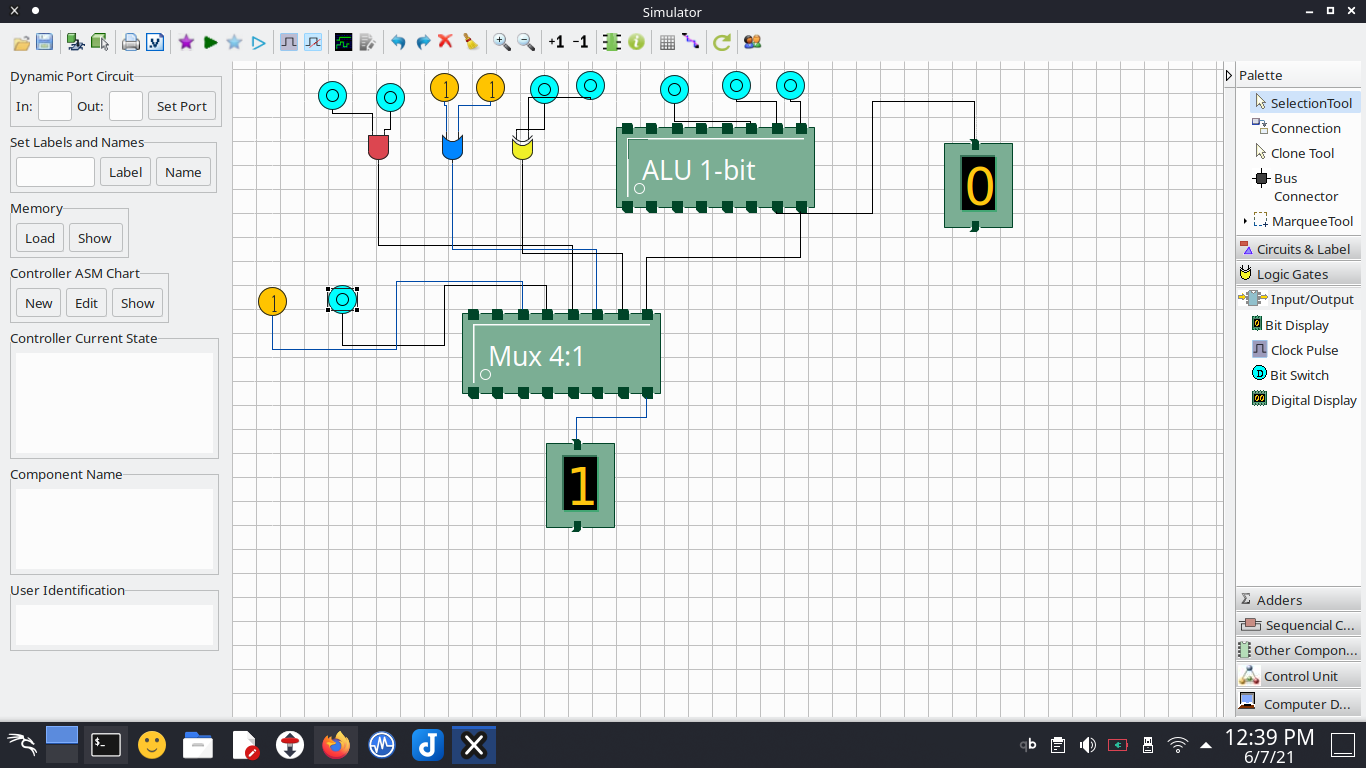


**3 to 8 DECODER**

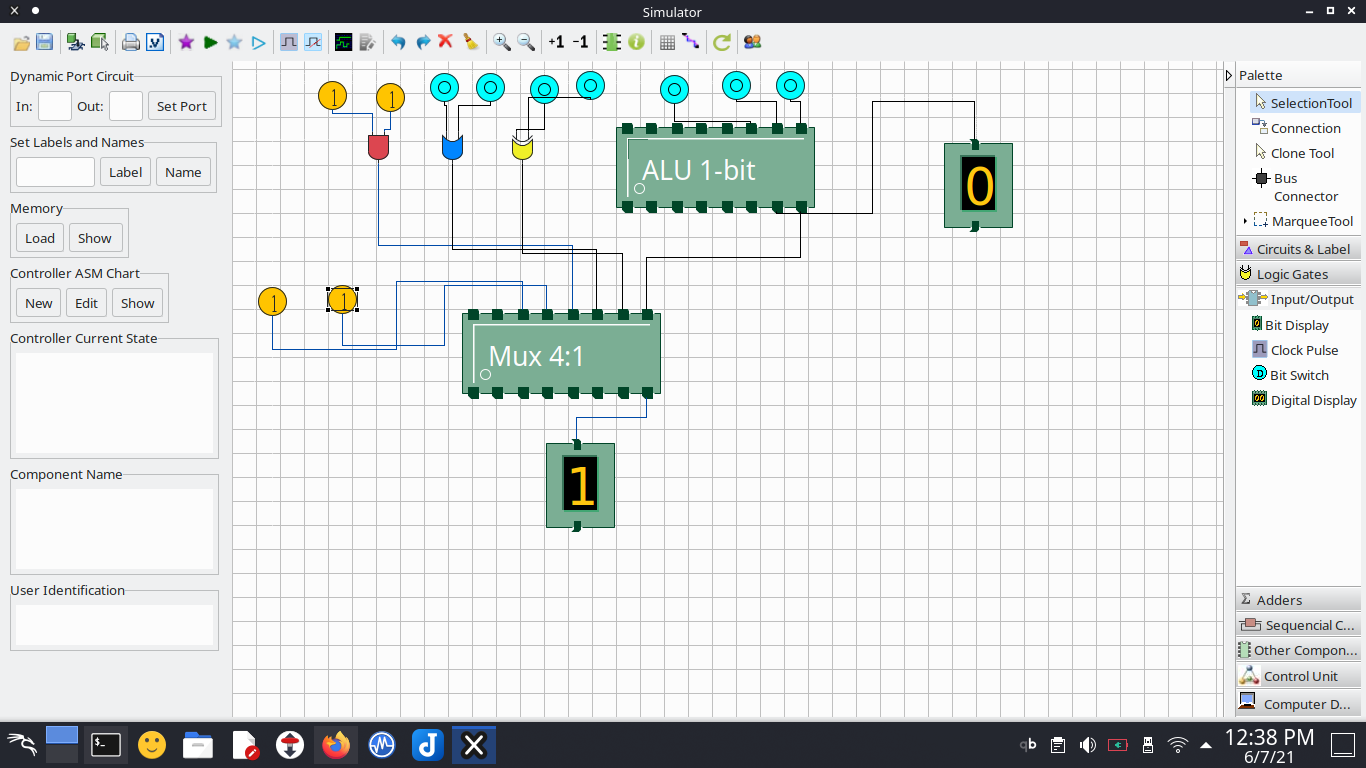


**Question 2:** Design a Logical Unit that support Basic Logical Operation and Shift Operations.

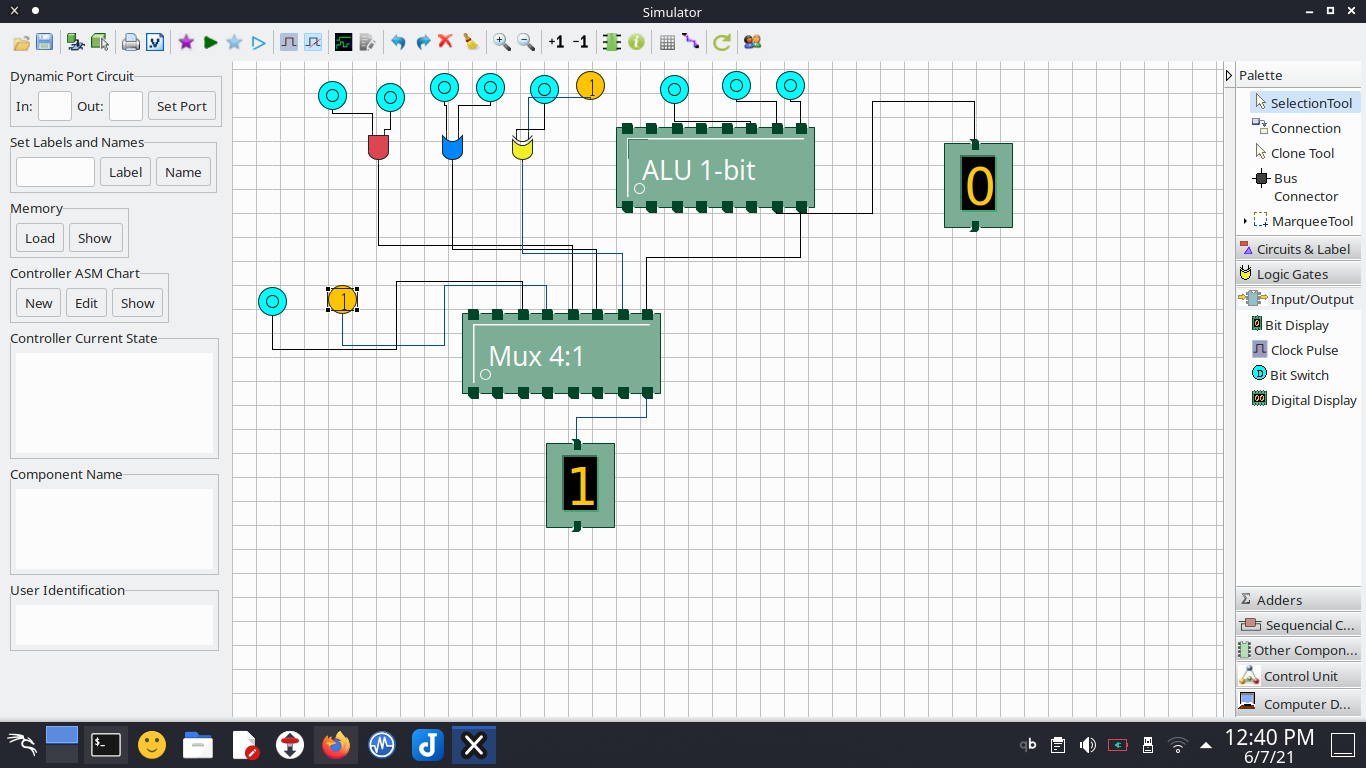
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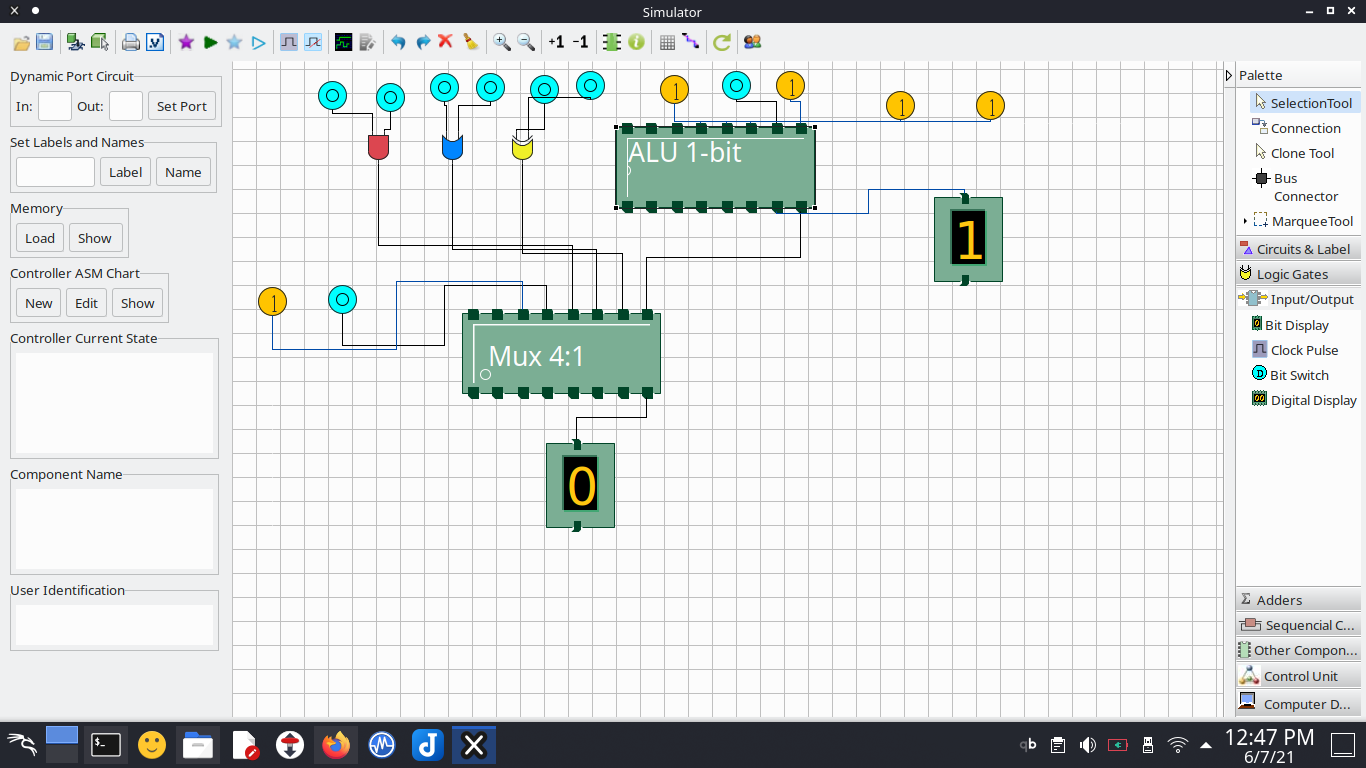
**ALU AND**



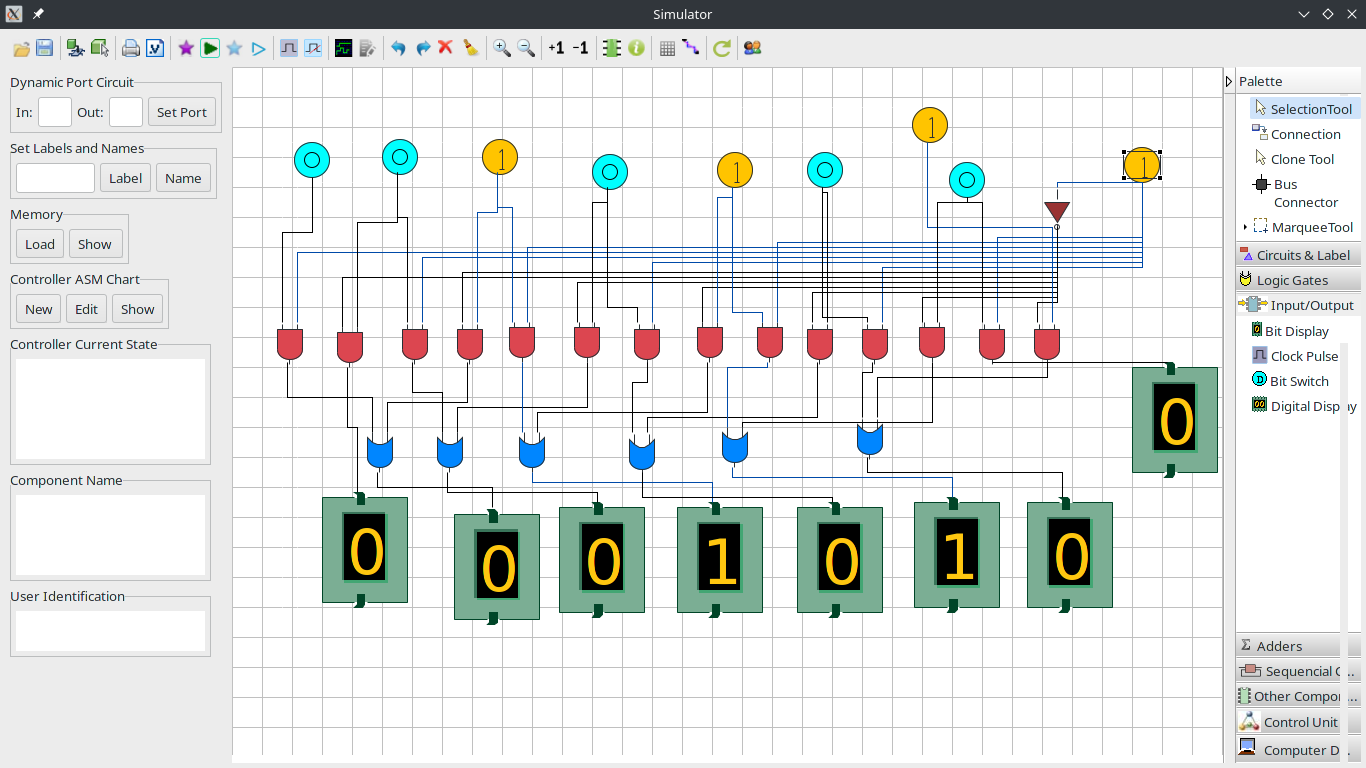
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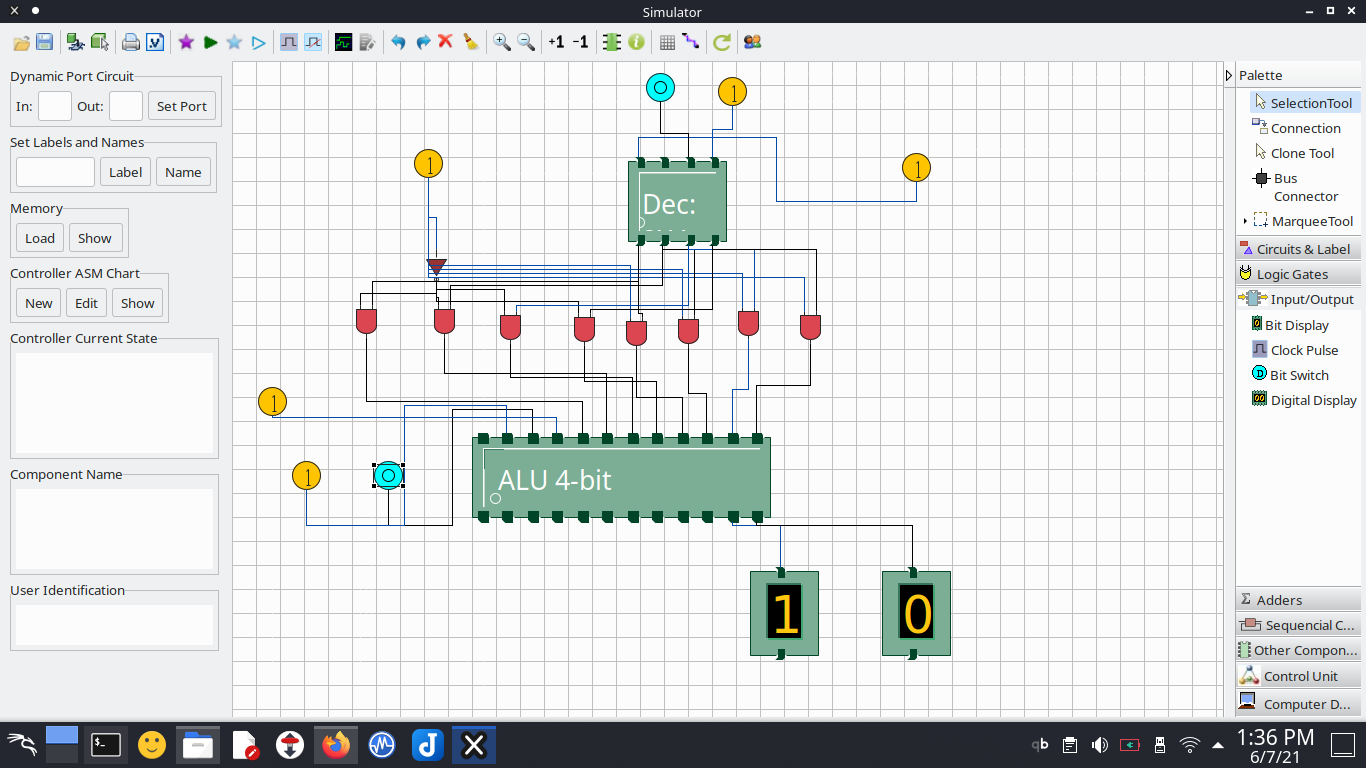
**ALU ALU**



**ALU LOGIC SHIFT OPERATORS**



**Question 3: Design a arithmetic Cicuit that Do addition, subtraction, Multiplication and Division.**

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