Date:

EXPERIMENT NO .3

AIM: Implement Arithmetic and Logic unit in Logisim.

Application Example: Design a calculator that can add, subtract, and perform basic logic operations on two 4-bit numbers.

TABLES OF CALCULATIONS:

1. Arithmetic Circuit

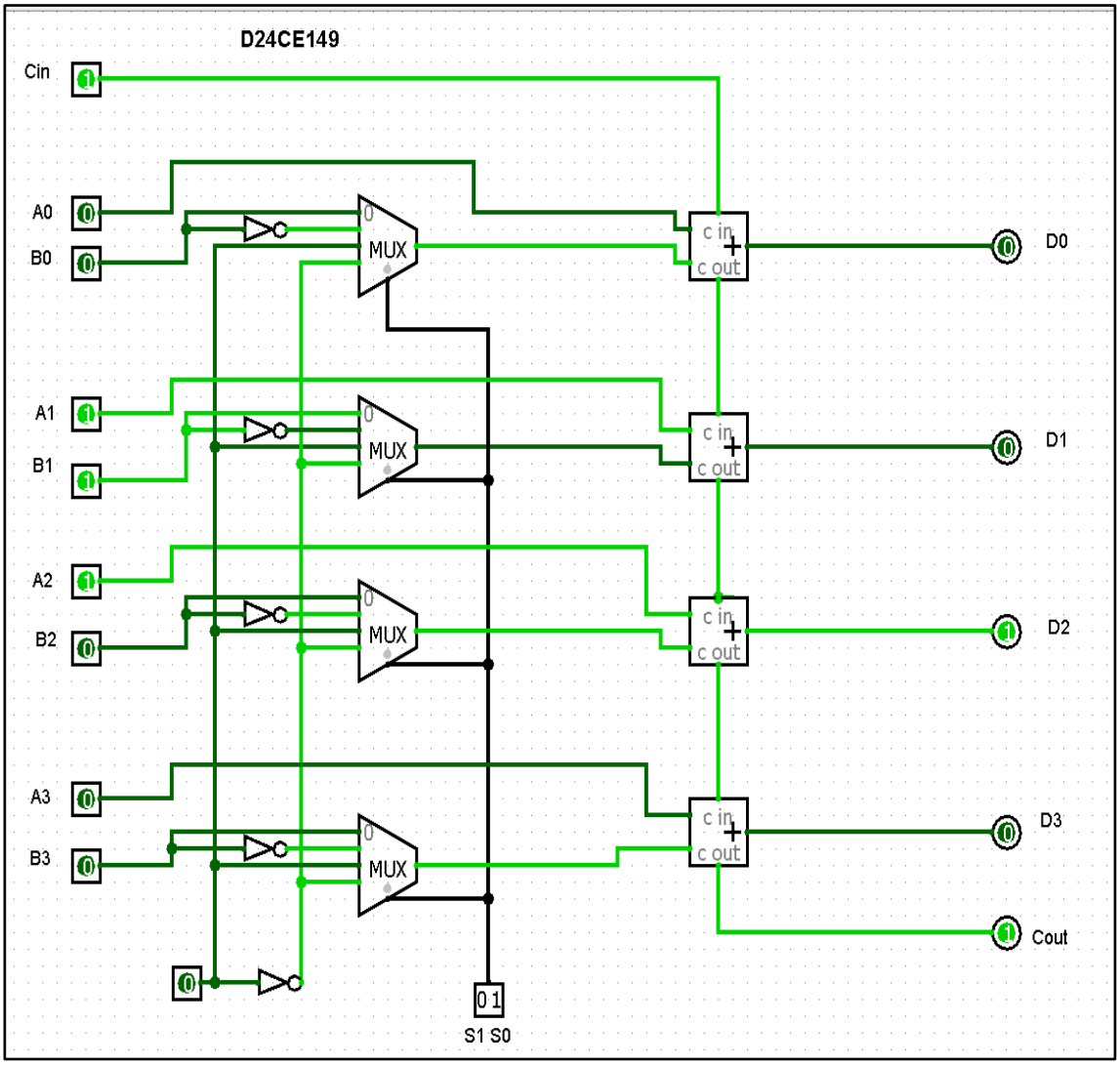
S1	S0	Cin	Y	Output	Microoperation

2. Logical Circuit

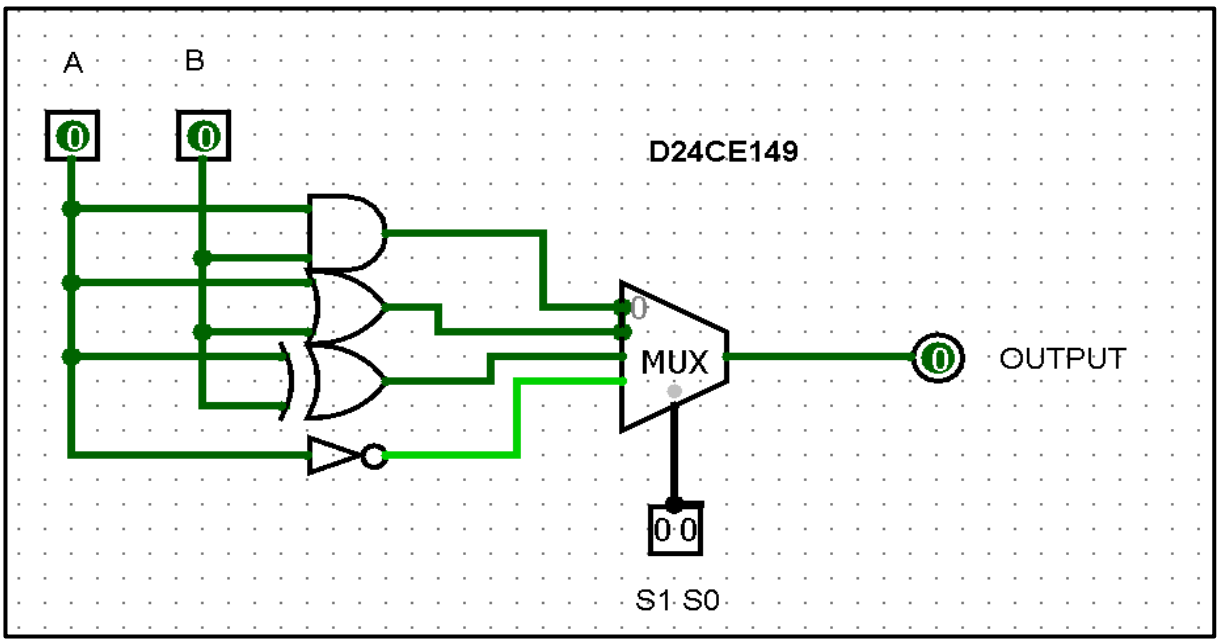
S1	S0	Output	Operations

CIRCUITS:

1. Arithmetic Circuit:

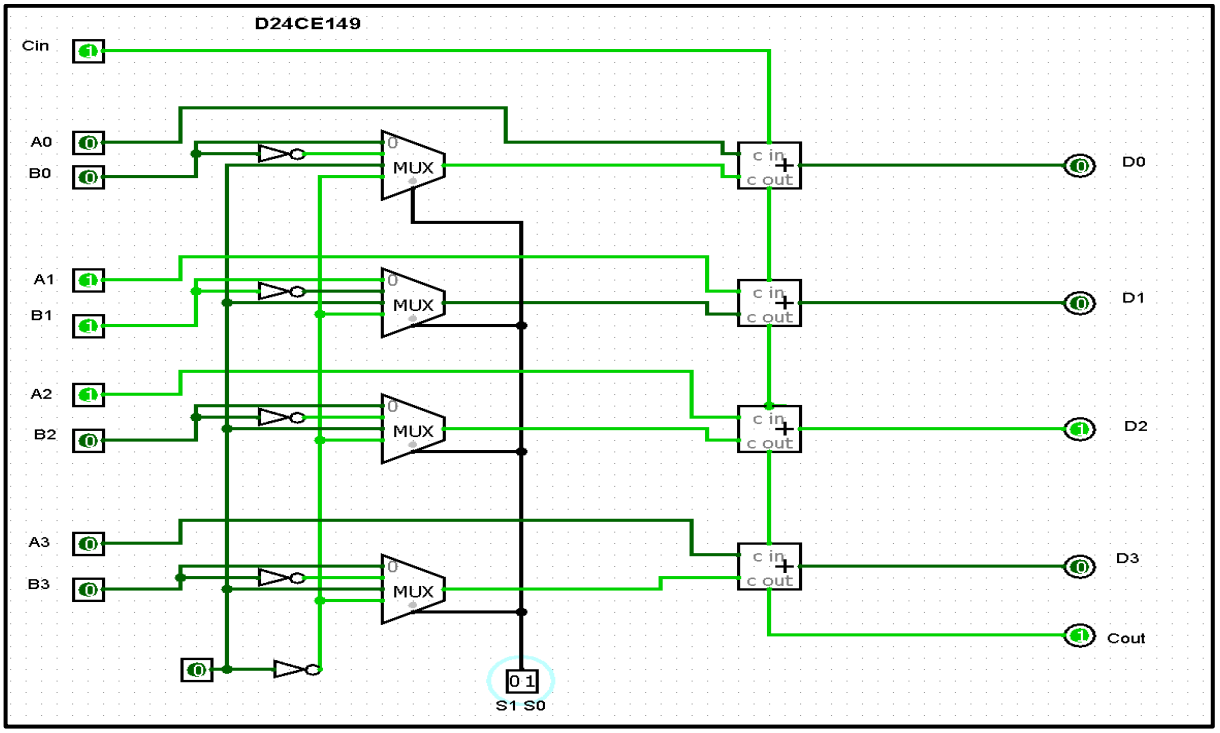


2. Logical Circuit:

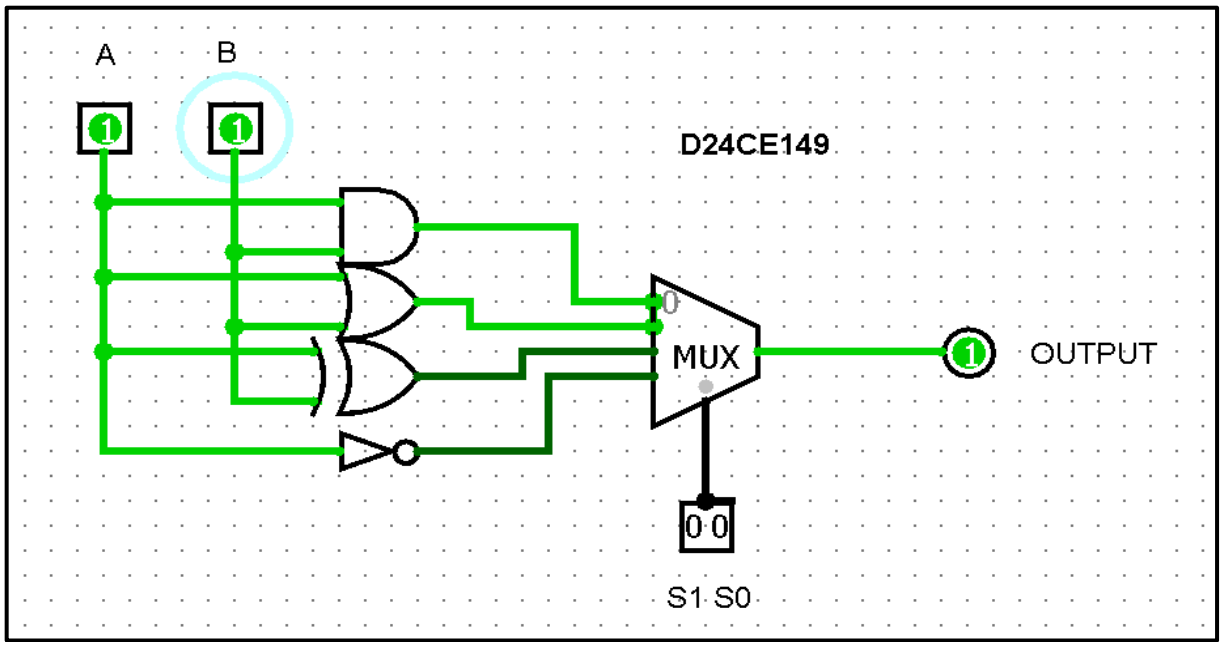


OUTPUTS:

Task 1: A=6(0110)-B=4(0010)=D=4(0100);



Task 2: A and B ;



OBSERVATION:

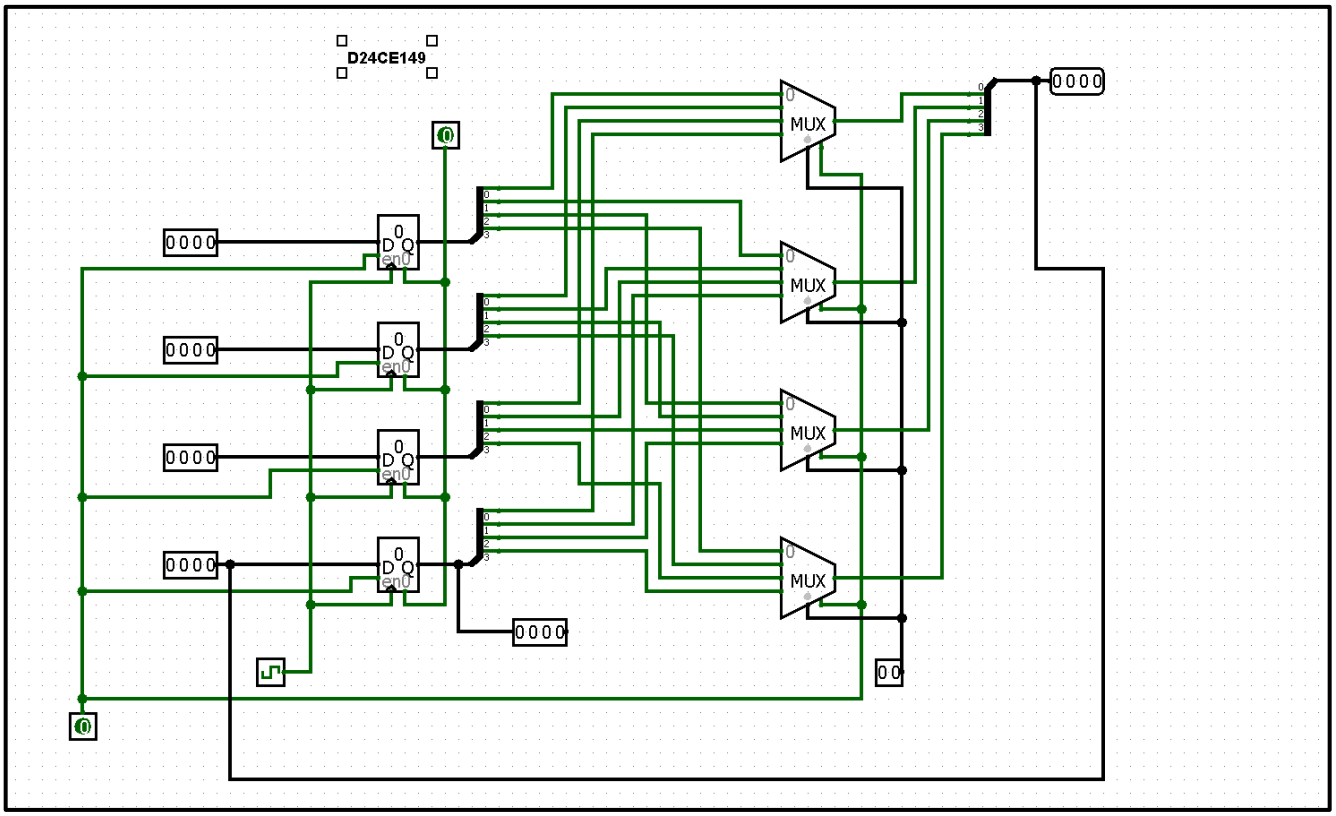
CONCLUSION:

Date:

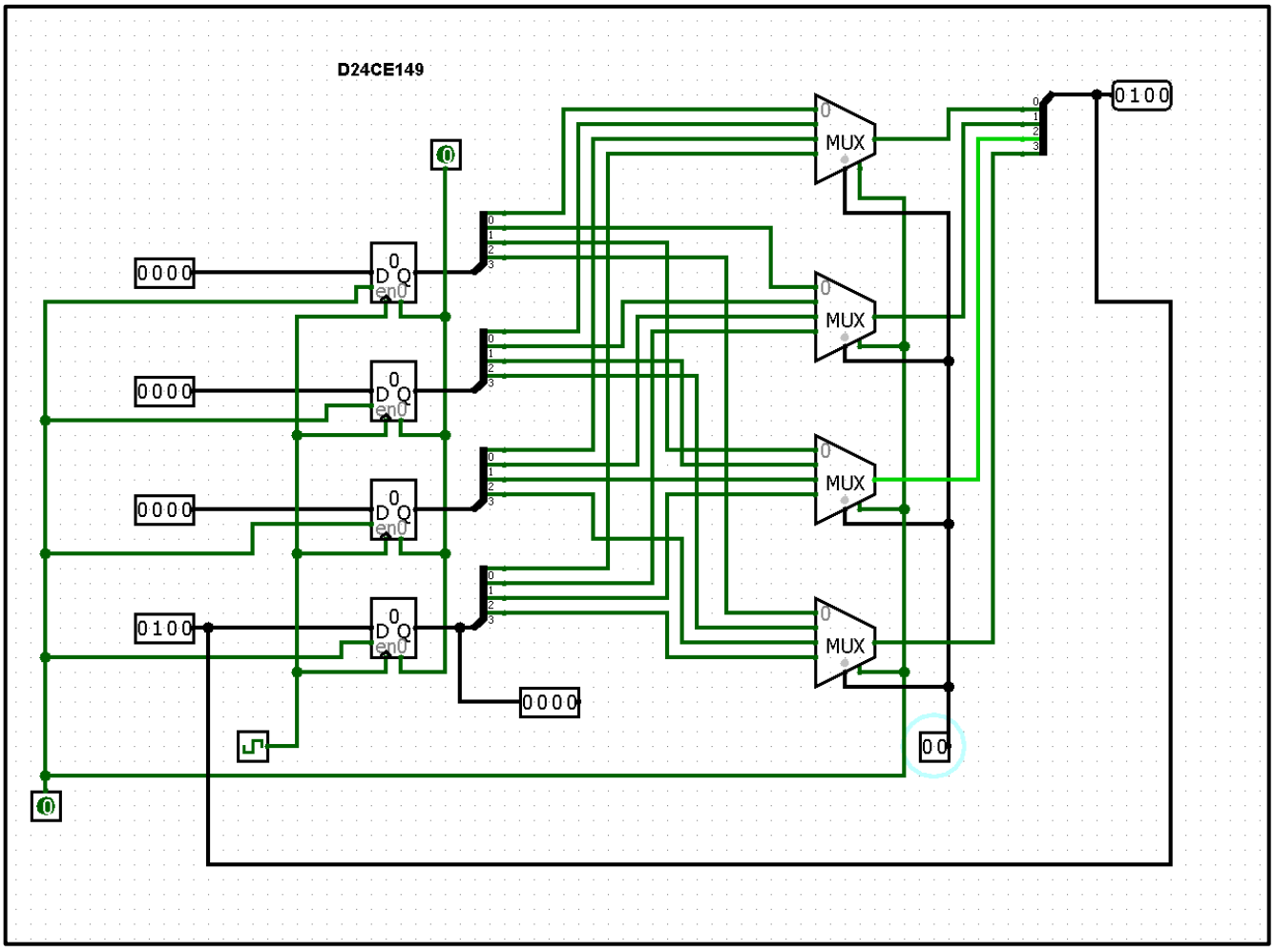
EXPERIMENT NO .4

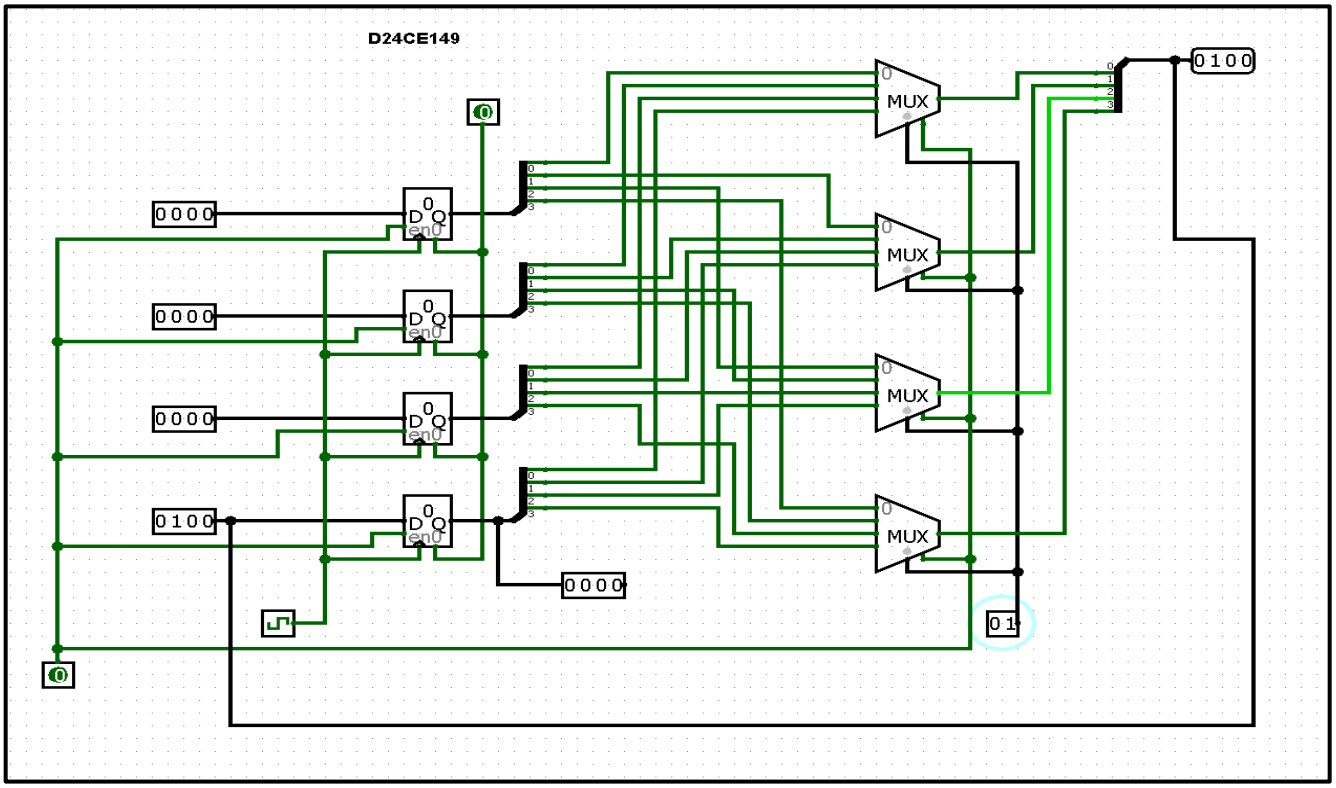
AIM: Implement common bus system using Multiplexer in Logisim.

CIRCUITS:



OUTPUTS:





OBSERVATION

CONCLUSION