

CSE 260

Lab 08

- Name of the Experiment: Design and Implementation of the 4 2 bit numbers and two selection Variable.

@1 Objective: For selection have to use MUX(74153) and for adding using 7483 2 bit Parallel Adder.

Required components and equipments:

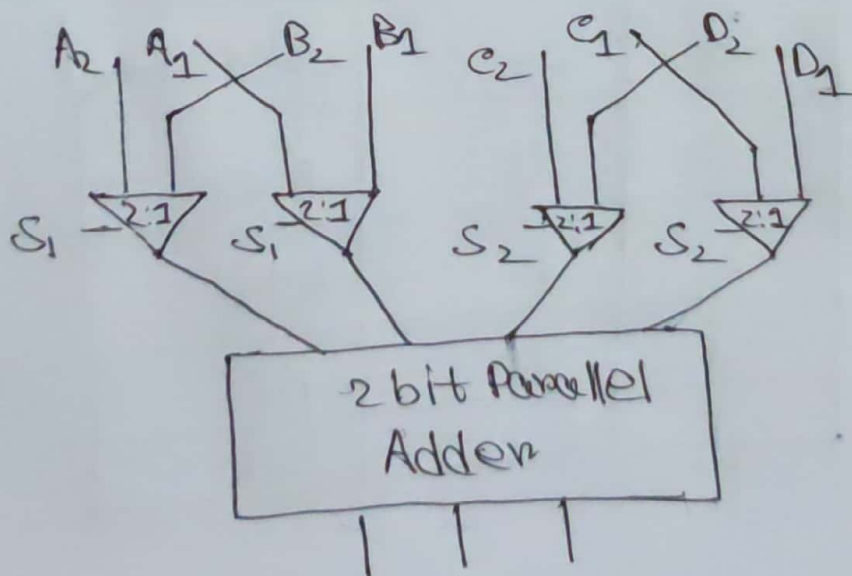
i) 7483

ii) 74153

iii) LED - Yellow

iv) Logic State.

Experimental Setup:



Result and discussion We have 2 bit number

(A,B,C,D) and two selection variable S_1 and S_2 . S_1 select either A or B and S_2 select either C or D. When S_1 value is 0, then A is selected. When S_1 value is ~~select~~ 1, then B is selected. Same as $S_2 = 0$, then C is selected and when $S_2 = 1$; then D is selected. This selected 2 bit parallel number pass into 2 bit parallel adder which add this two number and gives the output with 3 bit. Depending on the selection variable, the circuit would work,

S_1	S_2	operation
0	0	$A + C$
0	1	$A + D$
1	0	$B + C$
1	1	$B + D$

