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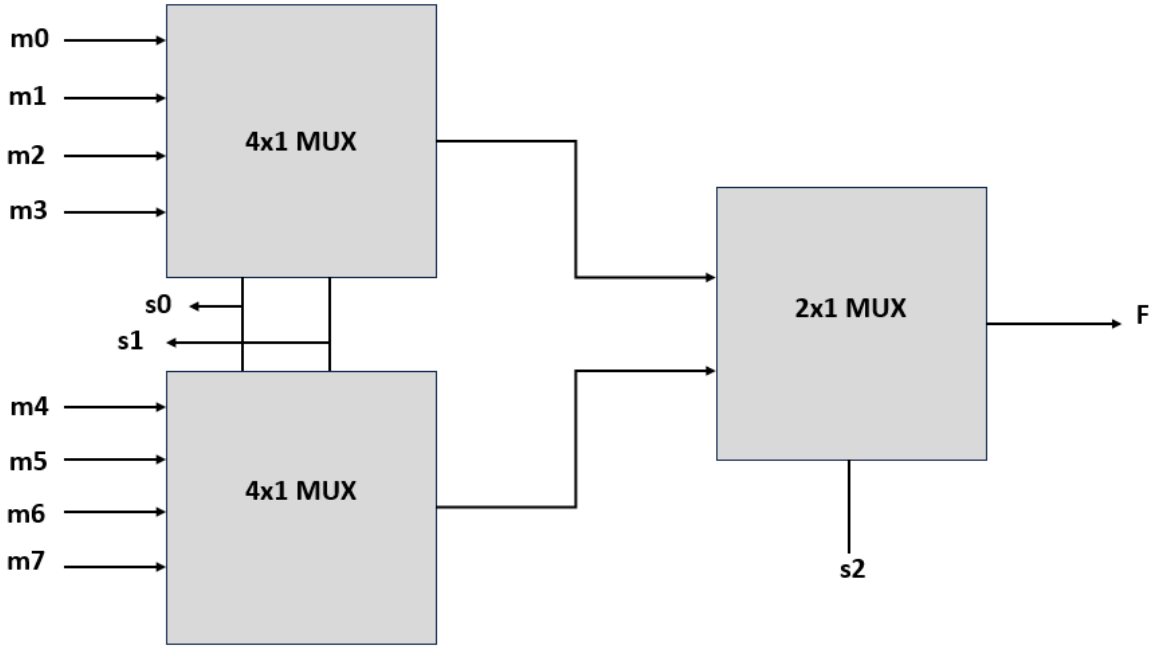
3.6 Post Lab

1. Implement 8x1 Multiplexer using lower order Multiplexers Show how to solve it.



2. Design a Majority Circuit; a circuit that takes 4 inputs A, B, C, D and 1 output Y. Its output equals 1 when 3 or 4 of the inputs are 1. You can only use two 4×1 multiplexers.

A	B	C	D	F	
0	0	0	0	0	
0	0	0	1	0	0
0	0	1	0	0	
0	0	1	1	0	0
0	1	0	0	0	
0	1	0	1	0	0
0	1	1	0	0	
0	1	1	1	1	D
1	0	0	0	0	
1	0	0	1	0	0
1	0	1	0	0	
1	0	1	1	1	D
1	1	0	0	0	
1	1	0	1	1	D
1	1	1	0	1	
1	1	1	1	1	1