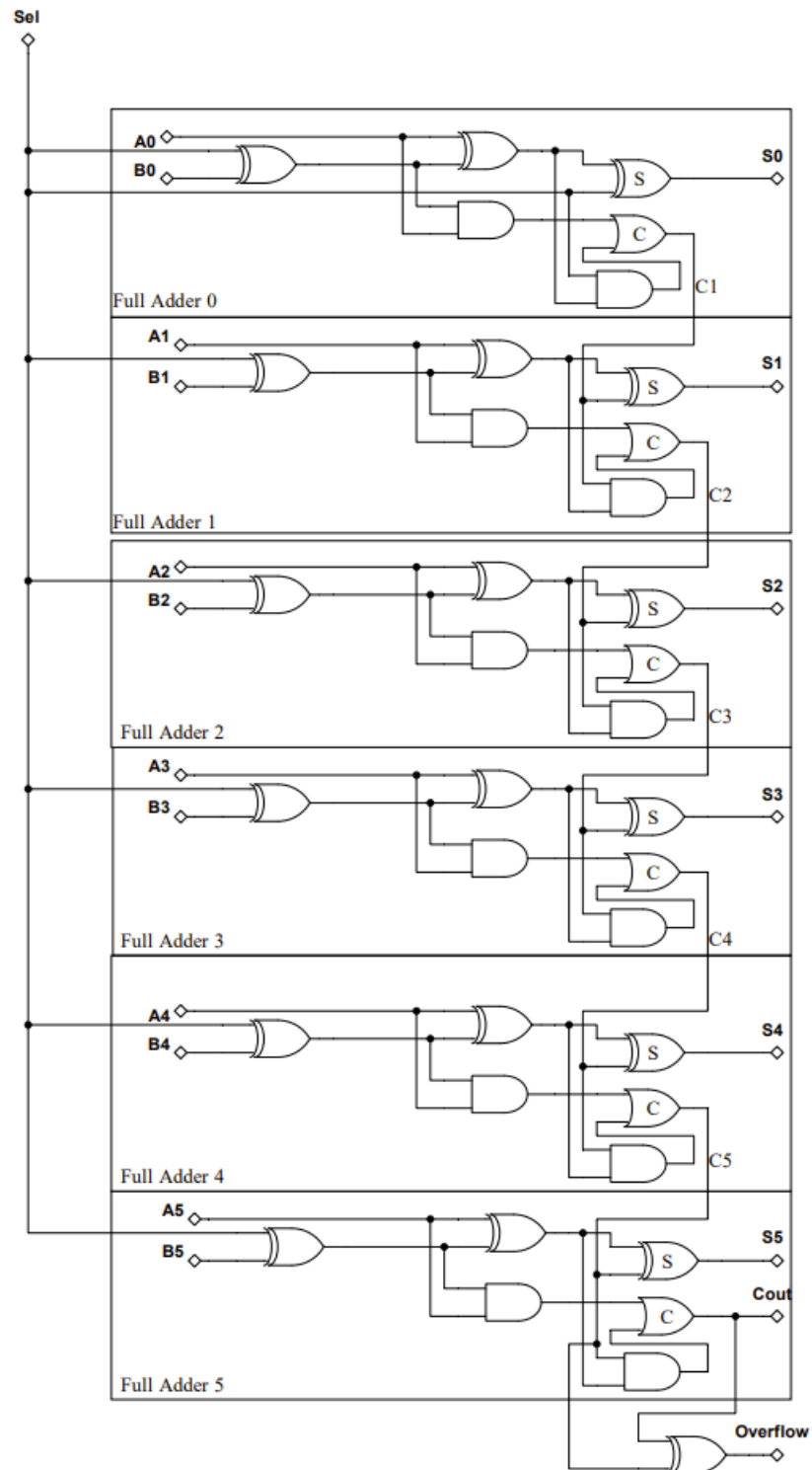


# Lab C

## 4) Block Diagram for the Ripple Adder



8)

Test Vector ID	Sel	x	y	Cout Expected	Overflow Expected	Sum Expected
1	0	000001	000010	0	0	000011
2	1	000001	000010	0	0	111111
3	0	100000	100000	1	1	000000
4	1	101010	101010	1	0	000000
5	0	111101	111111	1	0	111100
6	1	111101	111111	1	0	111011



9) The circuit has passed all the test vectors we have given it. However, this is definitely not a fully exhaustive test bench. But we have gone through all the important test cases (ie ones that indicate carry and overflow and addition and subtraction with negative numbers)