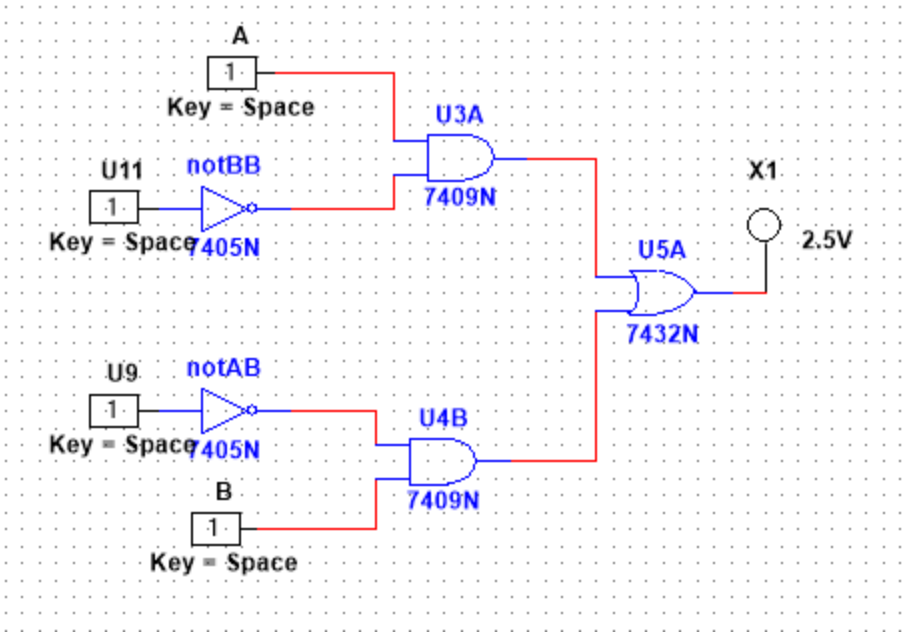
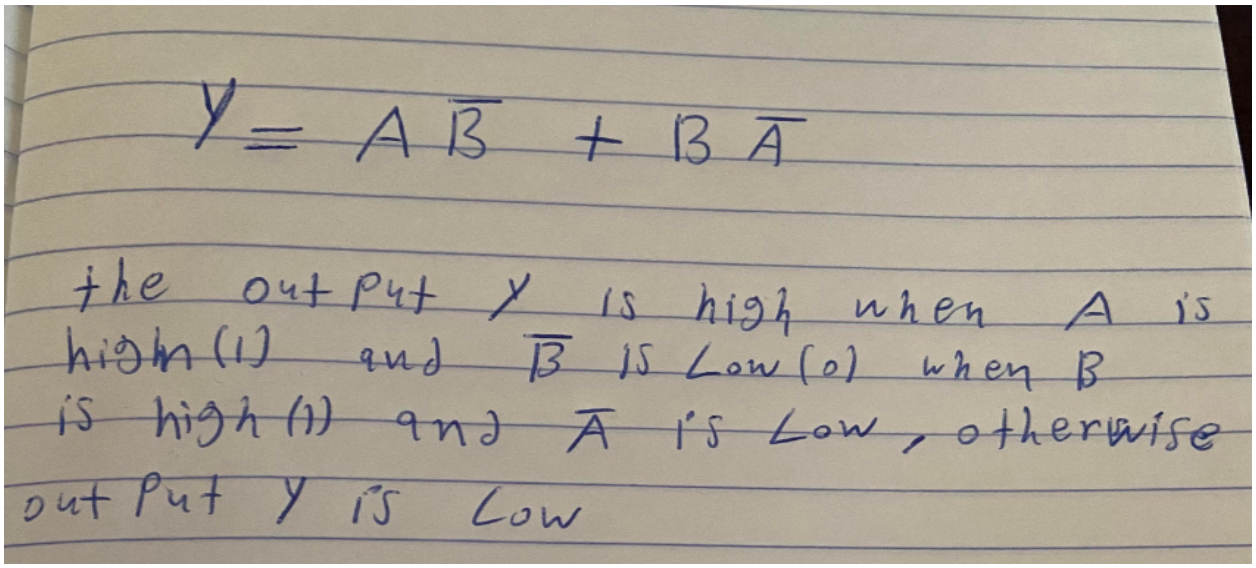
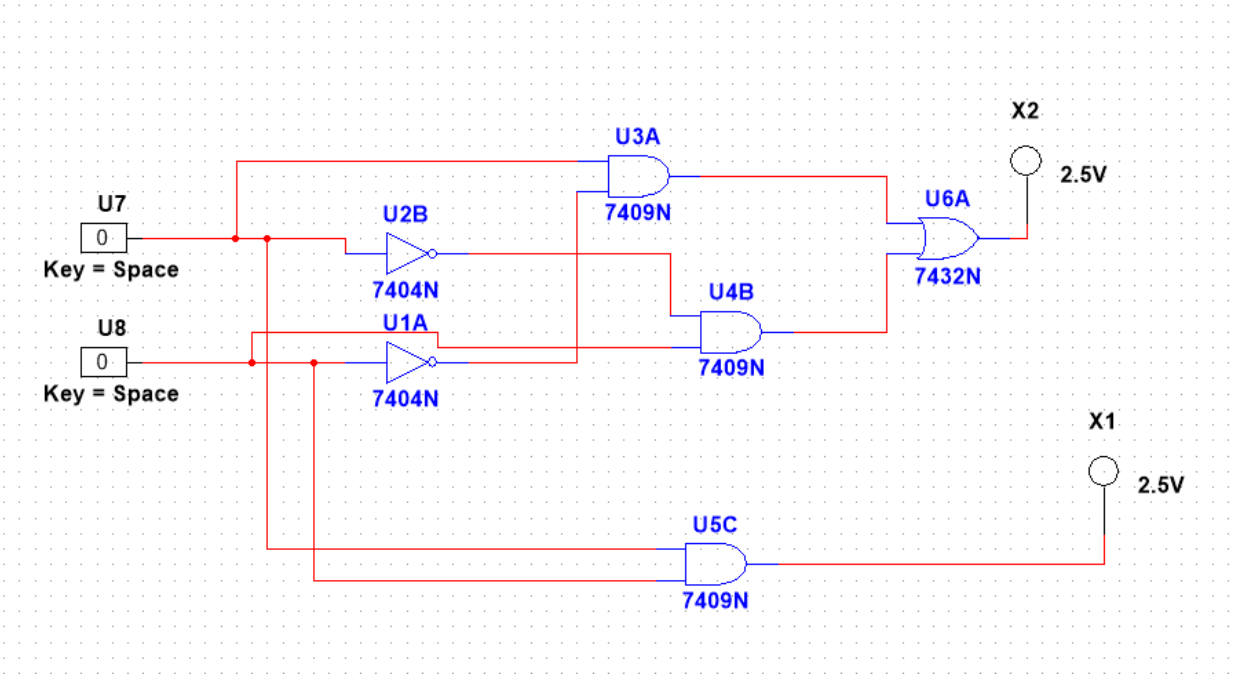


A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0



PART B:

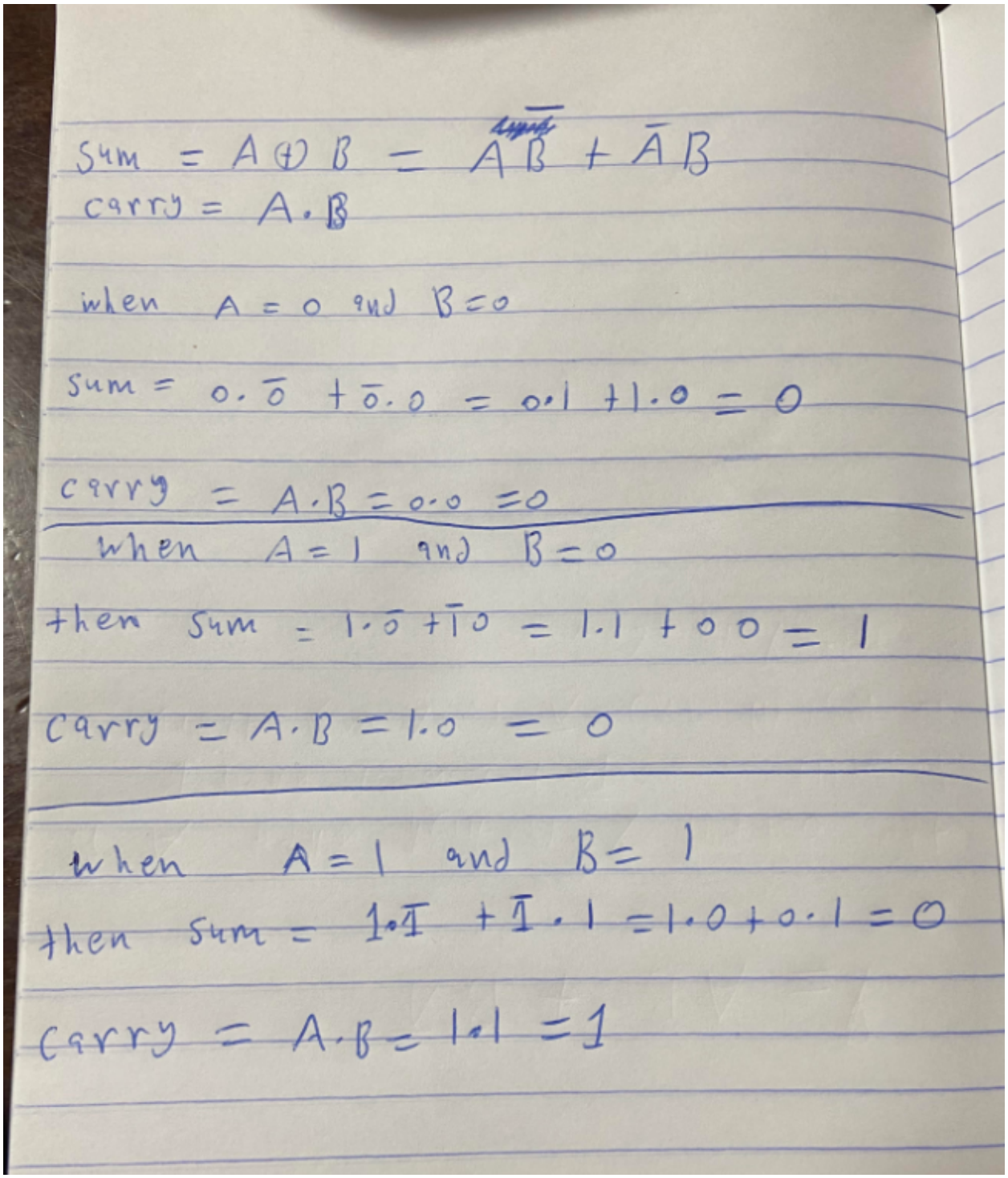


A	B	Carry	Sum
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

PART C:

Is shown below:

1. Write a clear statement of output as a function of the inputs and write the Boolean expression for a Half Adder.



2. In the truth table shown above, does the column location of “SUM” and “CARRY” matter? Explain why.

Yes it matters, because according the the orders 0, 1, 2.. The truth table is written from it for both the sum and carry, the sum is also calculated based on the combinations of the input, which shows how significant the column location of “SUM” and “CARRY” is.