Truth Table:

- G (Gate) = 0 is raised 1 is lower

T (Train)	V (vehicle)	G (Gates)
0	0	0
0	1	1
1	0	1
1	1	1

Figure 2. Truth table of the sensor.

Testing the Actual Output using the Logic.ly website.

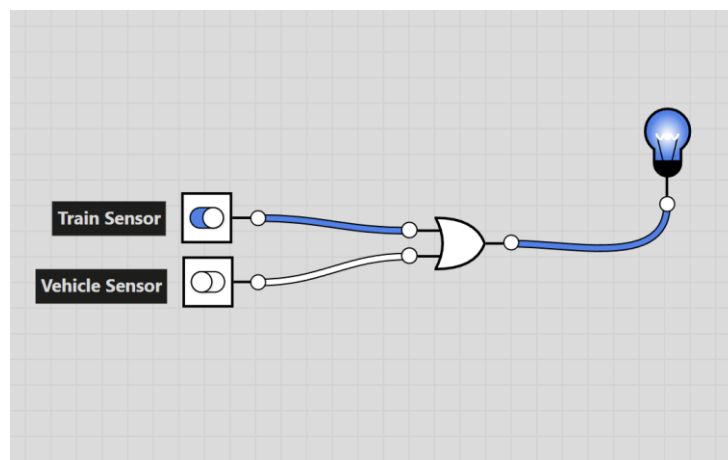Bulb light : Gate Lowered, Bulb Turn off : Gate Raised

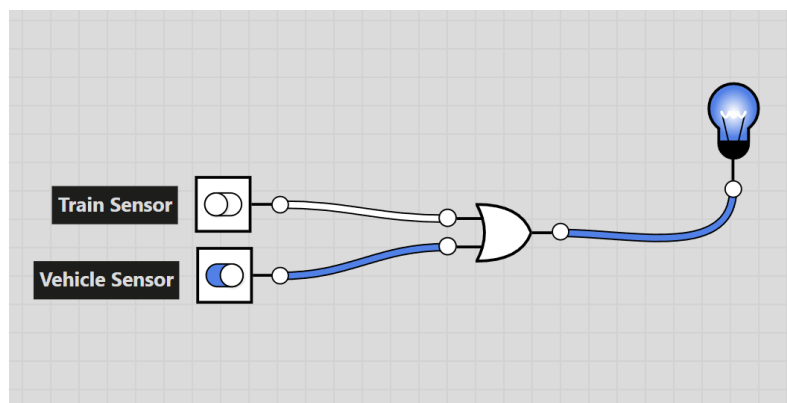Figure 3. Test Case 1 Results: Gates are Lowered.

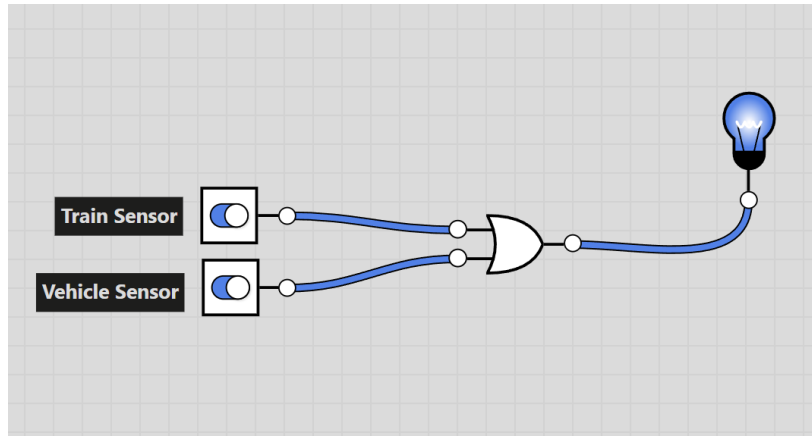Figure 4. Test Case 2 Results: Gates are Lowered.
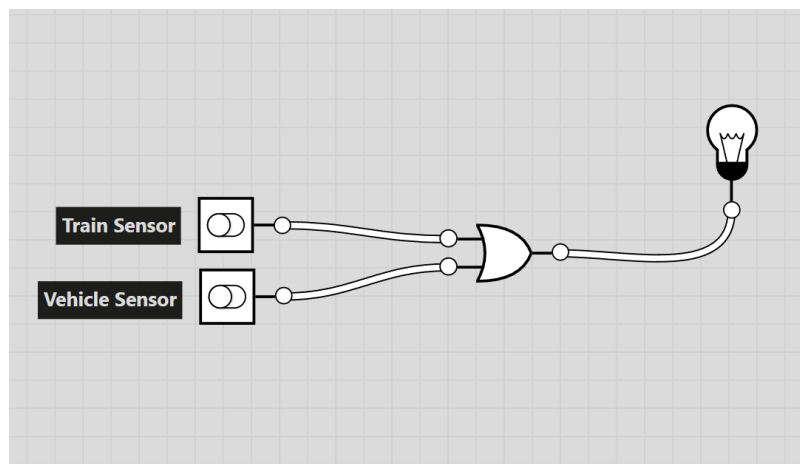
Figure 5. Test Case 3 Results: Gates are Lowered.

Figure 6. Test Case 4 Results: Gates still raised.