**Q1:**



* 0 change to 1 (under Not 0 so =1)
* 0 with 1 by AND gate is 0(0 and 1 so = 0 )
* 0 change to 1 (on the top Not 0 so =1)
* 1 with 0 by OR gate is 1(1 or 0 so = 1)

**Q2 :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **A** | **B** | **AND** | **OR** | **NOT A** | **NOT B** |
| 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 | 1 | 1 |
| 1 | 1 | 1 | 1 | 0 | 0 |

**Q3**

* **Only if the position of switch A is 1 and the positions of switch B is 1, the AND gate will be 1. In the other conditions, the AND gate will be 0.**
* **Only if the position of switch A is 0 and the positions of switch B is 0, the OR gate will be 0.In the other conditions, the AND gate will be 1.**