Prelab 2

1.

Inputs: manual switch, S

Motion detector, M1

Disable switch, D

Outputs: light, L

Alarm, A

2.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S | M1 | D | L | A |
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 1 | 0 | 0 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 1 | 1 | 0 |
| 1 | 1 | 0 | 1 | 1 |
| 1 | 1 | 1 | 1 | 0 |

3.

S·M1·D’ = A

S+M1·D’ = L

