**4-to-1 MUX Truth Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S1 | S0 | I0 | I1 | I2 | I3 | Y (Output) |
| 0 | **0** | **0** | **X** | **X** | **X** | **0** |
| 0 | **0** | **1** | **X** | **X** | **X** | **1** |
| 0 | **1** | **X** | **0** | **X** | **X** | **0** |
| 0 | **1** | **X** | **1** | **X** | **X** | **1** |
| 1 | **0** | **X** | **X** | **0** | **X** | **0** |
| 1 | **0** | **X** | **X** | **1** | **X** | **1** |
| 1 | **1** | **X** | **X** | **X** | **0** | **0** |
| 1 | **1** | **X** | **X** | **X** | **1** | **1** |