## The AND Gate

The AND gate is denoted by a dot (.). In an AND gate, there will be more than one input and only one output. Here, if all inputs are ON, the output will also be ON. And, if either of the inputs is OFF, then the output will also be OFF. The AND gate's symbol is '&'. Let's see the working in an example.

## A.B = C (Here, A and B are the inputs, and C is the output)

As we know that in the binary number system, 1 means ON and 0 means OFF. So, if we take the inputs to be 1, the output will also give us 1.

$$A \cdot B = C$$

$$1.1 = 1 (A = 1, B = 1).$$

If any of the input is taken as 0, then output will also be 0

$$A \cdot B = C$$

$$1.0 = 0 (A = 1, B = 0)$$



