

Ques 1:- NAND GATE :- The NOT-AND gate which is equal to an AND gate. The NAND gate gives high output if any of these inputs are low. The NAND gate is represented by a AND gate with a small circle on the output. They are connected in cascade form. It is also called Negated and gate. The NAND gate provides the false or low output only when their outputs are high or true. The NAND gate is essential because different types of boolean function are implemented by using it.

The NAND gate has the property of functional completeness. The function completeness.

It performs the function OR, NOR and AND gate.

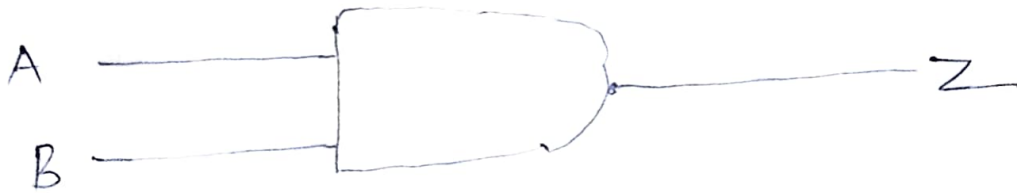
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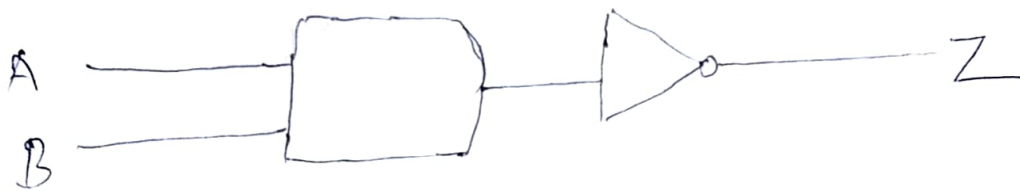
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Symbol :-



The logic circuit of the NAND gate is



from the logic circuit, the output can be expressed as:

$$Z = \overline{A \cdot B} \quad \text{--- Algebra Boolean}$$

Truth Table

A	B	Z
0	0	1
0	1	1
1	0	1
1	1	0