

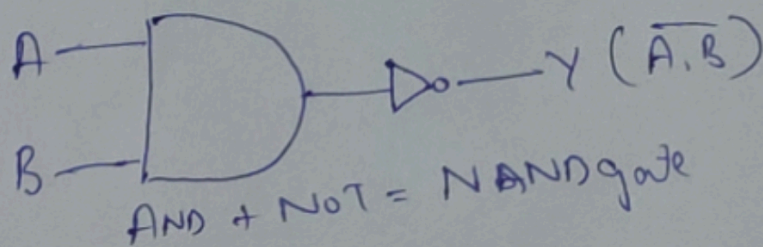
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Ans) NAND Gate: NAND Gate is a logical gate that produces a low output (0) only if all its inputs are true, and high output (1) otherwise. Hence a NAND Gate is inverse of an AND gate, and its circuit is produced by connecting an AND gate to a NOT gate.

NAND gate performs the logical NAND operation. NAND gates are known as Universal gates, which means they are a type of logical gate which can implement any boolean function without the need to use any other gate type.



Input		Output
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

Truth table

As shown in the circuit NAND gate process the inputs A and B in such a way that first AND gate manipulates the input variable A and B to generate  $A.B$  and then Not gate acts on  $A.B$  to generate Complement of  $A.B$ .

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