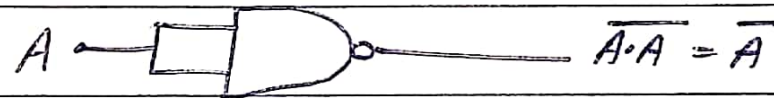Classwork

Q. How can you use NAND gate as an inverter?

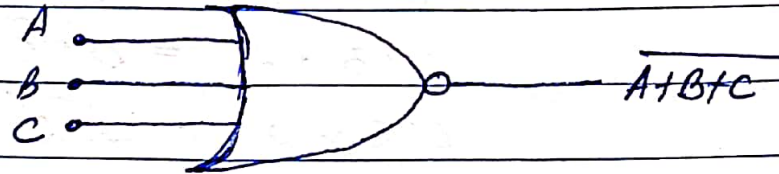Ans:— NAND gates are universal gates and so, they can be used an inverter (NOT gate), as follows —

$$A \longrightarrow \overline{A \cdot A} = \overline{A}$$

In the above circuit, we have A as I/P and $\overline{A}$ as O/P, so, the NAND gate works as an inverter.

2) Design a 3 input NOR gate.

Ans: A 3 input NOR gate is as follows—

A
B $\overline{A+B+C}$
C

The truth table for the 3 input NOR gate is →

INPUT			OUTPUT
A	B	C	$\overline{A+B+C}$
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

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