

UNI Roll no → 2101210

St. ID → 21711133

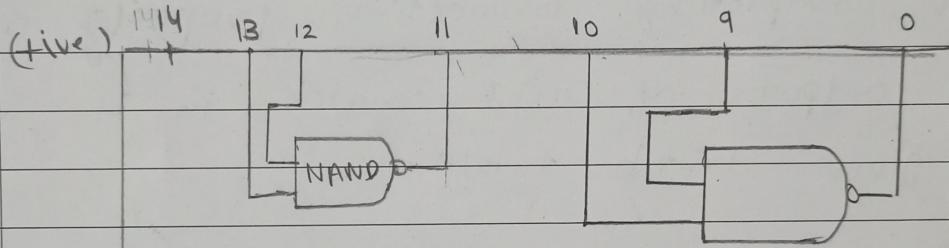
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Shubham bhatt

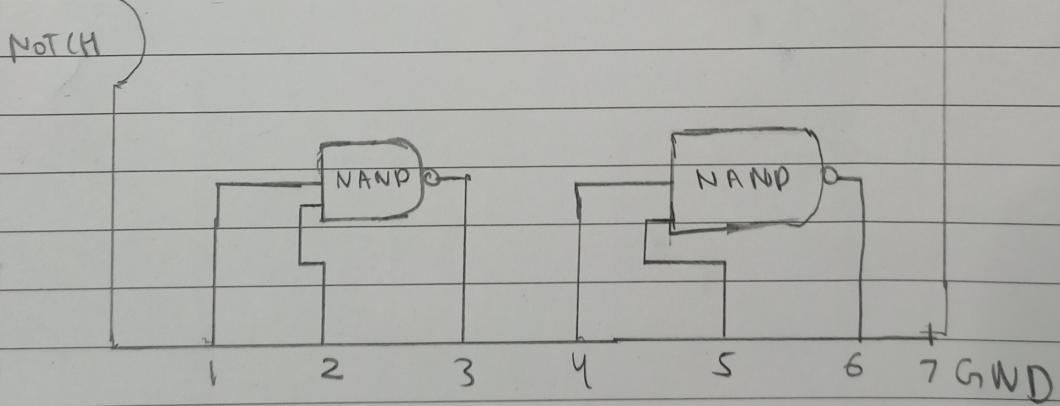
MCA1B

Q1) Working of NAND gate

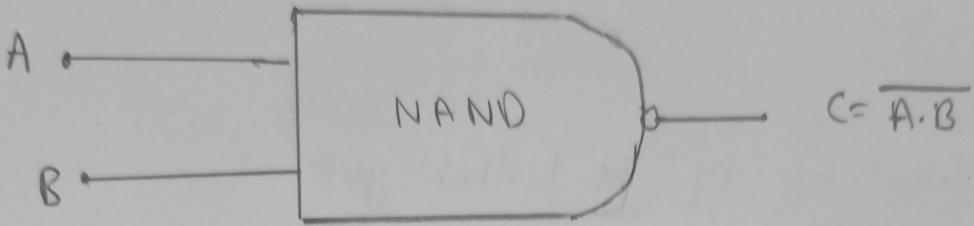
Solution) The logic NAND gate is generally called as a "UNIVERSAL GATE" because it is one of the most used logic gate types all gates can be implemented by NAND gate. Boolean expression $Q = \overline{A \cdot B}$. The NAND gate has an output low (0) only when all inputs are high (1). It is inverted of AND gate.



IC No. - 7400



IC Diagram



- Connect the V_{CC} and ground to the pins specified by the data sheet.
- Do all the connection as per IC Diagram.
- switch on the power supply,
- After completing connection properly observe the outputs of and match in it with the given truth-table.

Inputs		Output
A	B	$C = \overline{A \cdot B}$
0	0	1
1	0	1
0	1	1
1	1	0