2-input NAND gate gives output 0 when both inputs are 1, else it gives output 1.

2-input NOR gate gives output 1 when both inputs are 0, else it gives output 0.

3-input NAND gate gives output 0 when all three inputs are 1, else it gives output 1.

3-input NOR gate gives output 1 when all three inputs are 0, else it gives output 0.