

Q1) Convert hexadecimal to binary 24F.

Given hexadecimal no = 24F

→ First converting hexadecimal to decimal

$$\begin{aligned}(24F)_{16} &= (2 \times 16^2) + (4 \times 16^1) + (15 \times 16^0) \\ &= 512 + 64 + 15 \\ &= (591)_{10}\end{aligned}$$

→ Now converting $(591)_{10}$ to binary

$$2 \overline{) 591}$$

$$2 \overline{) 295} - 1$$

$$2 \overline{) 147} - 1$$

$$2 \overline{) 73} - 1$$

$$2 \overline{) 36} - 1$$

$$2 \overline{) 18} - 0$$

$$2 \overline{) 9} - 0$$

$$2 \overline{) 4} - 1$$

$$2 \overline{) 2} - 0$$

$$1 - 0$$

∴ The binary no. is $(1001001111)_2$

2) Convert any one octal to binary.

Let the octal number be $(540)_8$

5 ~~400~~ can be written as 101 in binary

4 can be written as 100 in binary

0 can be written as 000 in binary

Hence $(540)_8 = (101100000)_2$

$= (101100000)_2$

Q3) Create Inputs and outputs Domino's Pizza store and web site.

For Domino's Pizza Store ^{and web site}, the inputs would be

→ User have to provide their details like name, address, .

→ User then selects their preference and orders.

Domino's keep a track of customer's preference and shows items accordingly.

Outputs →

→ The bill would be generated

→ Cost of ingredients, delivery process all needs to be considered by Domino's.

5) Create logic numbers to compare 2 sets of no.

The truth table is

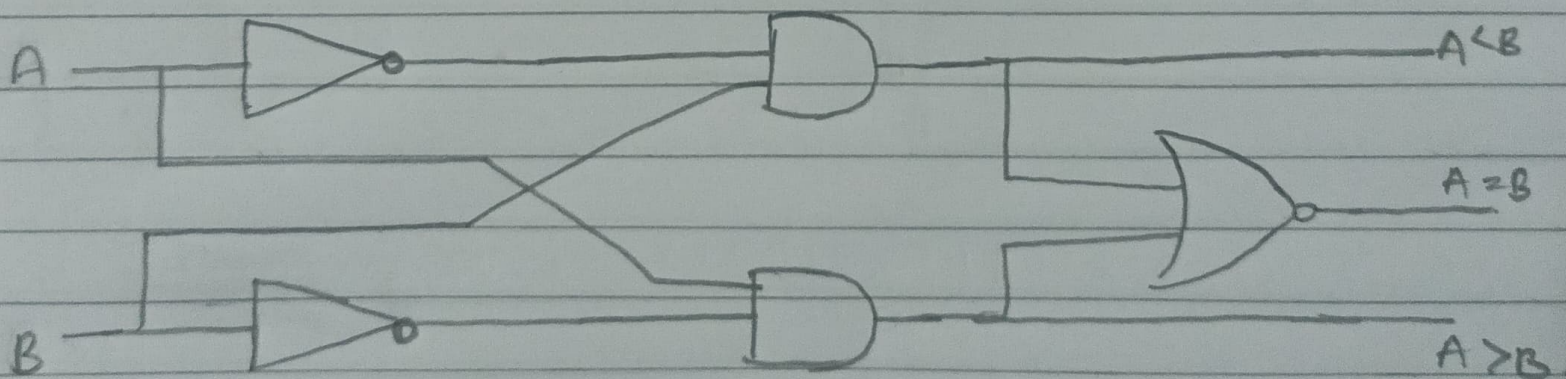
A	B	$A < B$	$A = B$	$A > B$
0	0	0	1	0
0	1	1	0	0
1	0	0	0	1
1	1	0	1	0

From the truth table each output can be expressed as

$$A > B = A\bar{B}$$

$$A < B = \bar{A}B$$

$$A = B = \bar{A}\bar{B} + AB$$



Logic Gate Diagram