* STICK DIAGRAM *

i) Equation should be represented in terms of bar.
{ eg → $y = \overline{A+B}$ }

ii) using equation draw static CMOS logic diagram.

iii) from static CMOS logic diagram, user can easily draw stick diagram.

Stick diagram Color Code →

i) P- diffusion → yellow / Brown
ii) N- diffusion → Green
iii) poly silicon → Red
iv) Contacts & TAPS → Black

Metal1 → Blue
Metal2 → purple

Stick diagram → Its a Capturing topography and layer information using simple diagram (using Color Code).

⇒ A stick diagram is a Cartoon of a layout.

Limitations :-

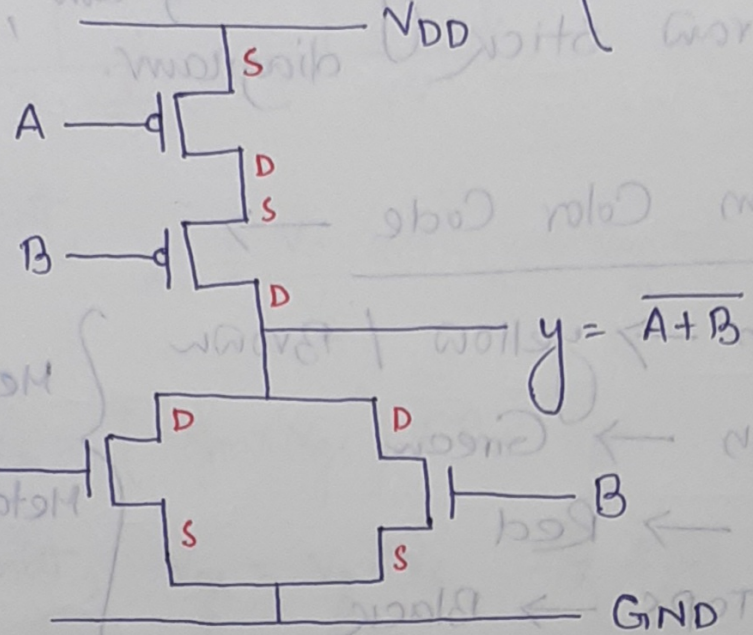
i) Exact placement of Components.
ii) Transistor sizes.
iii) Wire length, width, tub boundaries.
iv) Any other low level details, such as parasitics.

Example 1 → Draw the stick diagram of $y = \overline{A+B}$

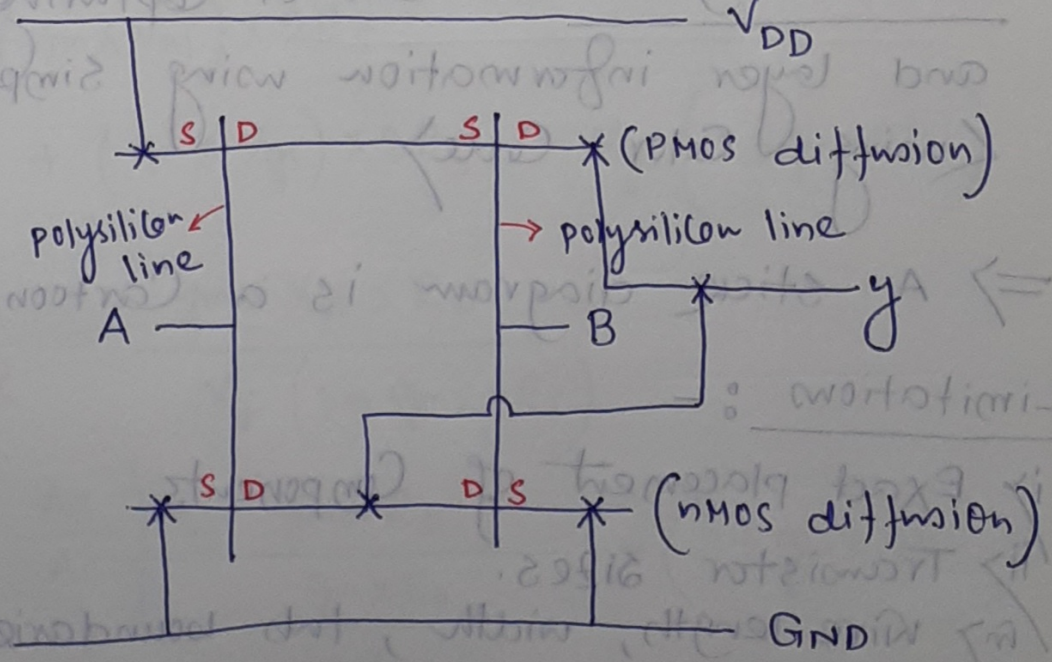
When the terms are added, nmos should be connected in parallel.

nmos → [+ → parallel ; . → series]

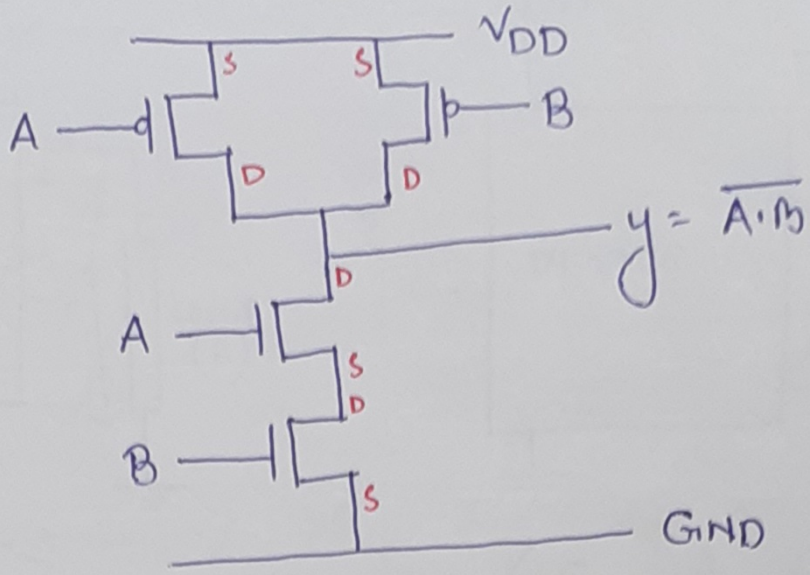
pmos → [+ → series ; . → parallel]



Stick diagram



Example 2 > Draw the stick diagram of $y = \overline{A \cdot B}$



Stick diagram