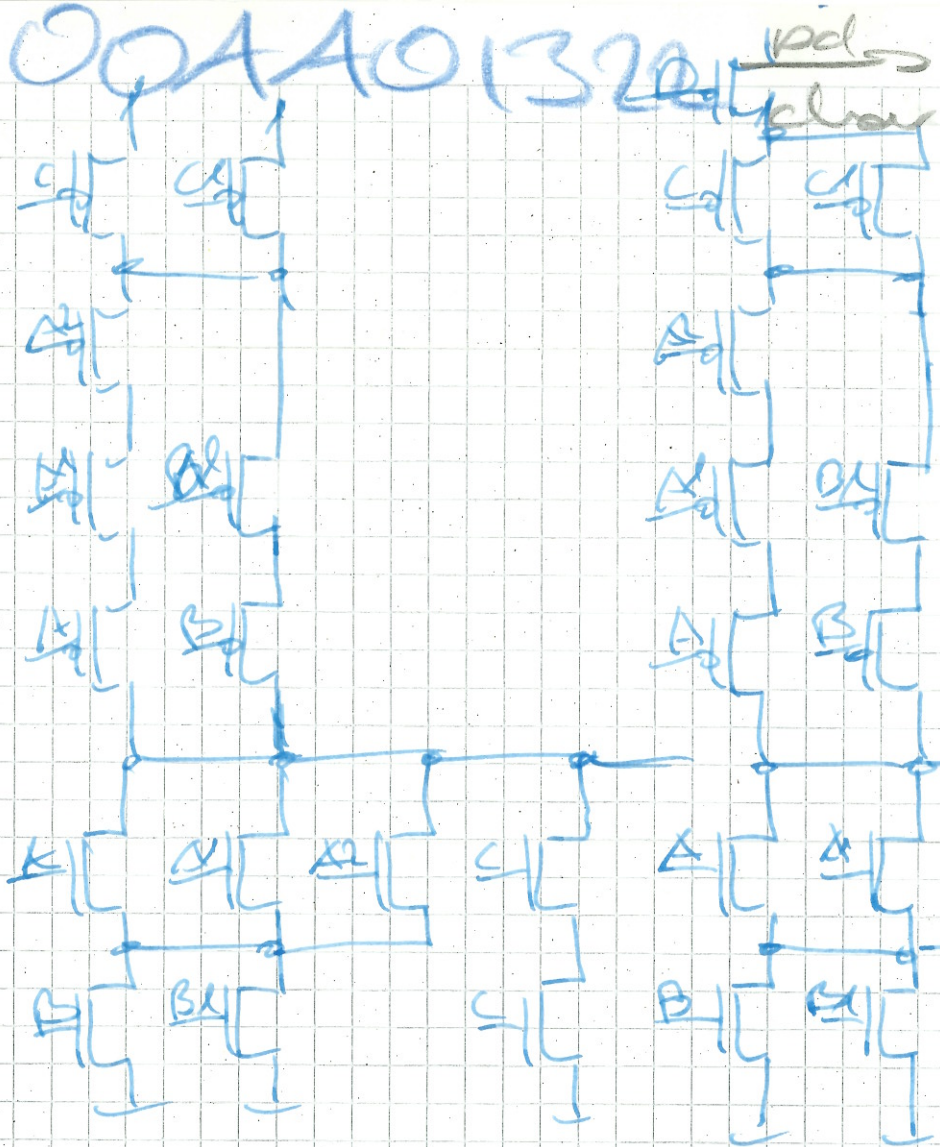


input

output



001101321

$$A = \begin{bmatrix} 1 & 2 & 1 \\ 1 & & 0 \\ 2 & & \\ 0 & & \end{bmatrix}$$

$$B = \begin{bmatrix} 1 & & \\ & & \\ & & \\ & & \end{bmatrix}$$

$$C = \begin{bmatrix} 2 & & \\ & & \\ & & \\ & & \end{bmatrix}$$

$$P = \begin{bmatrix} & & \\ & & \\ & & \\ & & \end{bmatrix}$$

2Tn