FUN WITH PHASE

(True / False) Phase is associated with a two-bit pair.

(True /False) Multi-bit operations can be solved neatly with visual representation.

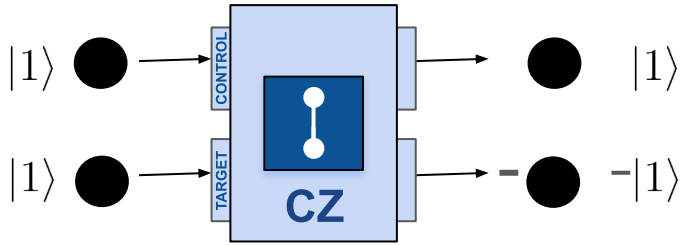
(True / False) When the Z gate is applied, the probability of measuring $|0\rangle$ or $|1\rangle$ does not change.

Which matrix corresponds with the Z gate as defined?

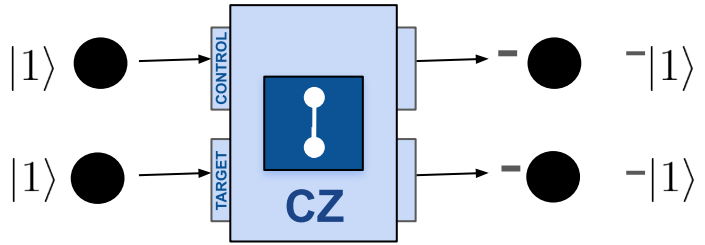
$a.\begin{bmatrix} -1 & 0 \\ 0 & -1 \end{bmatrix}$ $b.\begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}$ $c.\begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$ $d.\begin{bmatrix} -1 & 0 \\ 0 & 1 \end{bmatrix}$

For this C-Z (Controlled-Z) gate, which of the following are possible correct start and end states? (choose all that apply)

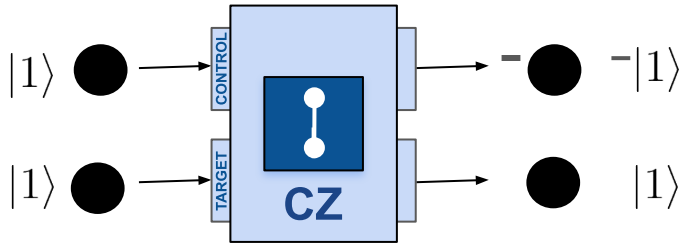
A.



C.



B.



D.