Pregunta 1:

$$|+\rangle = \frac{1}{\sqrt{2}}|0\rangle + \frac{1}{\sqrt{2}}|1\rangle$$

$$|+\rangle = \frac{1}{\sqrt{2}}|0\rangle + \frac{1}{\sqrt{2}}|1\rangle$$

$$|-\rangle = \frac{1}{\sqrt{2}}|0\rangle - \frac{1}{\sqrt{2}}|1\rangle$$

$$|\psi\rangle = \left(\frac{1}{\sqrt{2}}|0\rangle + \frac{1}{\sqrt{2}}|1\rangle\right)\left(\frac{1}{\sqrt{2}}|0\rangle + \frac{1}{\sqrt{2}}|1\rangle\right)\left(\frac{1}{\sqrt{2}}|0\rangle - \frac{1}{\sqrt{2}}|1\rangle\right)$$

$$|\psi\rangle = \left(\frac{1}{2}|0\rangle|0\rangle + \frac{1}{2}|0\rangle|1\rangle + \frac{1}{2}|1\rangle|0\rangle + \frac{1}{2}|1\rangle|1\rangle\right)\left(\frac{1}{\sqrt{2}}|0\rangle - \frac{1}{\sqrt{2}}|1\rangle\right)$$

$$|\psi\rangle = \frac{1}{2\sqrt{2}}|0\rangle|0\rangle|0\rangle - \frac{1}{2\sqrt{2}}|0\rangle|0\rangle|1\rangle + \frac{1}{2\sqrt{2}}|0\rangle|1\rangle|0\rangle - \frac{1}{2\sqrt{2}}|0\rangle|1\rangle|1\rangle + \frac{1}{2\sqrt{2}}|1\rangle|0\rangle|0\rangle -$$

$$- \frac{1}{2\sqrt{2}}|1\rangle|0\rangle|1\rangle + \frac{1}{2\sqrt{2}}|1\rangle|1\rangle|0\rangle - \frac{1}{2\sqrt{2}}|1\rangle|1\rangle|1\rangle$$

$$|\psi\rangle = \frac{1}{2\sqrt{2}}|000\rangle - \frac{1}{2\sqrt{2}}|001\rangle + \frac{1}{2\sqrt{2}}|010\rangle - \frac{1}{2\sqrt{2}}|011\rangle + \frac{1}{2\sqrt{2}}|100\rangle - \frac{1}{2\sqrt{2}}|101\rangle + \frac{1}{2\sqrt{2}}|110\rangle - \frac{1}{2\sqrt{2}}|111\rangle$$

- qiskit

Pregunta 2:   2 qubits

Pregunta 3:   • qiskit