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Amplitude transformation in a qubit register

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In quantum computing a diagrammatic representation of a code is conventionally displayed as a vertical column of qubits that feed from left to right into a network of wires and gates. An alternative view is an array with qubits as a header row for all register eigenstates, with amplitude values as a column on the left. In this view, the action of gates on the register is seen as successive transformations of amplitude values, which allows for quantum parallelism to be seen acting on the register as a whole and for the ingenuity of various algorithms to be evident. Examples are the algorithms by Deutsch and for quantum teleportation.

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