

The following exercises can be completed using a quantum framework such as Qiskit, or by drawing the circuits out by hand.

**1. Grover's Algorithm for two qubits**

Implement Grover's algorithm on two qubits with an initial state of  $|+\rangle \otimes |+\rangle$ , to find the string 01.

**2. Grover's Algorithm for three qubits**

Implement Grover's algorithm on three qubits with an initial state of  $|+\rangle^{\otimes 3}$ , to find the string 100.