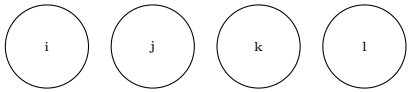
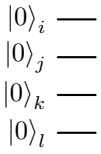
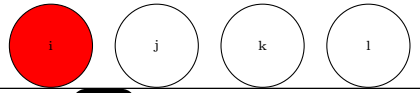
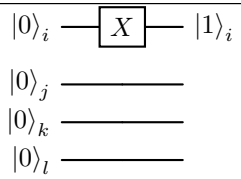
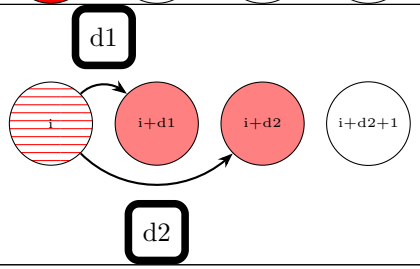
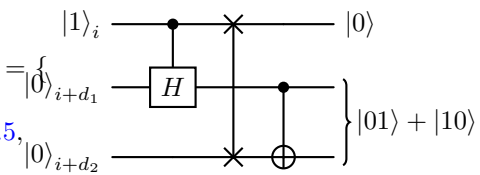
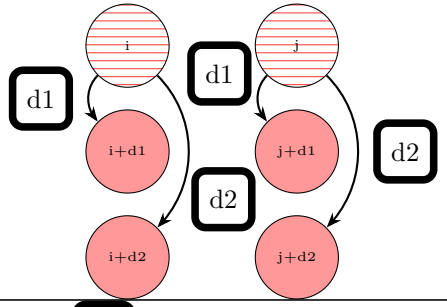
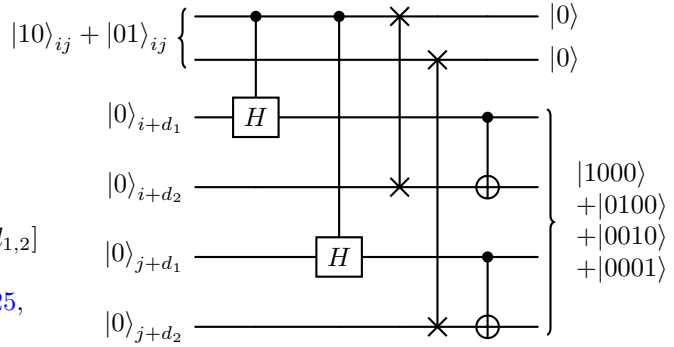
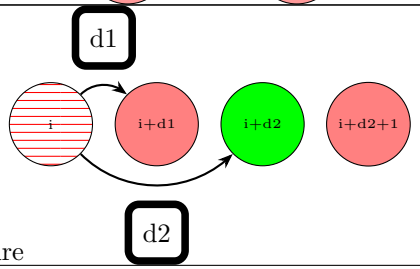
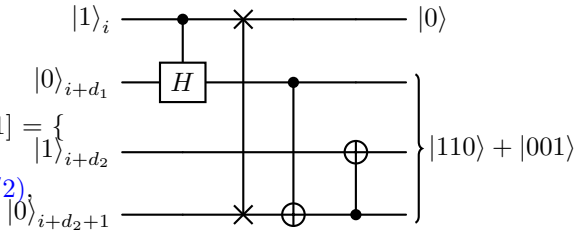
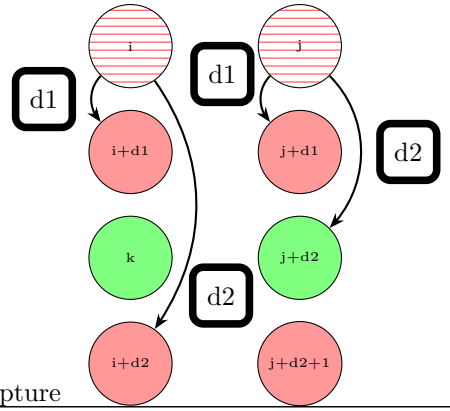
Move name	Move	Python list	Quantum array	Qiskit
Initialize		board=[None] * 32		q = QuantumRegister(10, 'q') circuit = QuantumCircuit(q)
New pawn		board[i] = { 'color' : red, 'probability' : 1, 'pawn' : 1 }		circuit.x[q[i]]
First move		board[i] = None board[i+d1, i+d2] = { 'color' : red, 'probability' : 0.5, 'pawn' : 1}		circuit.ch(q[i], q[i+d1]) circuit.swap(q[i], q[i+d2]) circuit.cx(q[i+d1], q[i+d2])
Second move		board[i, j] = None board[$i + d_{1,2}, j + d_{1,2}$] = {'color' : red, 'probability' : 0.25, 'pawn' : 1}		circuit.ch(q[i], q[i+d1]) circuit.ch(q[j], q[j+d1]) circuit.swap(q[i], q[i+d2]) circuit.swap(q[j], q[j+d2]) circuit.cx(q[i+d1], q[i+d2]) circuit.cx(q[j+d1], q[j+d2])
full-full capture		board[i] = None board[i+d1, i+d2+1] = { 'color' : red, 'probability' : (1/2), 'pawn' : 1}		circuit.ch(q[i], q[i+d1]) circuit.swap(q[i], q[i+d2]) circuit.cx(q[i+d1], q[i+d2]) circuit.cx(q[i+d2+1], q[i+d2])



1 half-half capture

board[i, j] = None
board[$i + d_{12}, j + d_1$,
$j + d_1 + 1$] = {
'color' : red,
'probability' : 1/4,
'pawn' : 1}