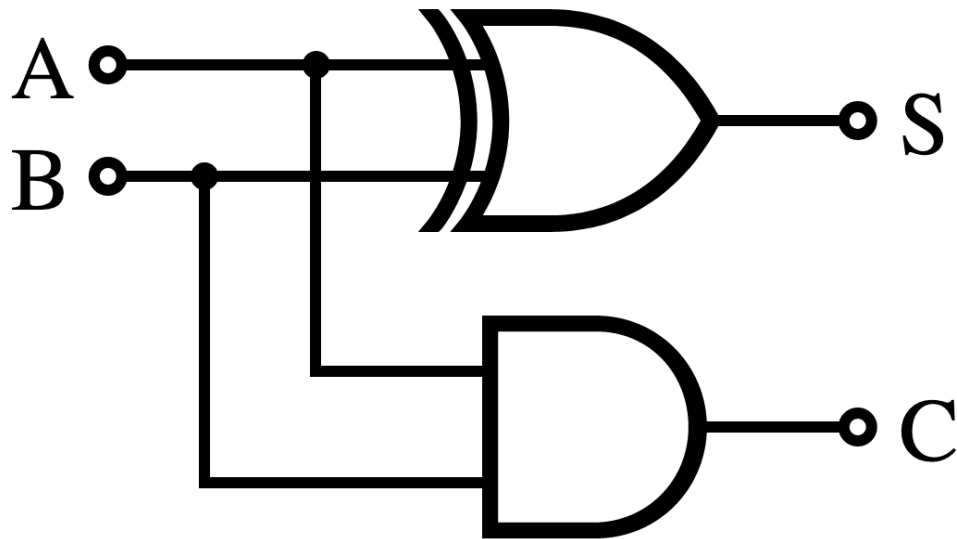
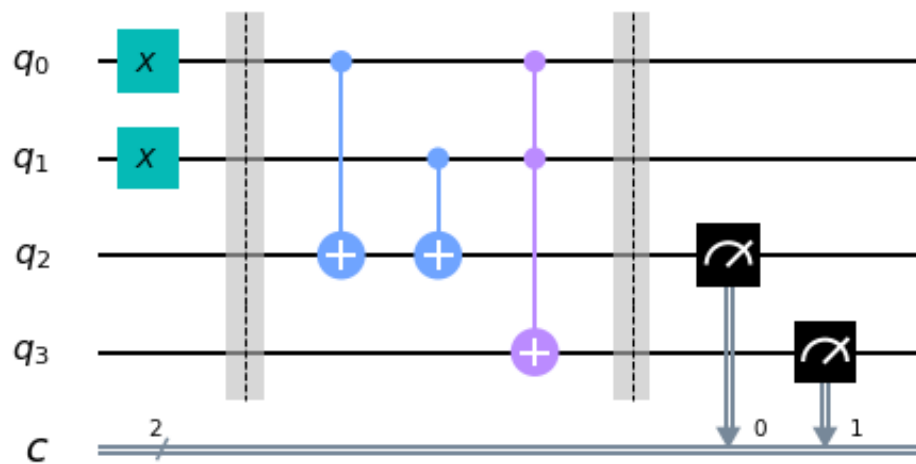

Circuits - Addition of two numbers

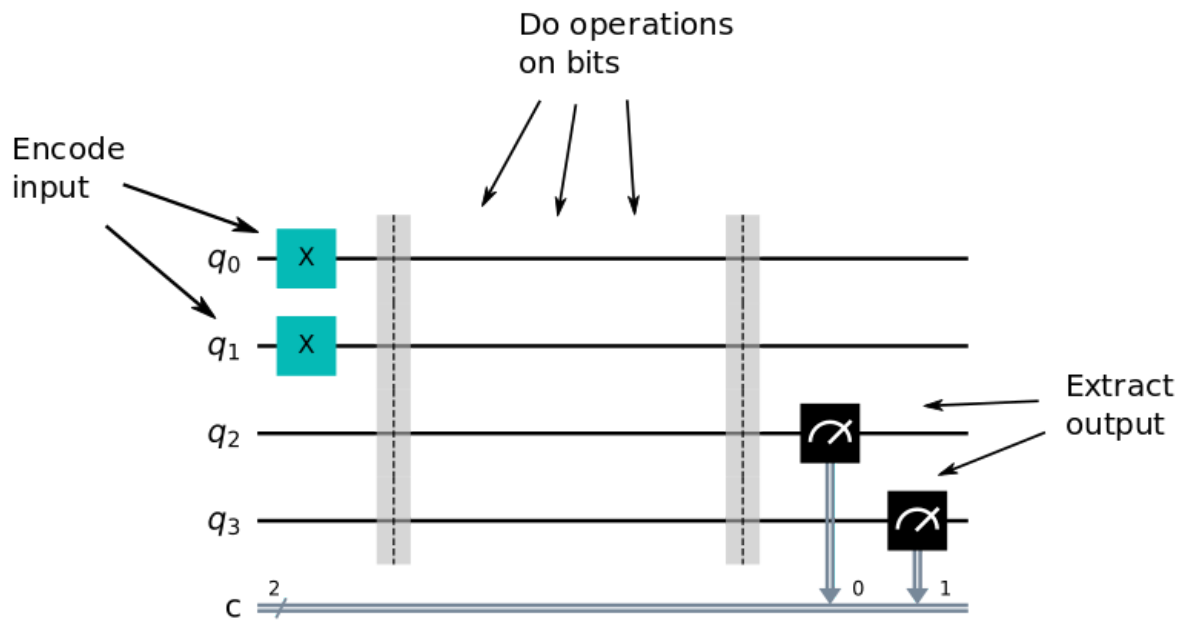


Classical Computer

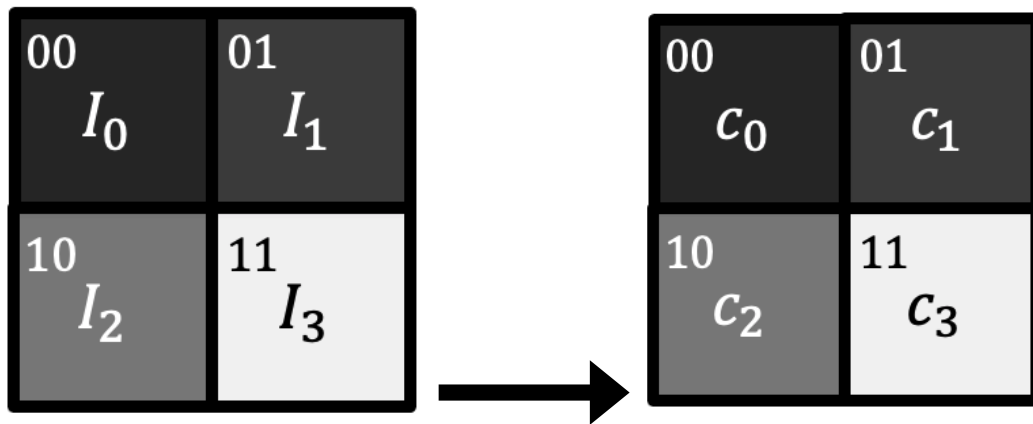


Quantum Computer

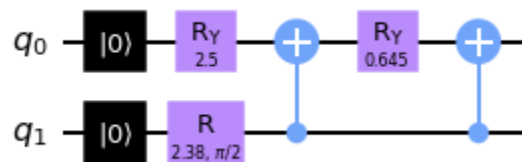
Half Adder Architecture on Quantum Circuit



Circuits - Image Processing



Classical Image to Quantum Image

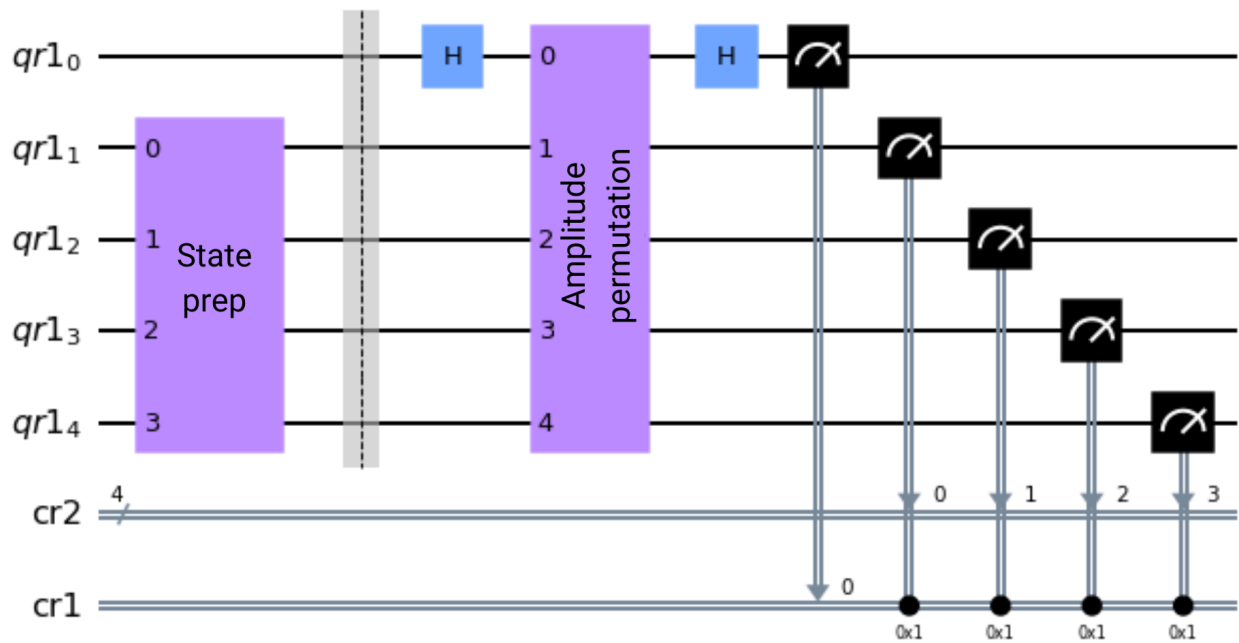


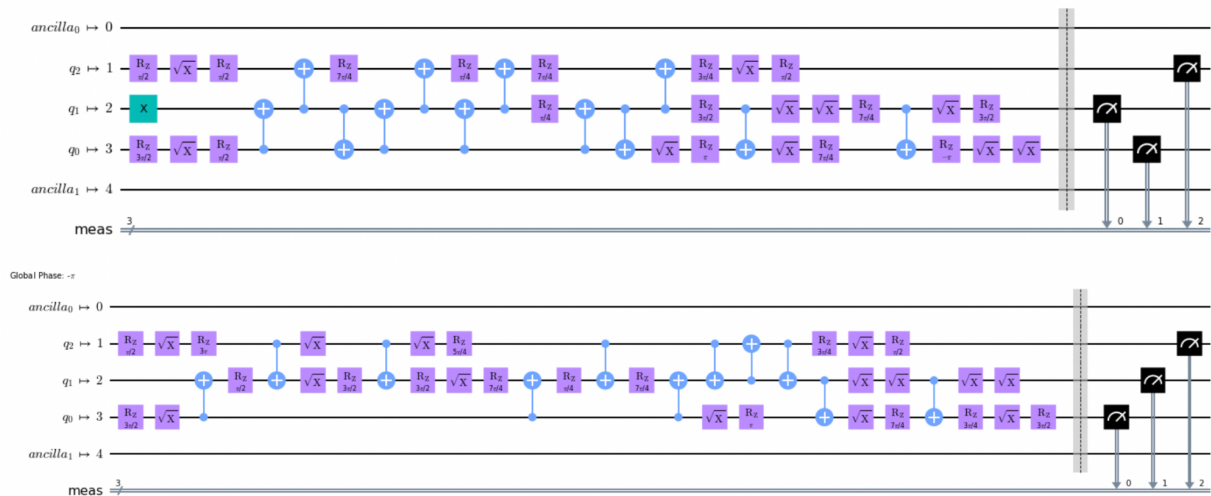
Sample circuit of 4 circle image

Sample classical image



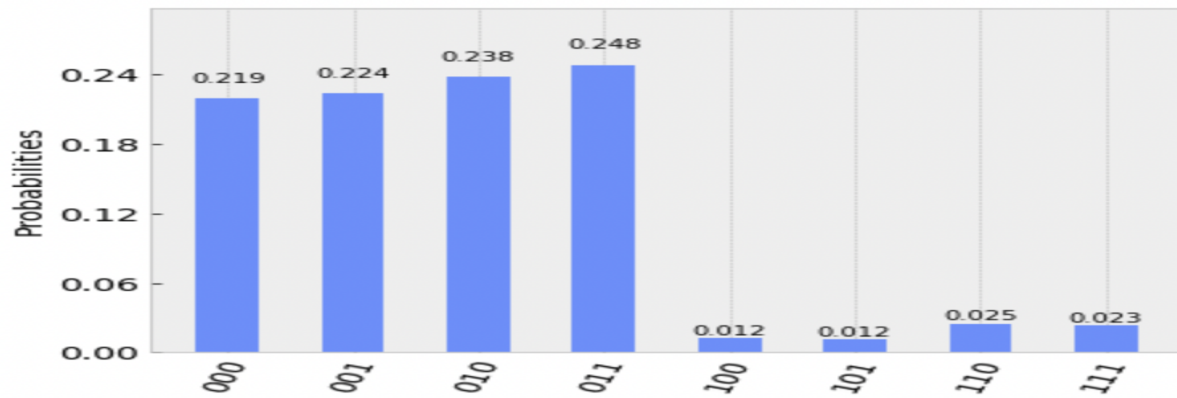
representation of above image in Quantum Circuits



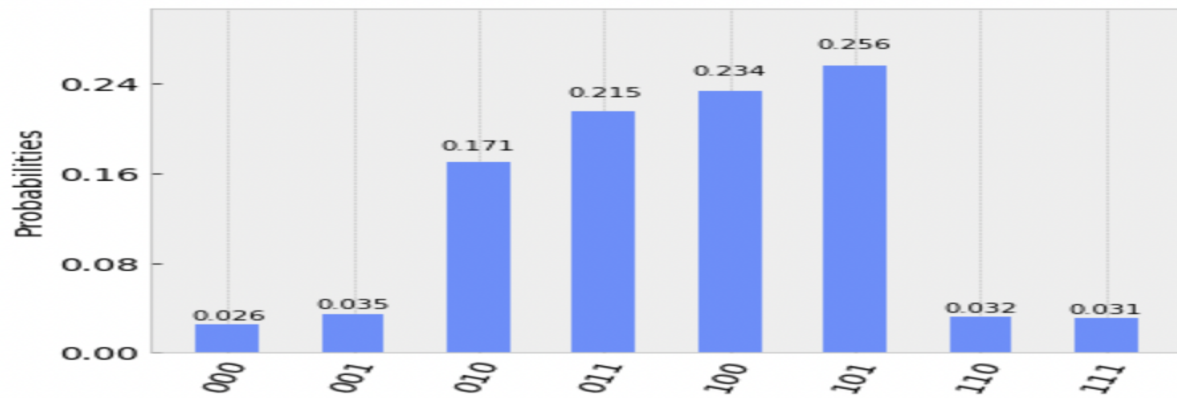


Running simulator on a IBM Quantum computer - ibmq_santiago (real hardware)

Counts for Horizontal scan:



Counts for Vertical scan:



Histogram