

Experiment Validation

- **Description.** Now, we are ready to test out GHZ state on a real quantum computer. Within IBM Composer, you should be able to find a button which says **Set up and run**. After selecting this option, you can choose a quantum computer to run the circuit on. We suggest choosing the quantum computer with the fewest pending jobs. After running the circuit, you will be given the option to view your new job. If you click this option, you can then watch and wait until the job completes. Sometimes the progress tracker will fail to update, so we suggest refreshing the page after several minutes. By default, you will run the circuit 1024 times. Once the job finishes, you can view a graph showing the total number of occurrences for each measurement outcome. Are these numbers what you expected?
- **Note.** This activity assumes that you have already created an instance on the IBM Quantum Platform. If you have not, then please refer to these instructions first.
- **Submission.** A screenshot of each histogram, and a few sentences comparing the experimental results to the predicted outcomes.