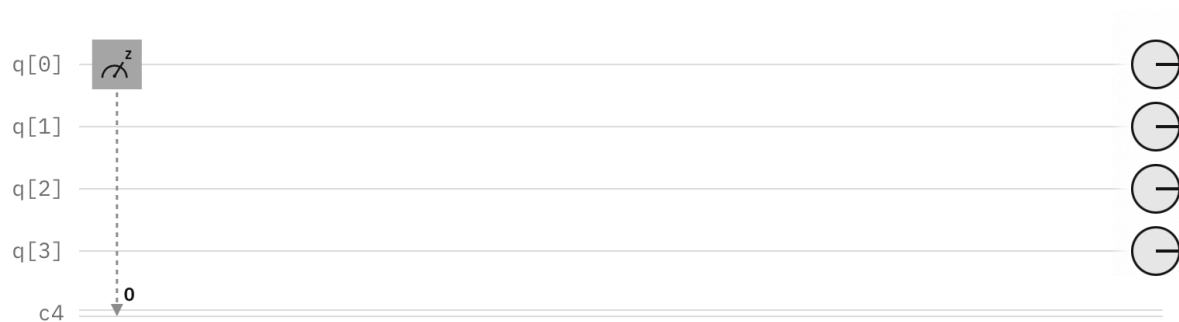# Report 1

Kacper Dobek 148247

Remark: probabilities for tasks 1 and 2 come from calculations run on the quantum computer. Probabilities for tasks 3, 4, and 5 come from the IBM Composer.
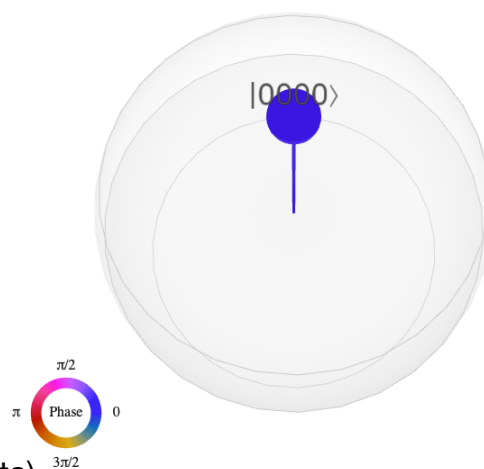
Task 1

Z-type projection measurement – reading of the qubit state.
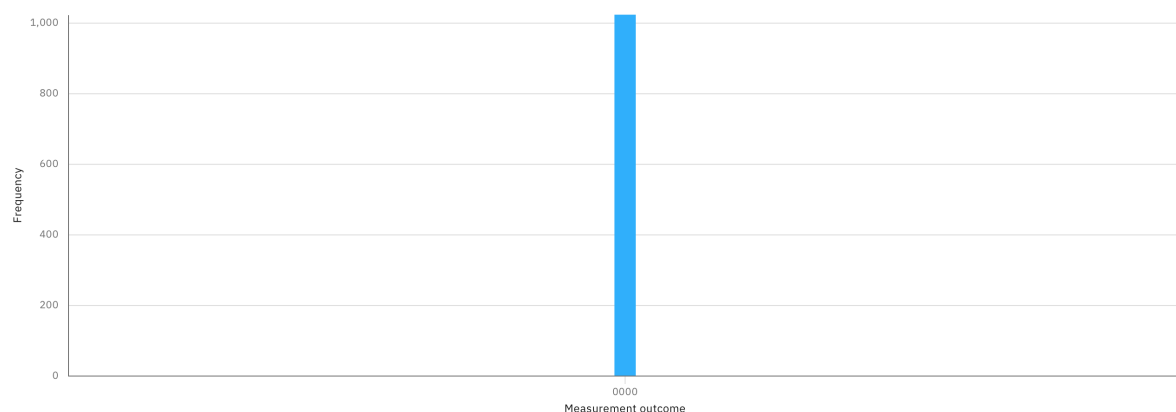
Graphical composer

Sphere
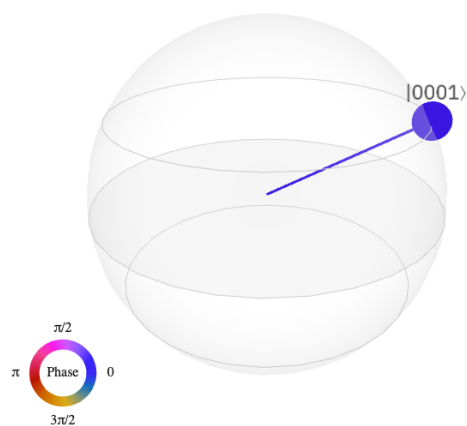

Probabilities (1024 shots)

Histogram for register "c"

Task 2

Quantum gate X = quantum negation.
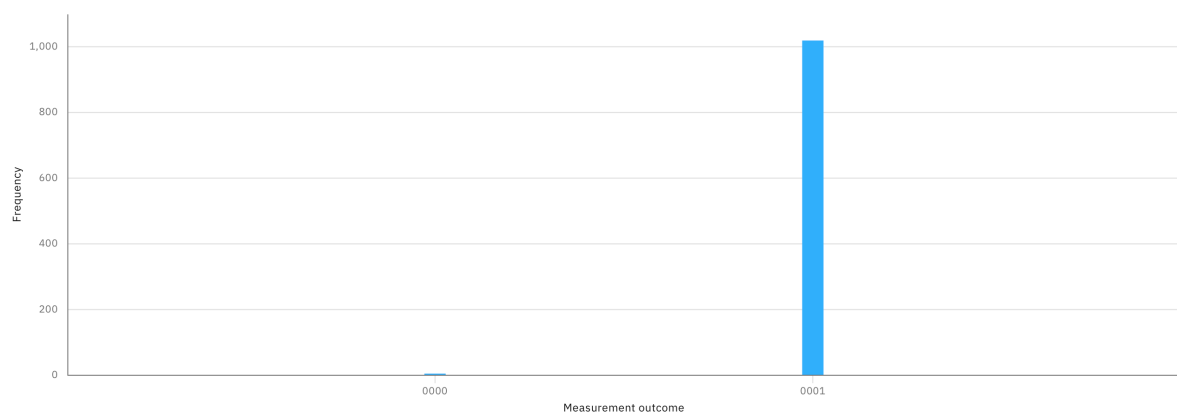
Graphical composer

Sphere

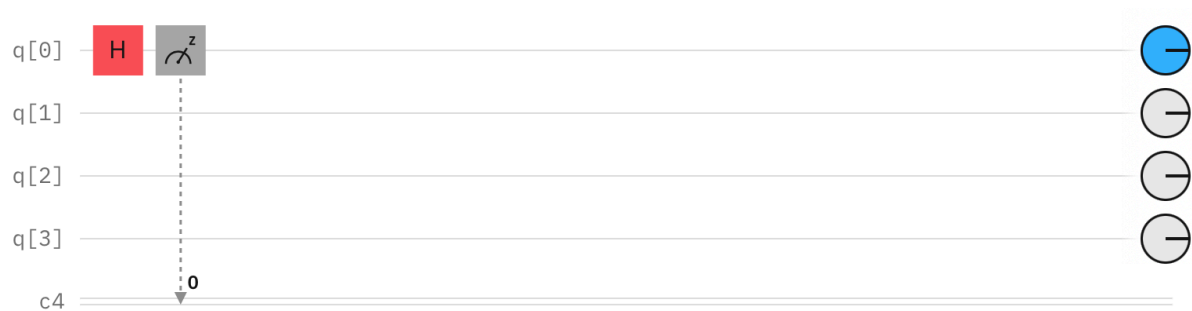## Probabilities (1024 shots)

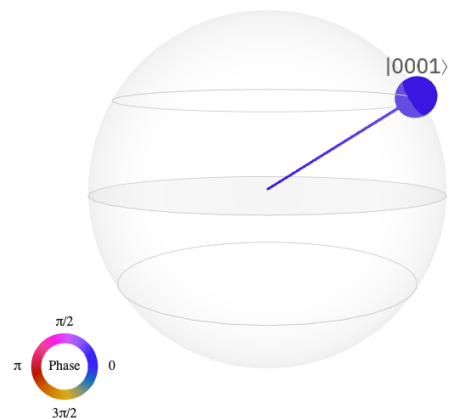Histogram for register "c"

Task 3

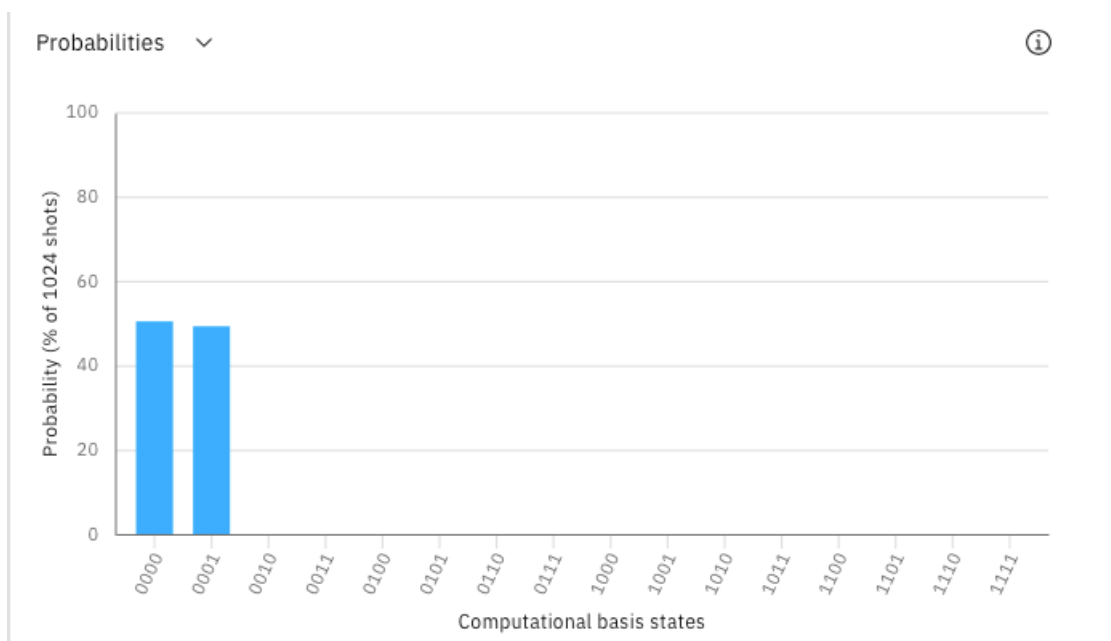Operation and reading of the result of Hadamard quantum gate (H gate).

Graphical composer

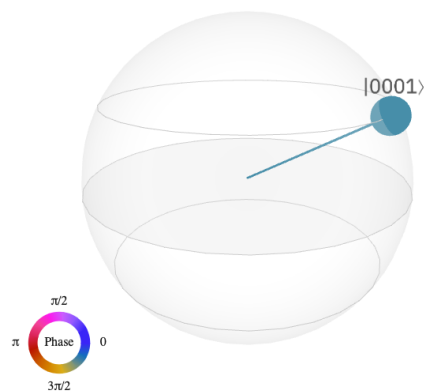## Sphere

Probabilities (1024 shots)

Task 4 X

Measurement in the X base.

Graphical composer

Sphere

Probabilities (1024 shots)

Task 4 Y
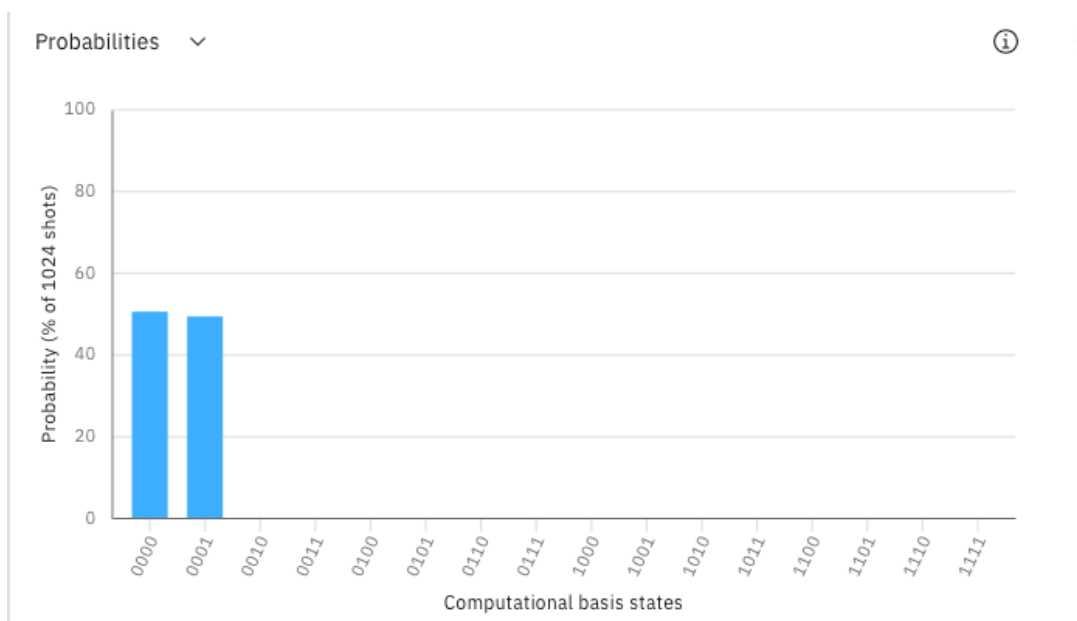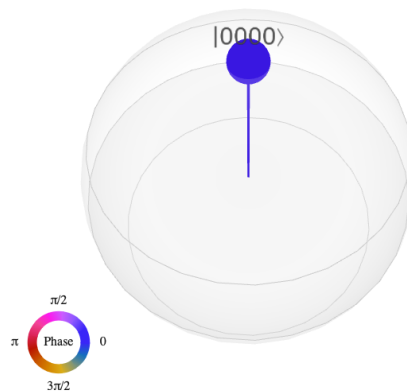
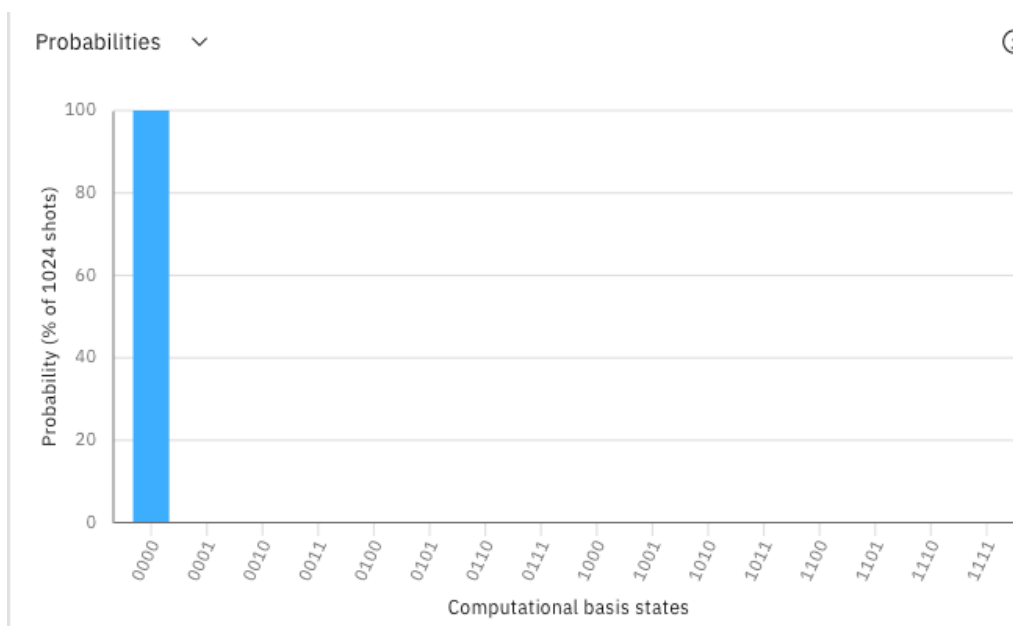Measurement in the Y base.

Graphical composer

Sphere
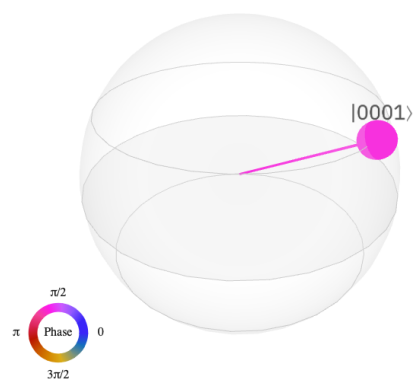

Probabilities (1024 shots)

Task 4 Z

Measurement in the Z base.

Graphical composer

Sphere

Probabilities (1024 shots)