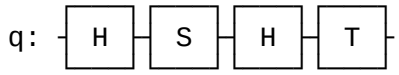
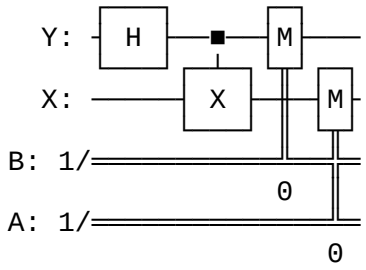
In [1]:
```
from qiskit import QuantumCircuit, QuantumRegister, ClassicalReg
from qiskit.primitives import Sampler
from qiskit.visualization import plot_histogram
```

In [2]:
```
circuit = QuantumCircuit(1)

circuit.h(0)
circuit.s(0)
circuit.h(0)
circuit.t(0)

display(circuit.draw())
```

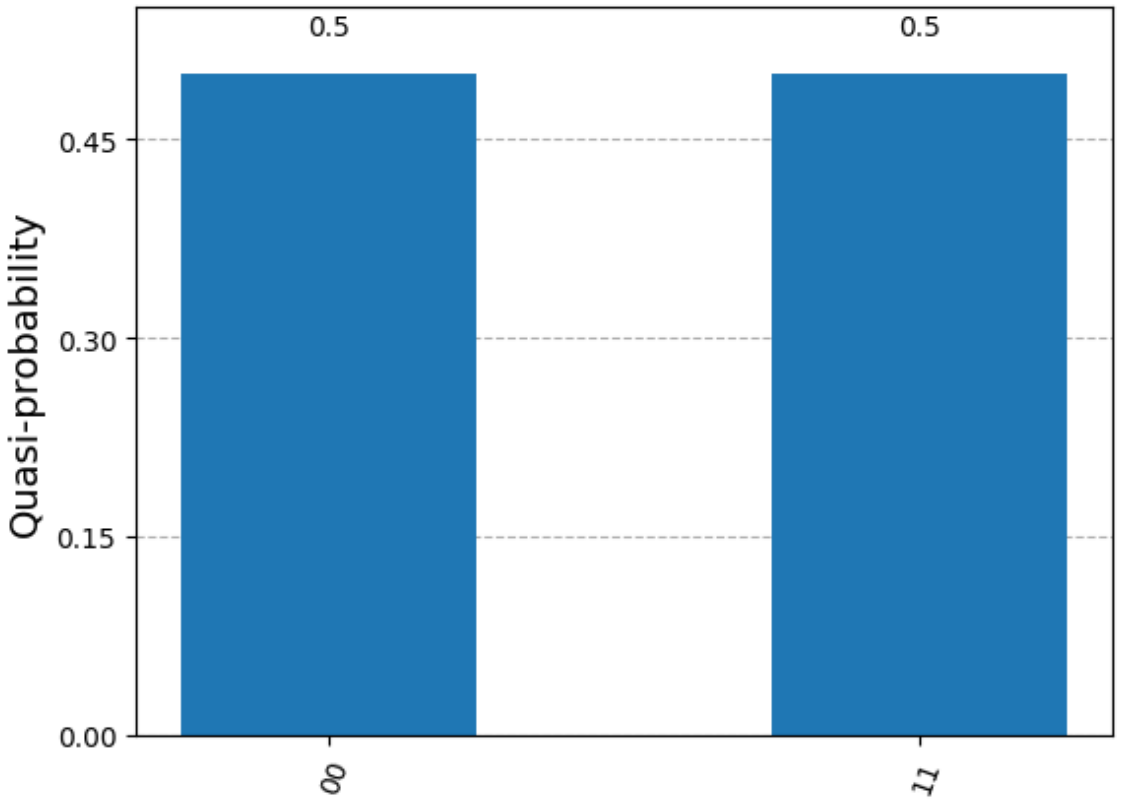


In [3]:
```
X = QuantumRegister(1, "X")
circuit = QuantumCircuit(X)

circuit.h(X)
circuit.s(X)
circuit.h(X)
circuit.t(X)

display(circuit.draw())
```

In [4]:
```
X = QuantumRegister(1, "X")
Y = QuantumRegister(1, "Y")
A = ClassicalRegister(1, "A")
B = ClassicalRegister(1, "B")

circuit = QuantumCircuit(Y, X, B, A)
circuit.h(Y)
circuit.cx(Y, X)
circuit.measure(Y, B)
circuit.measure(X, A)

display(circuit.draw())
```



In [5]:
```
1 results = Sampler().run(circuit).result()
2 statistics = results.quasi_dists[0].binary_probabilities()
3 display(plot_histogram(statistics))
```



In [ ]:
```
1
```