

In [4]: *#Grover's Algorithm.*

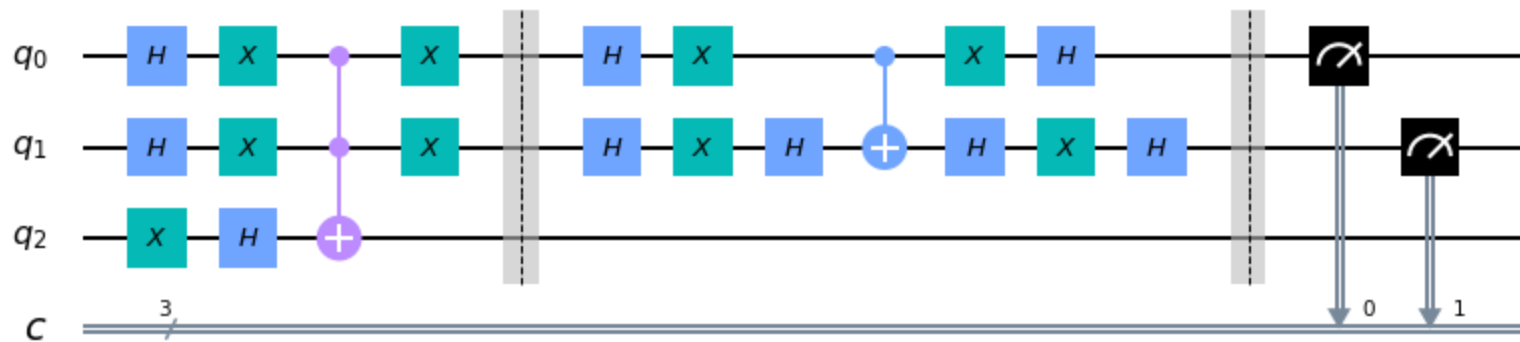
```
from qiskit import *  
import matplotlib.pyplot as plt  
import numpy as np  
Ssim=Aer.backends(name='statevector_simulator')[0]  
Msim=Aer.backends(name='qasm_simulator')[0]  
from qiskit.visualization import plot_histogram
```

```

In [5]: qr=QuantumRegister(3)
        cr=ClassicalRegister(3)
        GC=QuantumCircuit(3,3)
        GC.h(0)
        GC.h(1)
        GC.x(2)
        GC.h(2)
        ### 000 Oracle ###
        GC.x(0)
        GC.x(1)
        GC.ccx(0,1,2)
        GC.x(0)
        GC.x(1)
        GC.barrier()
        #### Amplification ####
        GC.h(0)
        GC.h(1)
        GC.x(0)
        GC.x(1)
        GC.h(1)
        GC.cx(0,1)
        GC.h(1)
        GC.x(0)
        GC.x(1)
        GC.h(0)
        GC.h(1)
        GC.barrier()
        GC.measure(0,0)
        GC.measure(1,1)
        GC.draw(output='mpl')

```

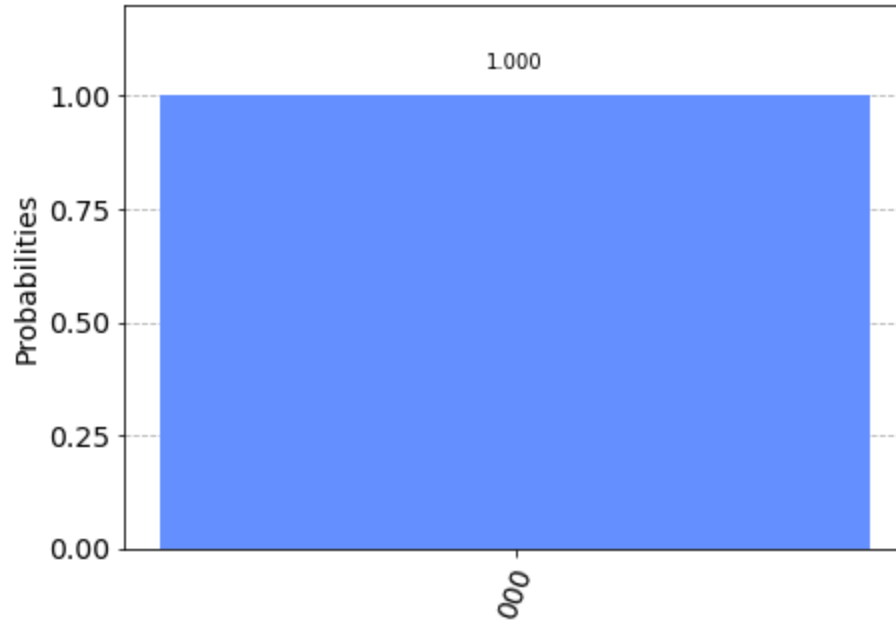
Out[5]:



```
In [6]: simulator = Aer.get_backend('qasm_simulator')
result = execute(GC, backend=simulator, shots=1024).result()
counts=result.get_counts()
print(counts)
plot_histogram(counts)
```

{'000': 1024}

Out[6]:



In [ ]: