DAY 5
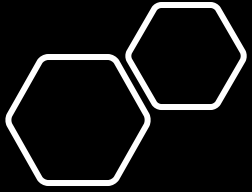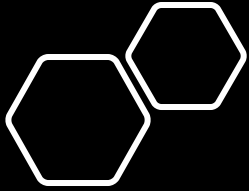
QUANTUM COMPUTATION COMMUNITY

IISER-K

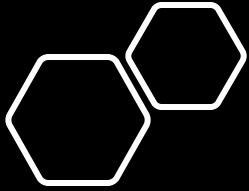# Topics

- Qiskit
- Control Gates
- Circuit Design

Qiskit

Resources

- Qiskit Documentation
  - https://qiskit.org/documentation/

- Qiskit Textbook
  - https://qiskit.org/textbook/preface.html

- Qiskit YouTube Channel
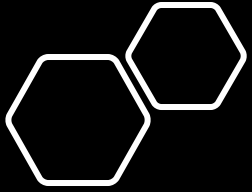 - https://www.youtube.com/channel/UClBNq7mCMf5xm8baE_VMl3A

Control Gates

A control can be paired with almost all the single qubit gates present in QC.

Just like cx and ccx, we can have

- cy , ccy

- cz , ccz

- ch , cch

and many more.

Quantum Circuit

- Importing required Packages.

- Number of Qubits and classical bits.

- Make a Quantum Circuit

- Implementing required gates for the circuit.

- Putting measurement gates at the end of the circuit.

- Choosing Backend and no. of shots

- Executing the circuit

- Retrieving the Counts