GNSS

Imports: The necessary libraries for simulation (NumPy, Matplotlib, SciPy, and Qiskit) are imported.

GNSS Signal Parameters: The parameters of the GNSS signal, such as the sampling frequency and time, are defined.

GNSS Signal Generation: A function `generate_gnss_signal` is created that utilizes a chirp signal.

Adding Noise: The function `add_noise` simulates noise in the signal.

Peak Detection: The function `detect_peaks` finds the peaks in the received signal.

Quantum Circuit: The function `create_quantum_circuit` constructs a quantum circuit that applies an X gate based on the maximum of the signal.

Main Function: In `main`, all steps are executed: signal generation, noise addition, peak detection, and quantum circuit simulation.

Execution: If the file is executed directly, `main` is called.