Instructions: The assignment is self-explanatory. Try yourself, as these concepts will be used for later assignments.

Section I

Write Qiskit code to play the Quantum Coin Game. Compare the efficiency of the quantum coin game over classical coin toss game.

Refer: <https://qiskit.org/textbook/ch-demos/coin-game.html>

Section 2

Write Qiskit code for Estimating Pi Using Quantum Phase Estimation Algorithm.

Refer: <https://qiskit.org/textbook/ch-demos/piday-code.html>

Section 3

Implement the Deutsch-Jozsa Algorithm.

Refer: <https://qiskit.org/textbook/ch-algorithms/deutsch-jozsa.html>