

Problem Statement

1. Use Object Oriented Python Programming to write a class `Converter` that takes input a Qiskit's `QuantumCircuit` Class object and returns a PennyLane `QNode` Class object. The input Qiskit circuit would have only gate operations (parameterized and unparameterized) and no measurement or state preparation operation. The PennyLane `QNode` object will have a PauliZ expectation value calculation for the zeroth qubit. Assume the device for `QNode` object to be ``default.qubit``. **You cannot use the available plugins.**

Qiskit version -> '0.45.1'

PennyLane version -> '0.33.1'

- **Sample Input**

```
qc = qiskit.QuantumCircuit(2)
```

```
qc.h(0)
```

```
qc.cx(0,1)
```

- **Expected Script**

```
converter = Converter(qc=qc)
```

```
qnode = converter.convert()
```

- **Expected Output**

```
qml.drawer.use_style("default")
```

```
qml.draw_mpl(qnode)()
```

