# 1 EXERCISE 1:

## 1.1 MEALY STATE MACHINE

In the Mealy state machine, the output value not only depends on the state we are but also depends on the input values. As a function it could be represented as $Z = f(X_1.....X_n, Q_1....Q_n)$ where Z: output, X: State and Q:Input event as could be visualize:
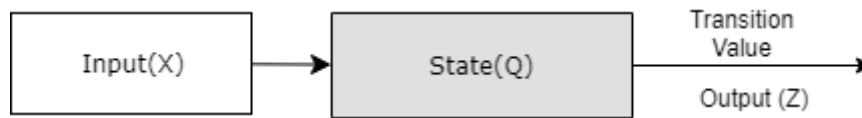


Figure 1.1: Mealy sate machine simple representation