## **State Machine**

## Design Description:

- This design is a simple state machine.
- It should hold current state and travel between states depending on the input.
- For each state, it should give different results as output.

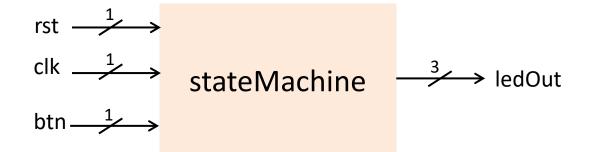
## Design I/O:

**rst:** 1 bit input for reset

**clk:** 1 bit input for clock

**btn:** 1 bit input coming from a push-button

**ledOut:** 3 bit output



## Design Behavior:

- Whenever rst is equal to 1, stateMachine should go to the top state.
- Otherwise it should work this way shown on the figure.

