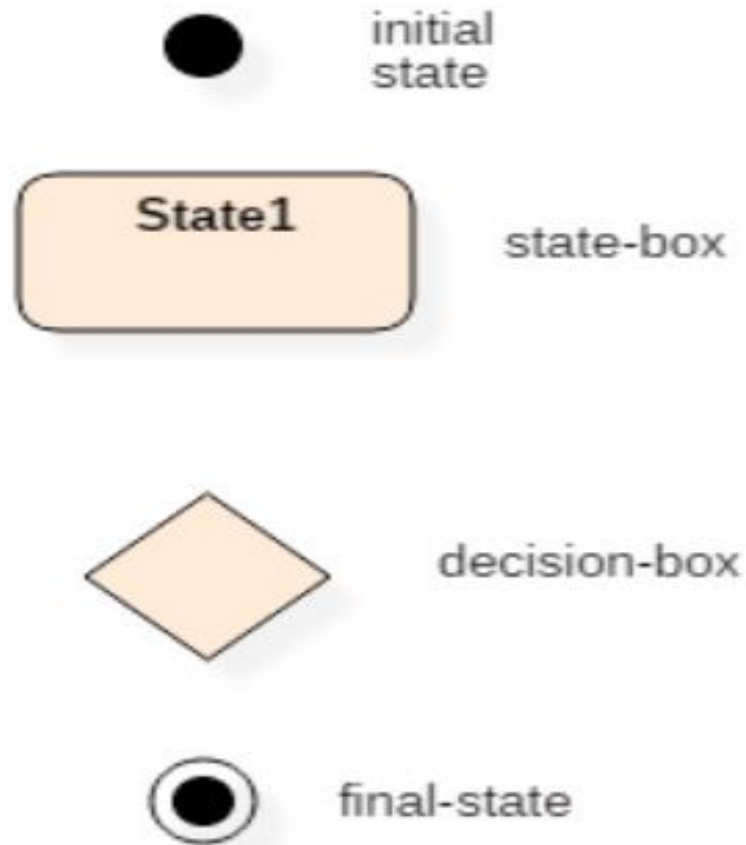


# State Diagram

- A state diagram is a technique that you can use to describe how your system behaves and responds.
- State diagrams can describe a single object and illustrate how that object behaves in response to a series of events in your system
- A state is the way an object exists at a particular point in time. The state of an object is determined by the values of its attributes.

# Notation for State Diagram





# Notation for State Diagram

- **Initial state**

- The initial state symbol is used to indicate the beginning of a state machine diagram.

- **Final state**

- This symbol is used to indicate the end of a state machine diagram.

- **Decision box**

- It contains a condition. Depending upon the result of an evaluated condition, a new path is taken for program execution.

# Notation for State Diagram

- **Transition**

- A transition is a change in one state into another state which is occurred because of some event. A transition causes a change in the state of an object.

- **State box**

- It is a specific moment in the lifespan of an object. It is defined using some condition or a statement within the classifier body. It is used to represent any static as well as dynamic situations.
- It is denoted using a rectangle with round corners. The name of a state is written inside the rounded rectangle.

# Example of State Diagram

