**Lab Assignment: 11**

**Object:** To draw the ***State Diagram*** for ***Hotel Management.***

**Introduction:**

State diagram is one of the five UML diagrams used to model the dynamic nature of a system. They define different states of an object during its lifetime and these states are changed by events. State diagrams are useful to model the reactive systems. Reactive systems can be defined as a system that responds to external or internal events.

Following are the main purposes of using State diagrams-

* To model the dynamic aspect of a system.
* To model the life time of a reactive system.
* To describe different states of an object during its life time.
* Define a state machine to model the states of an object.

How to Draw a State Diagram?

State diagram is used to describe the states of different objects in its life cycle. Emphasis is placed on the state changes upon some internal or external events. These states of objects are important to analyse and implement them accurately.

A typical example:

