ASSIGNMENT NO: 6

Aim: Object Oriented Analysis and design using UML diagrams: Activity and State Chart diagram, using Open Source Tool.

Problem Statement :

<<Students should write the problem statement assigned to them>>>

The tasks we have to do are:
1. You will have to identify the main entities (objects) for this system.
2. You will have to find out the relationships between these objects for sequence diagram.
3. You will have to find the necessary attributes and functions that need to be associated with each object to implement the functionality mentioned above.
4. You will make a final comprehensive diagram show and all objects and their message passing with data flow.

Objectives
1. To learn the relationships and notions of Activity diagram.
2. To learn the relationships and notions of State Chart diagram.

1. Activity Diagram:

● Describe Activity diagram.

● Explain the different notations of Activity diagram.

Following are the notations used to draw UML diagrams. It is added here for reference.

Notations	Description	Syntax

2. **State Chart Diagram:**

   ● Describe State chart diagram.

   ● Explain the different notations of State Chart diagram.

Following are the notations used to draw UML diagrams. It is added here for reference.

Notations	Description	Syntax

Platform: Microsoft Windows 7, Open Source draw.io tool or any UML design tool.
Input: Problem statement scenario.
Output: Activity and State Chart diagram.

Conclusion: Hence, I learned to draw Activity and State Chart diagram.

FAQs:
   1. Give the significance of Activity diagram.
   2. Explain any 2 terminologies used in Activity diagrams.
   3. Explain the message passing in State Chart diagram.
   4. Illustrate the use of a state diagram, consider software embedded within the Safe Home control panel that is responsible for reading user input.