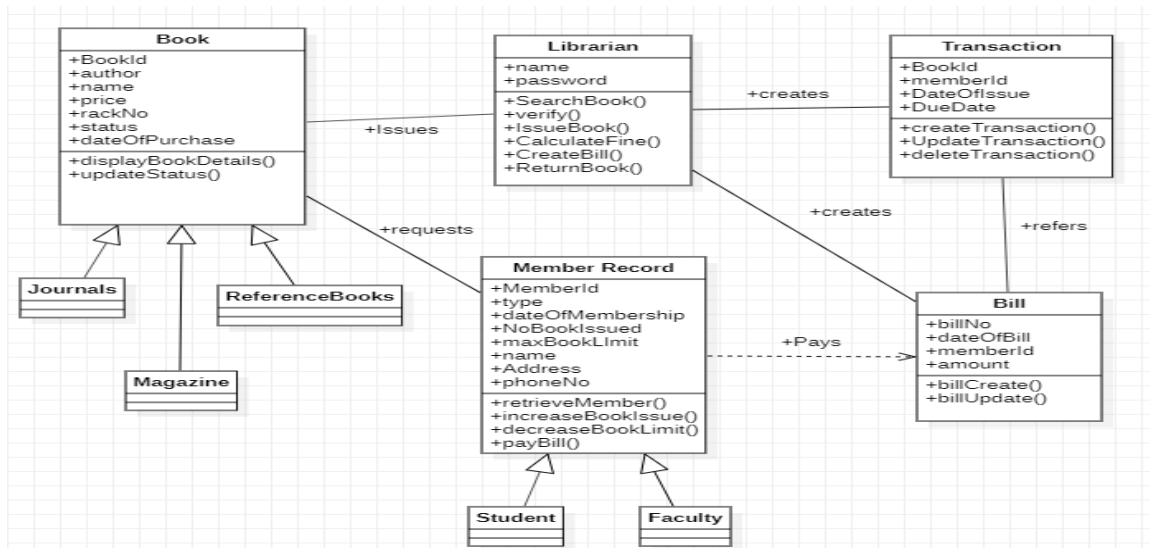Practical 5

Draw the structural view diagram for the Library Management system: Class diagram
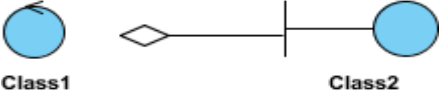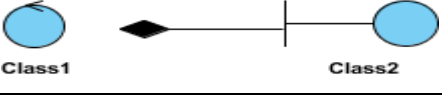

The UML Class diagram is a graphical notation used to construct and visualize object oriented systems. A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's:
- classes,
- their attributes,
- operations (or methods),
- and the relationships among objects.

Class Diagram Notations:

Tool Name	Description	Notation
Class	the system's: • classes, • their attributes, • operations (or methods), • and the relationships among objects.	Class Name Attributes Operations
Class Visibility	• + denotes public attributes or operations • - denotes private attributes or operations • # denotes protected attributes or operations	
Association	Associations are relationships between classes in a UML Class Diagram. They are represented by a solid line between classes.	——————

Inheritance (or Generalization):	A generalization is a taxonomic relationship between a more general classifier and a more specific classifier. Represents an "is-a" relationship.	
Aggregation	A special type of association. • It represents a "part of" relationship. • Class2 is part of Class1.	Class1 Class2
Composition	A special type of aggregation where parts are destroyed when the whole is destroyed.	Class1 Class2
Dependency	An object of one class might use an object of another class in the code of a method.	Class1 Class2