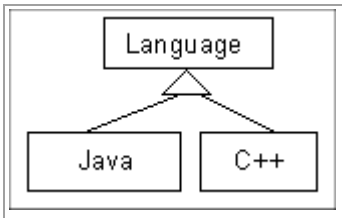
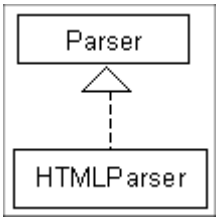
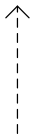
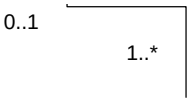
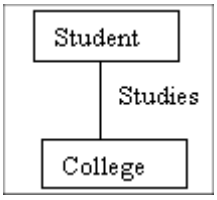
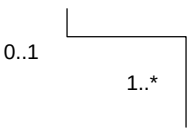
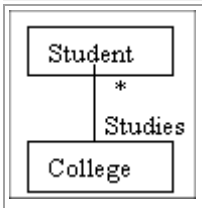
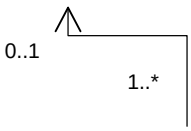
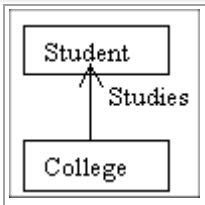
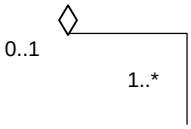
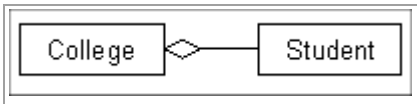
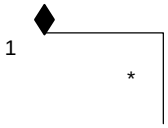
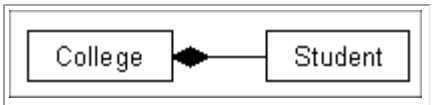
Summary for UML Class Diagrams		
Relation	**Symbol**	**Description**
Inheritance 		Also called an "**is a**" relationship, because the child class **is a** type of the parent class. Generalization is the basic type of relationship used to define reusable elements in the class diagram. Literally, the child classes "inherit" the common functionality defined in the parent class.
Realization 		In a realization relationship, one entity (normally an interface) defines a set of functionalities as a contract and the other entity (normally a class) "realizes" the contract by implementing the functionality defined in the contract.
Dependency 		The operation of one object C1 depends on the presence of another entity C2 ➔ changes in one would affect the other C1 depends on C2 if C1 • uses C2 as a method parameter, local method variable, or method return type • uses any of C2's static methods
Bidirectional Association 		When two classes are connected to each other in any way, an association relation is established. For example: A "student studies in a college"
Multiplicity 		An example of this kind of association is many students belonging to the same college. Hence, the relation shows a star sign near the student class (one to many, many to many, and so forth kind of relations).

Unidirectional Association 		Association between classes is bi-directional by default. You can define the flow of the association by using a directed association. The arrowhead identifies the container-contained relationship.
Aggregation 		When a class is formed as a collection of other classes, it is called an aggregation relationship between these classes. It is also called a "**has a**" relationship.
Composition 		Composition is a variation of the aggregation relationship. Composition connotes that a strong life cycle is associated between the classes.