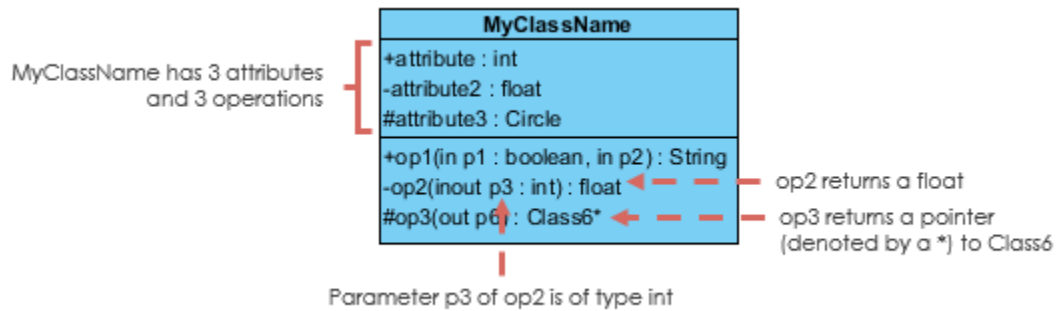


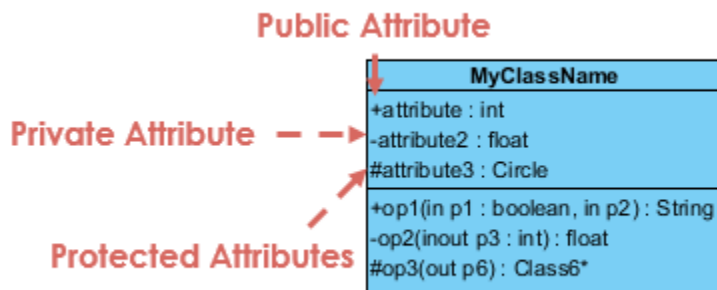
# UML

A UML(Unified Modeling Language) diagram is a graphical notation used to construct and visualize object oriented systems. These diagrams include: classes, attributes, methods and relationship between objects.

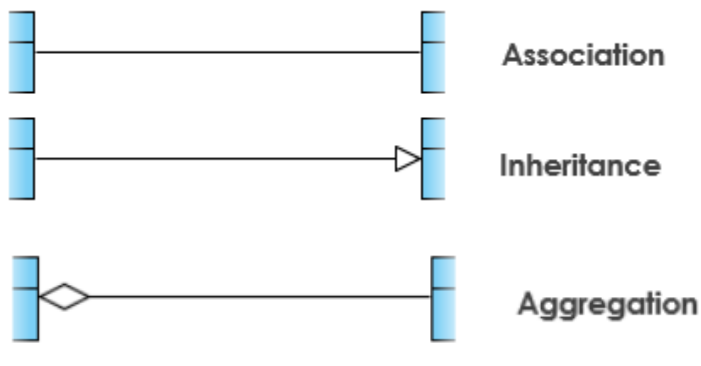


## Class Visibility

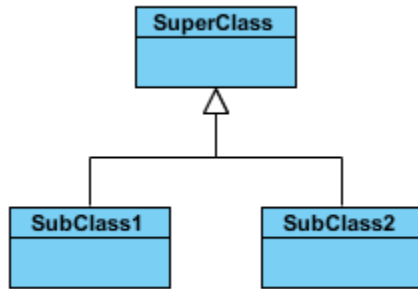
The +, - and # symbols before an attribute and method name in a class denote the visibility of the attribute and operation.



## Relationships



## Inheritance



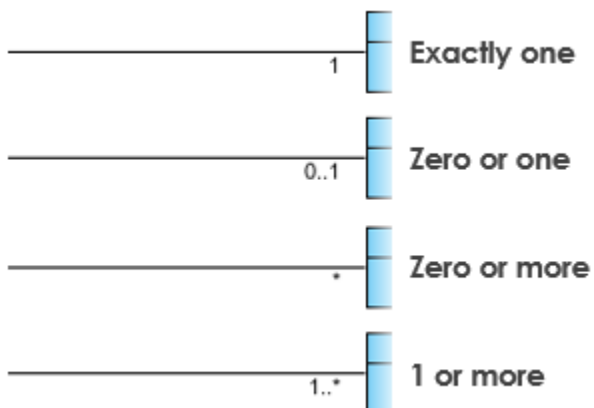
## Association

- It is a bi-directional relationship between two classes. It means that both classes are aware of each other and can interact with each other.
- They are represented by a solid line between classes.
- Associations are typically named using a verb or verb phrase which reflects the real world problem domain.

## Cardinality

Cardinality is expressed in terms of:

- one to one
- one to many
- many to many



## Directed Association

- It is a unidirectional association. It represents a relationship where only one class knows about the other class and can interact with it.



## Aggregation

- A special type of association.
- It represents a "part of" relationship.

