Object-Oriented Design 4: Class Relationships

Types of class relationships

Dependency	One class *uses* another class. For example, many classes use the scanner class to accept input from files or the system line. We use the class by importing it, instantiating it, and calling methods on that instance.
Aggregation	One class *comprises* of other classes. When creating the line class, there are data members such as point and slope. Point is its own class, which represents a point on a coordinate plane. The coordinate data members of Point could be Rationals, another class. The slope could also be a Rational object.
Inheritance	One class is a *subtype/child* of another class. If we have a Human class, and we have a Teenager class. A teenager is a type of human, so Teenager will be a child class of Human, so Teenager can access all data of Human, but Human cannot access Teenager data.

What is the this keyword?

The *this* keyword refers to the current instance of an object when called. Using *this* in a class declaration means that the variable or method after *this* will be the one belonging to the current object. *This* is abstract.