11/6 Die Hu (syhu)

Attendance (Chapter 12, 13, 14)

1. Dependency: A class depends on another class if it uses objects of that class.
2. Aggregation: The aggregation relationship states that objects of one class contains objects of another class. A class aggregates another if its objects contain objects of the other class.
3. Inheritance: Inheritance is a relationship between a more general class (the superclass) and a more specialized class (the subclass). The relationship is often described as the “is-a” relationship.
4. Recursive method: A recursive computation solves a problem by using the solution to the same problem with simpler inputs. For a recursion to terminate, there must be special cases for the simplest values.
5. Mutual Recursion: In a mutual recursion, a set of cooperating methods calls each other repeatedly.
6. Occasionally, a recursive solution is much slower than its iterative counterpart. However, in most cases, the recursive solution is only slightly slower.
7. To measure the running time of a method, get the current time immediately before and after the method call.
8. Doubling the data set means a fourfold increase in processing time.
9. Merge sort is an O(n log(n)) algorithm. The n log(n) function grows much more slowly than n^2.
10. A linear search examines all values in an array until it finds a match or reaches the end.