8-21-15 Data Structures Notes

Big O Notation

-Big O notation is a relative representation of the complexity of an algorithm

Basic rules of Big O Notation

1. Nested loops are multiplied together
2. Sequential loops are added
3. Only the largest term is kept. Drop all others
4. Constants are dropped.
5. Conditional checks, comparison are constant.

Example

For I = 0; I < n; i++

Print I

* This is O(n)

For I = 0; I < n; i++ {

Print I

For J = 0; J < n; J ++

Print J

- This is O(n2)