Four Pillars of OOP

Encapsulation – bundles data(variables) and methods together in a class. It is generally used to hide the internal interpretation of the object from outside of the class.

Abstraction – Shows only essential attributes and hides all unnecessary information. An abstract class for an example uses abstract methods that do not have a definition and are only callable and able to be used in inherited classes

Inheritance- when a class derives from another.

Polymorphism- the ability of an object to take on many different forms. Anything that can perform a is a test would be polymorphic. For an example a dog is a animal so if we were to make a class name dog and it were to Inherit from the class named animal in anyway then that would be considered polymorphic.

Private- not accessible outside of the class

Protected-similar to that of private variable but able to be accessed within the class and any subclasses that inherit from the parent class

Public- means that it is accessible outside of the class

What is average run time of a search on a hashtable

O(n)