Critical Thinking Question

1. **Explain the difference between a has-a and is-a relationship among classes.**
   Has-a is a composition relationship while Is-a is an inheritance relationship.

2. **If a base class has a public method go() and a derived class has a public method stop(), which methods will be available to an object of the derived class?**

   go() and stop() are methods that both will be available.

3. **Compare and contrast implementing an abstract method to overriding a method.**

   Abstract method is a method that MUST implement and Overriding is an optional
   method that modifies the existing method.
4. **Compare and contrast an abstract class to an interface.**

   An abstract class can have fields with some implementation while interface only methods
   signatures and no fields.