Chapter 8 CRT questions

1. A has-a relationship is a composition, which uses instance variables that refer to other objects. An is-a relationship is inheritance which means the class inherits from a parent class.

2. Both the go() and the stop() methods

3. An abstract method forces its immediate subclass to implement the behavior of all abstract methods. Overriding allows a subclass to provide a specific implementation of a method that is provided by a parent class.

4. An abstract class has at least one abstract method and can have multiple concrete methods, Abstract classes allow you to create blueprints for concrete classes. An abstract class cannot be instantiated. An interface is a blueprint that can be used to implement a class, the interface does not contain any concrete methods/methods with code. All the methods of an interface are abstract. An interface cannot be instantiated (represented by an instance) but a class that implements the interface can be.

6. a) A public method

    b) Wo is an interface that is implemented by the public class Roo

    c) Because doThat is in the interface Wo which is implemented by Roo.

    d) Public Bo and doThat

    e) In Bo doThis has a return method of return(2) but in Roo doThis is redefined to have a return method of return(10)

    f) It refers to the parent class, allowing Roo to call on any Bo methods

    g) The doThis method can be called from a Roo object only if the Roo object references a Bo object

    h) Yes because the super keyword will allow a method in Roo to call the doThis() method from Bo