Assignment #9

## Interfaces, Abstract class, Concrete class

Abstract classes define default behavior, it encapsulates the default functionality.

The interface is used when multiple objects have the same behavior but the implementation is different.

The concrete class implements method that only the objects from that class are using and are specific to that object.

For example the abstract class *Dancer* will have an abstract method *Dance()* that will declare the default behavior of a dancer object. But and Interface *IDance* would declare the different types of dances. Like *DanceWals()*, *DanceTango()* etc.   
For example women dancers are going to implement the *IDance* interface and all the methods it declares, but will implement them differently than male dancers.   
The Concrete class like a *DanceTeacher* would implement methods that are only used by the teacher objects and are specific only to these objects and are not used by any other object or class, like *TeachDancing().*

## Exercise 12.10

Attaching my .Java files below



## Shoe class – Test case

Attaching .Java files below

