Instructions: This lab will test your knowledge of interfaces and abstract classes. There are three types of vehicles: Boat, Cars and Planes (and they all work as you would expect). A Bicycle has a top speed of 40 mph, a Car has a top speed of 150 mph, and a Plane has a top speed of 500 mph. Given the following:

```java
public abstract class BaseVehicle implements Comparable{
    /** returns “Boat”, “Car”, or “Plane” depending on the object type.
        public abstract String getVehicleType();

}
```

**Complete Car.java, Boat.java and Plane.java** such that they all extend `BaseVehicle`, and implement all required methods.

HINT: There are 2 methods that must be implemented in each class.

Test your implementation by creating a main class with a main method that contains an array `BaseVehicles[10]`. Place a mixture of vehicle objects in the array and then use `Arrays.sort()` to sort your array. Afterwards, loop through the array and print the vehicle types to make sure they are sorted.

**Demonstrate your working project to the TA to receive your grade.**