INSTRUCTION:
Design and implement a Java program for the following description of a *VehicleSystem*. You must apply *Strategy* Design Pattern.

You won a new contract to design a set of vehicles that include StreetRacer, FormulaOne and AirCraft. One of the common functionalities of the vehicles is their ability to move despite in different ways. For example, a StreetRacer and a FormulaOne move by driving, and an aircraft moves by flying. The specific way a vehicle moves is changeable as time passes. For instance, an aircraft can be flying at one moment and it can be driving on the runway before takeoff.

1. Draw a UML class diagram to show your design for the *VehicleSystem*.

2. Implement your design in Java.

3. Create a test class (VehicleSystem.java) to test your implementation. The sample output should be as shown below.

   Sample output:

```
I am a StreetRacer. Now I'm driving.
I am a FormulaOne. Now I'm driving.
I am a Helicopter. Now I'm flying.
I am a Helicopter which is flying. I am arriving at the
runway. Now I'm driving.
```

4. Assume that the flying aircraft arrives at the airport and drives on the runway before coming to a halt. Write the statements inside the main method to represent this. Compile and run.