

## **IMPLEMENTATION OF VEHICLE CLASS USING POLYMORPHISM**

**Design a Vehicle class hierarchy in Java. Write a test program to demonstrate Polymorphism.**

### **ALGORITHM**

**STEP 1:** Create an abstract class named vehicle with abstract method Display and a concrete method Input.

**STEP 2:** Define the input method by prompting the user to enter the values for name, owner, type, number, engine capacity, seating capacity for the vehicle; all the inputs taken in the form string.

**STEP 3:** Extend three classes namely Air, Water and Land from the base class.

**STEP 4:** Define the method display under the class Air by displaying all the entered values.

**STEP 5:** Repeat step 4 for the class Water.

**STEP 6:** Extend the input method for the class Land by taking in the value of wheeling capacity for the vehicle in the form of string.

**STEP 7:** In the main method create a reference for the abstract class and create a switch case to perform operations on the opted class.

**STEP 8:** Under each class create a switch case to either enter the data or to display the transport report.

**STEP 9:** Repeat the main menu on the user's choice.