Aim:

Write Java program on use of Inheritance.

Create a class Vehicle
- contains the data members **color** of String type and **speed** and **size** of integer data type.
- write a method **setVehicleAttributes()** to initialize the data members

Create another class Car which is derived from the class Vehicle
- contains the data members **cc** and **gears** of **integer** data type
- write a method **setCarAttributes()** to initialize the data members
- write a method **displayCarAttributes()** which will display all the attributes.

Write another class InheritanceDemo with **main()** it receives five arguments **color**, **speed**, **size**, **cc** and **gears**.

Source Code:

InheritanceDemo.java

```java
class Vehicle {
  String color;
  int speed, size;
  public void setVehicleAttributes(String col, int s, int sz) {
   color = col;
   speed = s;
   size = sz;
   }
}
class Car extends Vehicle {
   int CC, gears;
   public void setCarAttributes(int c, int g){
     CC = c;
     gears = g;
    }
    void displayCarAttributes() {
      // The subclass refers to the members of the superclass
      System.out.println("Color of Car : " + color);
      System.out.println("Speed of Car : " + speed);
      System.out.println("Size of Car : " + size);
      System.out.println("CC of Car : " + CC);
      System.out.println("No of gears of Car : " + gears);
    }
}
public class InheritanceDemo{
   public static void main(String []args){
     Car b1 = new Car();
     b1.setVehicleAttributes(args[0], Integer.parseInt(args[1]), Integer.parseInt(ar
gs[2]));
     b1.setCarAttributes(Integer.parseInt(args[3]), Integer.parseInt(args[4]));
     b1.displayCarAttributes();
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Color of Car : Blue
Speed of Car : 100
Size of Car : 20
CC of Car : 1000
No of gears of Car : 5

Test Case - 2
User Output
Color of Car : Orange
Speed of Car : 120
Size of Car : 25
CC of Car : 900
No of gears of Car : 5