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
import java.util.Scanner;
class Vehicle{
    String color;
    int speed;
    int size;
    void setVehicleAttributes(String c,String s,String sp){
        color = c;
        speed = Integer.parseInt(s);
        size = Integer.parseInt(sp);
    }
}
class Car extends Vehicle {
    int CC;
    int gears;
    void setCarAttributes(String c,String s,String sp,String cce,String gear){
        setVehicleAttributes(c,s,sp);
        CC = Integer.parseInt(cce);
        gears = Integer.parseInt(gear);
        displayCarAttributes();
    }
    void displayCarAttributes(){
        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.setCarAttributes(args[0],args[1],args[2],args[3],args[4]);
```

```
            }
    }
```

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