

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

```
class Vehicle
{
    String color;
    int speed;
    int size;
    public void setVehicalAttributes(String col,int sp,int si)
    {
        color=col;
        speed=sp;
        size=si;
    }
}
class Car extends Vehicle
{
    int cc;
    int gears;
    public void setCarAttributes(int c,int ge)
    {
        cc=c;
        gears=ge;
    }
    public 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);
    }
}
class InheritanceDemo
{
    public static void main(String args[])
```

```

{
    Car c = new Car();
    c.setVehicalAttributes(args[0], Integer.parseInt(args[1]), Integer.parseInt(args
[2]));
    c.setCarAttributes(Integer.parseInt(args[3]), Integer.parseInt(args[4]));
    c.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