## 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 |