S.No: 11	Exp. Name: ***A program to illustrate Inheritance***	Date:2023-10-10

ID: 224G1A0504

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

```
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