

**Aim:**

Write a program to demonstrate the uses of **super** keyword (three uses)

Create classes 'Vehicle' (with constructor and method) and 'Car' (inherit from 'Vehicle' with extra field). Employ 'super' to call superclass constructor, invoke a method, and access a variable. Implement a main method for user input, creating a 'Car' instance, displaying info, and starting the engine.

**Source Code:**

q17213/Main.java

```
package q17213;
import java.util.*;
class Vehicle {
    String name;
    Vehicle(String name) {
        this.name = name;
    }
    void startEngine() {
        System.out.println("Starting Car Engine:\nEngine started");
    }
}
class Car extends Vehicle {
    int year;
    Car(String name, int year) {
        super(name);
        this.year = year;
    }
    void displayCarInfo() {
        System.out.println("Displaying Car Information:");
        System.out.println("Name:" + name);
        System.out.println("Year:" + year);
    }
    @Override
    void startEngine() {
        super.startEngine();
        System.out.println("Car engine started");
    }
}
public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the car name:");
        String carName = sc.nextLine();
        System.out.print("Enter the year of car:");
        int carYear = sc.nextInt();
        Car car = new Car(carName, carYear);
        car.displayCarInfo();
        car.startEngine();
        sc.close();
    }
}
```

## Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter the car name: BMW
Enter the year of car: 2022
Displaying Car Information:
Name:BMW
Year:2022
Starting Car Engine:
Engine started
Car engine started

Test Case - 2
User Output
Enter the car name: Ford Probe
Enter the year of car: 2021
Displaying Car Information:
Name:Ford Probe
Year:2021
Starting Car Engine:
Engine started
Car engine started