

Program:

abstract class vehicle {

    abstract double calculateSpeed();

} abstract double calculateVelocity();

class car extends vehicle {

    private double distance, time, disp;

    car (double distance, double time, double disp) {

        this.distance = distance;

}     this.time = time;

    double calculateSpeed () {

        return distance/time;

}

    double calculateVelocity () {

        return disp/time;

}

class bike extends vehicle {

    private double distance, time, disp;

    bike (double distance, double time, double disp) {

        this.distance = distance;

        this.time = time;

        this.disp = disp;

}     double calculateSpeed () {

        return distance/time;

}

double calculateVelocity () {

return disp / time;

}

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Public class VehicleDemo {

public static void main (String [] args) {

Vehicle car = new Car (5, 30, 4);

Vehicle bike = new Bike (6, 30, 5);

System.out.println ("Car speed:" + car.calculateSpeed());

System.out.println ("Car velocity:" + car.calculateVelocity());

System.out.println ("Bike speed:" + Bike.calculateSpeed());

System.out.println ("Bike velocity:" + Bike.calculateVelocity());

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