

② Write a JAVA Program to create an abstract class vehicle with abstract methods calculate Speed and velocity. Create Subclasses Car and bike that extend vehicle class and implement run method to calculate the Speed & velocity of each vehicle.

→

abstract class vehicle {

 abstract double calculateSpeed();

 abstract double calculateVelocity();

}

class Car extends vehicle {

 private double distance, time;

 Car (double distance, double time) {

 this.distance = distance;

 this.time = time;

}

 public double calculateSpeed () {

 return distance / time;

}

 public double calculateVelocity () {

 return distance / time;

}

class Bike extends vehicle {

 private double distance, time;

 Bike (double distance, double time) {

 this.distance = distance;

 this.time = time;

}

public double calculateSpeed() {

return distance / time;

{

public double calculateVelocity() {

return distance / time;

{

public class vehicleDemo {

public static void main(String[] args) {

Vehicle car = new Car(100.0, 2.0);

Vehicle Bike = new Bike(50.0, 1.5);

System.out.println("Car Speed: " + car.calculateSpeed()
+ " units/time");

System.out.println("Car Velocity: " + car.calculateVelocity()
+ " units/time");

System.out.println("Bike Speed: " + Bike.calculateSpeed()
+ " units/time");

System.out.println("Bike Velocity: " + bike.calculateVelocity()
+ " units/time");

{

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