Classes, Constructors & Methods

**-Define the class Vehicle and describe the states and behavior of Vehical.**

**package** assignment\_2;

**import** java.util.Scanner;

**public** **class** Question1

{

**public** **static** **void** main(String[] args)

{

Vehicle1 vehicle = **new** Vehicle1();

vehicle.vname = "Motorcycle";

vehicle.make = "Herohonda";

vehicle.color = "Black";

System.***out***.println("Details of vehicle is......");

vehicle.showDetails();

System.***out***.println("Starting engine......");

vehicle.startEngine();

System.***out***.println("-------------------");

vehicle.startEngine();

}

}

**package** assignment\_2;

**class** Vehicle1

{

String vname;

String make;

String color;

**boolean** engineState=false;

**void** startEngine()

{

**if**(engineState == **true**)

{

System.***out***.println("Engine is already on... ");

}

**else**

{

engineState = **true**;

System.***out***.println("Engine is now on... ");

}

}

**void** showDetails()

{

System.***out***.println("Vehicle name is " +vname);

System.***out***.println("nmake is " + make);

System.***out***.println("color is "+color);

}

}

**Overload the constructor of Vehicle class by passing different parameters.**

**package** assignment\_2;

**public** **class** Question2

{

**public** **static** **void** main(String args[])

{

Vehicle2 vehicle2 = **new** Vehicle2();

vehicle2.showData();

System.***out***.println("-----------------------------");

Vehicle2 vehicle3 = **new** Vehicle2("Scooty" ,"Hero motocorp", "Activa", "White", "2002", 60000, 60);

vehicle3.showData();

System.***out***.println("-----------------------------");

Vehicle2 vehicle4 = **new** Vehicle2("Car", "Maruti", "Maruti Suziki 800", "red");

vehicle4.showData();

System.***out***.println("-----------------------------");

}

}

**package** assignment\_2;

**public** **class** Vehicle2

{

String typeOfVehicle, brand, model, color, year;

**int** price, speed;

Vehicle2()

{

typeOfVehicle = "Motorcycle";

brand = "Hero MotorCorp";

model = "Hero Splendor Plus";

color = "yellow ";

year = "1998 ";

price = 50000 ;

speed = 45 ;

}

**public** Vehicle2(String typeOfVehicle, String brand, String model, String color, String year, **int** price, **int** speed)

{

**super**();

**this**.typeOfVehicle = typeOfVehicle;

**this**.brand = brand;

**this**.model = model;

**this**.color = color;

**this**.year = year;

**this**.price = price;

**this**.speed = speed;

}

**public** Vehicle2(String typeOfVehicle, String brand, String model, String color) {

**super**();

**this**.typeOfVehicle = typeOfVehicle;

**this**.brand = brand;

**this**.model = model;

**this**.color = color;

price = 4500000;

speed = 120;

}

**void** showData()

{

System.***out***.println("Vehicle type is:" +typeOfVehicle);

System.***out***.println("brand :" +brand);

System.***out***.println("model :" +model);

System.***out***.println("color :" +color);

System.***out***.println("price:" +price);

System.***out***.println("speed is:" +speed+ "k/h");

}

}

**Determine the speed Up of Vehicle which represents behavior of Vehicle and which can**

**get increased**.

**package** assignment\_2;

**import** java.util.Scanner;

**public** **class** Question3

{

**public** **static** **void** main(String[] args)

{

Vehicle3 vehicle3 = **new** Vehicle3("Car", "Maruti", "Maruti Suziki 800", "red");

System.***out***.println(vehicle3);

// for increase the speed of vehicle

vehicle3.speedUp();

System.***out***.println("Current speed of vehicle is :" +vehicle3.getSpeed());

System.***out***.println(vehicle3);

}

}

**package** assignment\_2;

**public** **class** Vehicle3

{

String typeOfVehicle, brand, model, color, year;

**int** price, speed;

**public** Vehicle3(String typeOfVehicle, String brand, String model, String color) {

**super**();

**this**.typeOfVehicle = typeOfVehicle;

**this**.brand = brand;

**this**.model = model;

**this**.color = color;

price = 4500000;

speed = 0;

}

@Override

**public** String toString() {

**return** "Vehicle3 [typeOfVehicle=" + typeOfVehicle + ", brand=" + brand + ", model=" + model + ", color=" + color+ ", year=" + year + ", price=" + price + ", speed=" + speed + "]";

}

**public** **int** getSpeed() {

**return** speed;

}

**public** **void** setSpeed(**int** speed) {

**this**.speed = speed;

}

**public** **void** speedUp()

{

speed += 5;

}

}

**4.** Define the common states and behaviors for the Vehicle.

**5.** Define constants in for Vehicle i.e. the states those are fix for all Vehicles.

**6.** Show the parameter passing in Vehicle.

**7.** Use in instaceOf operator in Vehicle.

**8.** Overload the method fuelCapacity by passing the capacity in terms of liters and milliliters.

**9.** Show the use of instance initializer block in Vehical class.

**10.** Implement the object array of User accounts. Perform following actions by taking user input

- Adding new account

- Updating existing account

- Deleting existing account

- Searching particular account

- Displaying all accounts

**11.** Depositing money in particular account

**12.** Withdrawing money from particular account

b = 20

First AnonumousBlock called.

Second AnonumousBlock called.

one parameter constructor called.

a = 10

b = 20

**13.** Implement the object array of Books. Perform following actions by taking user input

- Adding new Book

- Updating existing Book

- Deleting existing Book

- Searching particular Book

- Displaying all Books