

PROBLEM 1

```
public class Human
{
    private String name;
    private String color;
    private double height;
    private double weight;
    private double age;
    private String dateOfBirth;

    public void setName(String name) {

        this.name=name;
    }
    public void setColor(String color) {

        this.color=color;
    }
    public void setHeight(double height) {

        this.height=height;
    }
    public void setWeight(double weight) {

        this.weight=weight;
    }
    public void setAge(double age) {

        this.age=age;
    }
    public void setDateofbirth(String dateOfBirth) {

        this.dateOfBirth=dateOfBirth;
    }

    public String getName()
    {
        return name;
    }

    public String getColor()
    {
        return color;
    }

    public double getHeight()
    {
        return height;
    }
}
```

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    public double getWeight()
    {
        return weight;
    }

    public double getAge()
    {
        return age;
    }

    public String getDateOfBirth()
    {
        return dateOfBirth;
    }

    public Human(String name , String color , double height , double weight ,
    double age , String dateOfBirth ) {

        this.name=name;
        this.color=color;
        this.height=height;
        this.weight=weight;
        this.age=age;
        this.dateOfBirth=dateOfBirth;
    }

    public Human (){//This is an empty constructor
    }

    public void showInfo(){
        System.out.println("Name           :"+name);
        System.out.println("Color           :"+color);
        System.out.println("height          :"+height);
        System.out.println("weight          :"+weight);
        System.out.println("age             :"+age);
        System.out.println("Date of Birth:"+dateOfBirth);
    }

    public static void main(String args[])
    {
        Human h1=new Human();
        h1.setName("Imdad");
        h1.setColor("Black");
        h1.setHeight(4.5);
        h1.setWeight(38);
        h1.setAge(15);
        h1.setDateOfBirth("22 April,2005");

        System.out.println("Name           :"+h1.getName());
        System.out.println("Color           :"+h1.getColor());
        System.out.println("height          :"+h1.getHeight());
        System.out.println("weight          :"+h1.getWeight());
        System.out.println("age             :"+h1.getAge());
        System.out.println("Date of Birth:"+h1.getDateOfBirth());
    }

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        Human h2 = new Human ("Imdad" , "Black" , 4.5 , 38 , 15 , "22
April , 2005");
        h2.showInfo();
    }
}

```

PROBLEM 2

```

public class Cat
{
    private String name;
    private String color;
    private double height;
    private double weight;

    public void setName(String name) {
        this.name=name;
    }
    public void setColor(String color) {
        this.color=color;
    }
    public void setHeight(double height) {
        this.height=height;
    }
    public void setWeight(double weight) {
        this.weight=weight;
    }

    public String getName()
    {
        return name;
    }

    public String getColor()
    {
        return color;
    }

    public double getHeight()
    {
        return height;
    }

    public double getWeight()
    {
        return weight;
    }
}

```

```

    }

    public Cat(String name , String color , double height , double weight) {

        this.name=name;
        this.color=color;
        this.height=height;
        this.weight=weight;
    }

    public Cat (){//This is an empty constructor
    }

    public void showInfo(){
        System.out.println("Name           :"+name);
        System.out.println("Color           :"+color);
        System.out.println("height        :"+height);
        System.out.println("weight       :"+weight);
    }

    public static void main(String args[])
    {
        Cat c1=new Cat();
        c1.setName("Meaow");
        c1.setColor("White");
        c1.setHeight(0.8);
        c1.setWeight(1.5);

        System.out.println("Name           :"+c1.getName());
        System.out.println("Color           :"+c1.getColor());
        System.out.println("height        :"+c1.getHeight());
        System.out.println("weight       :"+c1.getWeight());

        Cat c2 = new Cat ("Meaow" , "White" , 0.8 , 1.5);
        c2.showInfo();
    }
}

```

PROBLEM 3

```

public class Dog
{
    private String name;
    private String color;
    private double height;
    private double weight;

    public void setName(String name) {

        this.name=name;
    }
    public void setColor(String color) {

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        this.color=color;
    }
    public void setHeight(double height) {

        this.height=height;
    }
    public void setWeight(double weight) {

        this.weight=weight;
    }

    public String getName()
    {
        return name;
    }

    public String getColor()
    {
        return color;
    }

    public double getHeight()
    {
        return height;
    }

    public double getWeight()
    {
        return weight;
    }

    public Dog(String name , String color , double height , double weight) {

        this.name=name;
        this.color=color;
        this.height=height;
        this.weight=weight;
    }

    public Dog (){//This is an empty constructor
    }

    public void showInfo(){
        System.out.println("Name           :"+name);
        System.out.println("Color          :"+color);
        System.out.println("height         :"+height);
        System.out.println("weight         :"+weight);
    }

    public static void main(String args[])
    {
        Dog d1=new Dog();
        d1.setName("Tommy");
        d1.setColor("White");
    }

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        d1.setHeight(1.5);
        d1.setWeight(9);

        System.out.println("Name          :"+d1.getName());
        System.out.println("Color         :"+d1.getColor());
        System.out.println("height      :"+d1.getHeight());
        System.out.println("weight     :"+d1.getWeight());

        Dog d2 = new Dog ("Tommy" , "White" , 1.5 , 9);
        d2.showInfo();
    }
}

```

PROBLEM 4

```

public class Duck
{
    private String name;
    private String color;
    private double height;
    private double weight;

    public void setName(String name) {

        this.name=name;
    }
    public void setColor(String color) {

        this.color=color;
    }
    public void setHeight(double height) {

        this.height=height;
    }
    public void setWeight(double weight) {

        this.weight=weight;
    }

    public String getName()
    {
        return name;
    }

    public String getColor()
    {
        return color;
    }

    public double getHeight()
    {
        return height;
    }

    public double getWeight()

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        {
            return weight;
        }

public Duck(String name , String color , double height , double weight) {

    this.name=name;
    this.color=color;
    this.height=height;
    this.weight=weight;
}

public Duck (){//This is an empty constructor
}

public void showInfo(){
    System.out.println("Name           :"+name);
    System.out.println("Color           :"+color);
    System.out.println("height        :"+height);
    System.out.println("weight       :"+weight);
}

public static void main(String args[])
{
    Duck d1=new Duck();
    d1.setName("Necco");
    d1.setColor("White");
    d1.setHeight(0.4);
    d1.setWeight(0.8);

    System.out.println("Name           :"+d1.getName());
    System.out.println("Color           :"+d1.getColor());
    System.out.println("height        :"+d1.getHeight());
    System.out.println("weight       :"+d1.getWeight());

    Duck d2 = new Duck("Necco" , "White" , 0.4 , 0.8);
    d2.showInfo();
}
}

```

PROBLEM 5

```

public class Car
{
    private String name;
    private String color;
    private String model;
    private double yearOfUse;
    private String ownerName;

    public void setName(String name) {

        this.name=name;
    }
}

```

```

    }
    public void setColor(String color) {

        this.color=color;
    }
    public void setModel(String model) {

        this.model=model;
    }
    public void setYearOfuse(double yearOfUse) {

        this.yearOfUse=yearOfUse;
    }
    public void setOwnerName(String ownerName) {

        this.ownerName=ownerName;
    }

    public String getName()
    {
        return name;
    }

    public String getColor()
    {
        return color;
    }

    public String getModel()
    {
        return model;
    }

    public double getYearOfUse()
    {
        return yearOfUse;
    }

    public String getOwnerName()
    {
        return ownerName;
    }

    public Car(String name , String color , String model , double yearOfUse,
String ownerName) {

        this.name=name;
        this.color=color;
        this.model=model;
        this.yearOfUse=yearOfUse;
        this.ownerName=ownerName;
    }

    public Car (){//This is an empty constructor
    }

    public void showInfo(){
        System.out.println("Name          : "+name);
    }

```



```

        System.out.println("Color          :"+color);
        System.out.println("Model          :"+model);
        System.out.println("YearOfUse       :"+yearOfUse);
        System.out.println("OwnerName      :"+ownerName);
    }

    public static void main(String args[])
    {
        Car c1=new Car();
        c1.setName("BMW");
        c1.setColor("White");
        c1.setModel("i8");
        c1.setYearOfuse(1);
        c1.setOwnerName("Dihan");
        System.out.println("Name          :"+c1.getName());
        System.out.println("Color          :"+c1.getColor());
        System.out.println("Model          :"+c1.getModel());
        System.out.println("YearOfUse       :"+c1.getYearOfUse());
        System.out.println("OwnerName      :"+c1.getOwnerName());

        Car c2 = new Car ("BMW" , "White" , "i8" , 1, "Dihan");
        c2.showInfo();
    }
}

```

PROBLEM 6

```

public class Building
{
    private String name;
    private String address;
    private double size;
    private String ownerName;
    private String engnieerName;
    private String permitNo;
    private String licenseNo;

    public void setName(String name) {

        this.name=name;
    }
    public void setAddress(String address) {

        this.address=address;
    }
    public void setSize(double size) {

        this.size=size;
    }
    public void setOwnerName(String ownerName) {

        this.ownerName=ownerName;
    }
}

```

```

public void setEngineerName(String engineerName) {

    this.engineerName=engineerName;
}
public void setPermitNo(String permitNo) {

    this.permitNo=permitNo;
}
public void setLicenseNo(String licenseNo) {

    this.licenseNo=licenseNo;
}
public String getName()
{
    return name;
}

public String getAddress()
{
    return address;
}

public double getSize()
{
    return size;
}

public String getOwnerName()
{
    return ownerName;
}
public String getEngineerName()
{
    return engineerName;
}
public String getPermitNo()
{
    return permitNo;
}
public String geLicenseNo()
{
    return licenseNo;
}
}

public Building(String name , String address , double size , String
ownerName, String engineerName, String permitNo, String licenseNo) {

    this.name=name;
    this.address=address;
    this.size=size;
    this.ownerName=ownerName;
    this.engineerName=engineerName;
    this.permitNo=permitNo;
    this.licenseNo=licenseNo;
}

public Building (){//This is an empty constructor

```

```
}
```

```
public void showInfo(){
    System.out.println("Name          :"+name);
    System.out.println("Address       :"+address);
    System.out.println("Model        :"+size);
    System.out.println("OwnerName    :"+ownerName);
    System.out.println("EngineerName :"+engineerName);
    System.out.println("PermitNo     :"+permitNo);
    System.out.println("LicenseNo    :"+licenseNo);
}
```

```
public static void main(String args[])
{
    Building b1=new Building();
    b1.setName("Royal");
    b1.setAddress("C-108");
    b1.setSize(50);
    b1.setOwnerName("Dihan");
    b1.setEngineerName("Imdad");
    b1.setPermitNo("4K209B");
    b1.setLicenseNo("200VC09");
    System.out.println("Name          :"+b1.getName());
    System.out.println("Address       :"+b1.getAddress());
    System.out.println("Size          :"+b1.getSize());
    System.out.println("OwnerName     :"+b1.getOwnerName());
    System.out.println("EngineerName  :"+b1.getEngineerName());
    System.out.println("PermitNo      :"+b1.getPermitNo());
    System.out.println("LicenseNo     :"+b1.getLicenseNo());

    Building b2 = new Building ("Royal", "C-108", 50, "Dihan",
    "Imdad", "4K209B", "200VC09");
    b2.showInfo();
}
}
```