

WEEK 8

1. Create a class FRUIT which has data members color, taste and price. Also create a method display() which will print values of FRUIT object. Create three objects of FRUIT class and call their display() methods.
2. Create a class FRUIT which has data members color, taste and price. It has a method setDetails() which will set the values of color, taste and price. Also create a method display() which will print values of FRUIT object.
3. In previous question, set the values of using color, taste and price using Constructor.
4. Add one-argument constructor and two-argument constructor in addition to default constructor in FRUIT class.
5. Use the concept of constructor-chaining in the previous question using this().

```
>Main.java   FRUIT.java
```

```
1 package week8_1;
2
3 public class FRUIT { 6 usages
4     private String color; 4 usages
5     private String taste; 4 usages
6     private double price; 4 usages
7
8     FRUIT(String color, String taste){ 2 usages
9         this.color = color;
10        this.taste = taste;
11        this.price = 0;
12    }
13    > FRUIT(String color) { this(color, taste: "Unknown"); }
14    FRUIT(){ 1 usage
15        color = "Unknown";
16        taste = "Unknown";
17        price = 0;
18    }
19
20
21    public void setDetails(String color, String taste, double price){ 3 usages
22        this.color = color;
23        this.taste = taste;
24        this.price = price;
25    }
26
27
28    public void display(){
29        System.out.println("Color : "+color);
30        System.out.println("Taste : "+taste);
31        System.out.println("Price : $" +price);
32    }
33}
```

WEEK 8

```
>Main.java  FRUIT.java
1 package week8_1;
2
3 public class Main {
4     public static void main(String[] args) {
5         FRUIT apple = new FRUIT( color: "Red", taste: "Sweet");
6         FRUIT banana = new FRUIT( color: "Yellow");
7         FRUIT grape = new FRUIT();
8
9         System.out.println("Apple:");
10        apple.display();
11        System.out.println("Banana:");
12        banana.display();
13        System.out.println("Grape:");
14        grape.display();
15
16        apple.setDetails( color: "Red", taste: "Sweet", price: 6.99);
17        banana.setDetails( color: "Yellow", taste: "Sweet", price: 3.99);
18        grape.setDetails( color: "Green", taste: "Sour", price: 5.99);
19
20        System.out.println("Apple:");
21        apple.display();
22        System.out.println("Banana:");
23        banana.display();
24        System.out.println("Grape:");
25        grape.display();
26    }
27 }
28 }
```

Apple:	Apple:
Color : Red	Color : Red
Taste : Sweet	Taste : Sweet
Price : \$0.0	Price : \$6.99
Banana:	Banana:
Color : Yellow	Color : Yellow
Taste : Unknown	Taste : Sweet
Price : \$0.0	Price : \$3.99
Grape:	Grape:
Color : Unknown	Color : Green
Taste : Unknown	Taste : Sour
Price : \$0.0	Price : \$5.99

6. Create a class CAR with the following details:

Data members: model, color, price.

Member methods:

setDetails() – to set values of all data members using setters.

getDetails() – to get values of all data members using getters.

display() – to print all details of the car.

WEEK 8

Requirements:

1. Implement default constructor to initialize default values.
2. Implement a parameterized constructor (with one argument) to set only model.
3. Implement another parameterized constructor (with two arguments) to set model and color.
4. Use constructor chaining to reduce code redundancy.
5. Create three objects of CAR class using:
 - Default constructor
 - One-argument constructor
 - Two-argument constructor
6. Set price for each object using the setDetails() method.
7. Call the display() method for each object.

```
>Main.java   CAR.java ×
1 package week8_2;
2
3 public class CAR { 6 usages
4     private String color; 4 usages
5     private String model; 4 usages
6     private double price; 4 usages
7
8     CAR(String color, String model){ 2 usages
9         this.color = color;
10        this.model = model;
11        this.price = 0;
12    }
13    > CAR(String color) { this(color, model: "Unknown"); }
14    CAR(){ 1 usage
15        color = "Unknown";
16        model = "Unknown";
17        price = 0;
18    }
19
20    public void setDetails(String color, String model, double price){ 3 usages
21        this.color = color;
22        this.model = model;
23        this.price = price;
24    }
25
26    public void getDetails() { display(); }
27
28    > public void display(){
29        System.out.println("Color : "+color);
30        System.out.println("Model : "+ model);
31        System.out.println("Price : $" +price);
32    }
33
34 }
```

WEEK 8

```
© Main.java × © CAR.java
1 package week8_2;
2
3 ▷ public class Main {
4 ▷     public static void main(String[] args) {
5         CAR porsche = new CAR( color: "White", model: "911 GT3 RS");
6         CAR mercedes = new CAR( color: "Navy");
7         CAR ferrari = new CAR();
8
9         System.out.println("Porsche:");
10        porsche.getDetails();
11        System.out.println("Mercedes:");
12        mercedes.getDetails();
13        System.out.println("Ferrari:");
14        ferrari.getDetails();
15
16        porsche.setDetails( color: "White", model: "911 GT3 RS", price: 100000);
17        mercedes.setDetails( color: "Navy", model: "1986 S Class", price: 150000);
18        ferrari.setDetails( color: "Red", model: "F40", price: 200000);
19
20        System.out.println("Porsche:");
21        porsche.display();
22        System.out.println("Mercedes:");
23        mercedes.display();
24        System.out.println("Ferrari:");
25        ferrari.display();
26    }
27 }
28
```

Porsche:
Color : White
Model : 911 GT3 RS
Price : \$0.0
Mercedes:
Color : Navy
Model : Unknown
Price : \$0.0
Ferrari:
Color : Unknown
Model : Unknown
Price : \$0.0

Porsche:
Color : White
Model : 911 GT3 RS
Price : \$100000.0
Mercedes:
Color : Navy
Model : 1986 S Class
Price : \$150000.0
Ferrari:
Color : Red
Model : F40
Price : \$200000.0