

Java main

BoxDemo.java

```
1 class Box { // 2310080053 2 usages
2     double width; 2 usages
3     double height; 2 usages
4     double depth; 2 usages
5 }
6
7 public class BoxDemo {
8     public static void main(String[] args) {
9         Box myBox = new Box();
10        double vol;
11
12        // Giving value to myBox instance variables
13        myBox.width = 10;
14        myBox.height = 20;
15        myBox.depth = 15;
16
17        // Finding the volume of the box

```

Run BoxDemo

```
"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea_rt.jar=
The volum of box is 3000.0

```

Java > BoxDemo.java > Box > depth

4:18 CRLF UTF-8 4 spaces

Java main

BoxDemo.java BoxDemo2.java

1

class MyBox { 4 usages

2

double width; 4 usages

3

double height; 4 usages

4

double depth; 4 usages

5

}

6

7 ▶ public class BoxDemo2 {

8 ▶ public static void main(String[] args) {

9

MyBox mybox1 = new MyBox();

10

MyBox mybox2 = new MyBox();

11

double vol;

12

13 // Giving value to mybox1 instance variables

14 mybox1.width = 10;

Run BoxDemo2

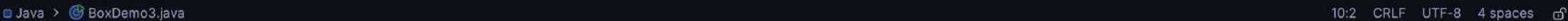
"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea\_rt.jar=

The volume of box1 is 3000.0

The volume of box1 is 162.0

Process finished with exit code 0

Java > BoxDemo2.java > BoxDemo2 > main



Java main

BoxDemo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java

1

class MyBox2 { 4 usages

2

double width; 3 usages

3

double height; 3 usages

4

double depth; 3 usages

5

6

double volume() { 2 usages

7

return width\*height\*depth;

8

}

9

}

10

public class BoxDemo4 {

11

public static void main(String[] args) {

12

MyBox2 mybox1 = new MyBox2();

13

MyBox2 mybox2 = new MyBox2();

14

double vol:

Run BoxDemo4

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea\_rt.jar=

The volume of box1 is 3000.0

The volume of box2 is 162.0

Process finished with exit code 0

Java > BoxDemo4.java > MyBox2 > volume

6:22 CRLF UTF-8 4 spaces



Java main

Current File

BoxDemo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java BoxDemo5.java

1

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15

class MyBox3 { 4 usages

double width; 2 usages

double height; 2 usages

double depth; 2 usages

double volume() { 2 usages

return width\*height\*depth;

}

void setDim(double w, double h, double d) { 2 usages

width = w;

height = h;

depth = d;

}

}

public class BoxDemo5 {

Run BoxDemo5

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea\_rt.jar=

The volume of box1 is 3000.0

The volume of box2 is 162.0

Process finished with exit code 0

Java > BoxDemo5.java 14:2 CRLF UTF-8 4 spaces

Java main

BoxDemo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java BoxDemo5.java BoxDemo6.java

```
16 }
17 public class BoxDemo6 {
18     public static void main(String[] args) {
19         MyBox4 mybox1 = new MyBox4();
20         MyBox4 mybox2 = new MyBox4();
21         double vol;
22
23         // Calling the volume of the box 1
24         vol = mybox1.volume();
25         System.out.println("The volume of box1 is " + vol);
26         // Calling the volume of the box 2
27         vol = mybox2.volume();
28         System.out.println("The volume of box2 is " + vol);

```

Run BoxDemo6

```
"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea_rt.jar=
Constructing Box...
Constructing Box...
The volume of box1 is 3000.0
The volume of box2 is 3000.0

Process finished with exit code 0

```

Java > BoxDemo6.java > BoxDemo6 > main 19:36 CRLF UTF-8 4 spaces

Java main

Current File

BoxDemo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java BoxDemo5.java BoxDemo6.java BoxDemo7.java

1 class MyBox5 { 4 usages

5 MyBox5(double w, double h, double d) { 2 usages

6 width = w;

7 height = h;

8 depth = d;

9 }

10 double volume() { 2 usages

11 return width\*height\*depth;

12 }

13 }

14 public class BoxDemo7 {

15 public static void main(String[] args) {

16 MyBox5 mybox1 = new MyBox5( w: 10, h: 20, d: 15);

17 MyBox5 mybox2 = new MyBox5( w: 2, h: 6, d: 9);

18 double vol =

Run BoxDemo7

Run

BoxDemo7

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea\_rt.jar=

The volume of box1 is 3000.0

The volume of box2 is 108.0

Process finished with exit code 0

Java > BoxDemo7.java > BoxDemo7 > main

16:48 CRLF UTF-8 4 spaces

Java main

Current File

BoxDemo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java BoxDemo5.java BoxDemo6.java BoxDemo7.java Overloading.java

4

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21

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```
public class Overloading {  
    public static void main(String[] args) {  
        OverloadingDemo ob = new OverloadingDemo();  
  
        ob.test();  
        ob.test(a: 12);  
        ob.test(a: 10, b: 12);  
        double ans = ob.test(a: 12.2);  
        System.out.println("Result of ob.test(12.2) is " + ans);  
    }  
}
```

Run Overloading

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea\_rt.jar=  
No Parameters  
a: 12  
a: 10 b: 12  
double a: 12.2  
Result of ob.test(12.2) is 148.83999999999997  
Process finished with exit code 0

Java > Overloading.java > OverloadingDemo > test 11:44 CRLF UTF-8 4 spaces



emo.java BoxDemo2.java BoxDemo3.java BoxDemo4.java BoxDemo5.java BoxDemo6.java BoxDemo7.java Overloading.java ConstructorOverloading.java

24

25

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28

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30

31

32

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34

35

36

37

```
public class ConstructorOverloading {  
    public static void main(String[] args) {  
        ConsOverloadingDemo mybox1 = new ConsOverloadingDemo(width: 10, height: 20, depth: 15);  
        ConsOverloadingDemo mybox2 = new ConsOverloadingDemo();  
        ConsOverloadingDemo mybox3 = new ConsOverloadingDemo(len: 10);  
        double vol;  
        //Volume of first box  
        vol = mybox1.volume();  
        System.out.println("The Volume of box 1 is " + vol);  
        //Volume of Second box  
        vol = mybox2.volume();  
        System.out.println("The Volume of box 2 is " + vol);  
        //Volume of Third box
```

Run ConstructorOverloading

```
"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:D:\IntelliJ IDEA 2024.1.4\lib\idea_rt.jar:  
The Volume of box 1 is 3000.0  
The Volume of box 2 is -1.0  
The Volume of box 3 is 1000.0  
  
Process finished with exit code 0
```

Java > ConstructorOverloading.java > ConstructorOverloading > main 29:66 CRLF UTF-8 4 spaces