

Aim :- Create, debug and run Java program based on constructor overloading

Theory :-

Constructor overloading in Java

In Java, a constructor is just like a method but without return type. It can also be overloaded like Java method.

Constructor overloading in Java is a technique of having more than one constructor with different parameter lists. They are arranged in a way that each constructor performs a different task. They are differentiated by the number of parameters in the lists and their types.

Program :-

```
class Box {  
    double width, height, depth;  
    Box (double w, double h, double d) {  
        width = w;  
        height = h;  
        depth = d;  
    }  
    Box (double len) {  
        width = height = depth = len;  
    }  
    double volume () {  
        return width * height * depth;  
    }  
}
```

```
public class practicals {  
    public static void main (String args []) {  
        Box b1 = new Box (5);  
        Box b2 = new Box ();  
        Box c1 = new Box (10);  
        Box b3 = new Box (12, 14, 16);  
  
        double vol;  
        vol = b1.volume ();  
        System.out.println ("Volume of Box 1 is " + vol);  
    }  
}
```



```
    val = b2.volume ();  
    System.out.println (" Volume of Box 2 is " + val);  
    val = b3.volume ();  
    System.out.println (" Volume of Box 3 is " + val);  
    val = c1.volume ();  
    System.out.println (" Volume of Cube is " + val);
```

```
}  
}
```

Conclusion:- Hence, we create and run program on constructor overloading.

```
C:\Users\Public\Java\Practicals>javac practical8.java
```

```
C:\Users\Public\Java\Practicals>java practical8
```

```
Volume of box 1 is 2688.0
```

```
Volume of box 2 is 0.0
```

```
Volume of box 3 is 1000.0
```

```
Volume of cube is 125.0
```

```
C:\Users\Public\Java\Practicals>
```