```
// This program uses inheritance to extend Box.
class Box {
	double width;
	double height;
	double depth;
	// construct clone of an object
	Box(Box ob) { // pass object to constructor
		width = ob.width;
		height = ob.height;
		depth = ob.depth;
	}
	// constructor used when all dimensions specified
	Box(double w, double h, double d) {
		width = w;
		height = h;
		depth = d;
	}
	// constructor used when no dimensions specified
	Box() {
		width = -1; // use -1 to indicate
		height = -1; // an uninitialized
		depth = -1; // box
	}
	// constructor used when cube is created
	Box(double len) {
		width = height = depth = len;
	}
```

```
        // compute and return volume
        double volume() {
                return width * height * depth;
        }
}


// Here, Box is extended to include weight.
class BoxWeight extends Box {
        double weight; // weight of box

        // constructor for BoxWeight

        BoxWeight(double w, double h, double d, double m) {
                width = w;
                height = h;
                depth = d;
                weight = m;
        }
}
class DemoBoxWeight {
        public static void main(String args[]) {
                BoxWeight mybox1 = new BoxWeight(10, 20, 15, 34.3);
                BoxWeight mybox2 = new BoxWeight(2, 3, 4, 0.076);
                double vol;
                vol = mybox1.volume();
                System.out.println("Volume of mybox1 is " + vol);
                System.out.println("Weight of mybox1 is " + mybox1.weight);
```

```
                System.out.println();
                vol = mybox2.volume();
                System.out.println("Volume of mybox2 is " + vol);
                System.out.println("Weight of mybox2 is " + mybox2.weight);
        }
}
```

The output from this program is shown here:

```
Volume of mybox1 is 3000.0
Weight of mybox1 is 34.3
Volume of mybox2 is 24.0
Weight of mybox2 is 0.076
```