```
class Box {
        private double width;
        private double height;
        private 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;
        }
}


// Add weight.
class BoxWeight extends Box {
        double weight; // weight of box
        // construct clone of an object
        BoxWeight(BoxWeight ob) { // pass object to constructor
            super(ob);
            weight = ob.weight;
        }
        // constructor when all parameters are specified
        BoxWeight(double w, double h, double d, double m) {
            super(w, h, d); // call superclass constructor
            weight = m;
        }
        // default constructor
        BoxWeight() {
            super();
```

```
            weight = -1;
        }


        // constructor used when cube is created
        BoxWeight(double len, double m) {
            super(len);
            weight = m;
        }
}

// Add shipping costs.

class Shipment extends BoxWeight {
        double cost;
        // construct clone of an object
        Shipment(Shipment ob) { // pass object to constructor
            super(ob);
            cost = ob.cost;
        }
        // constructor when all parameters are specified
        Shipment(double w, double h, double d,
            double m, double c) {
            super(w, h, d, m); // call superclass constructor
            cost = c;
```

```
        }
        // default constructor
        Shipment() {
                super();
                cost = -1;
        }
        // constructor used when cube is created
        Shipment(double len, double m, double c) {
                super(len, m);
                cost = c;
        }
}


class DemoShipment {
        public static void main(String args[]) {
                Shipment shipment1 =
                new Shipment(10, 20, 15, 10, 3.41);
                Shipment shipment2 =
                new Shipment(2, 3, 4, 0.76, 1.28);
                double vol;
                vol = shipment1.volume();
                System.out.println("Volume of shipment1 is " + vol);
                System.out.println("Weight of shipment1 is "
```

```
            + shipment1.weight);
            System.out.println("Shipping cost: $" + shipment1.cost);
            System.out.println();

            vol = shipment2.volume();
            System.out.println("Volume of shipment2 is " + vol);
            System.out.println("Weight of shipment2 is "
            + shipment2.weight);
            System.out.println("Shipping cost: $" + shipment2.cost);
        }
}
```

The output of this program is shown here:

```
Volume of shipment1 is 3000.0
Weight of shipment1 is 10.0
Shipping cost: $3.41
Volume of shipment2 is 24.0
Weight of shipment2 is 0.76
Shipping cost: $1.28
```