**Code:**

**class** Box {

**double** length;

**double** width;

**double** height;

// Default constructor

Box() {

length = -1;

width = -1;

height = -1;

}

// Parameterized constructor

Box(**double** len, **double** wid, **double** hgt) {

length = len;

width = wid;

height = hgt;

}

// Copy constructor

Box(Box ob) {

length = ob.length;

width = ob.width;

height = ob.height;

}

Box(**double** len)

{

width=height=length=len;

}

// Method to calculate volume

**double** volume() {

**return** length \* width \* height;

}

}

// Define the BoxWeight class that extends Box

**class** BoxWeight **extends** Box {

**double** weight;

// Default constructor

BoxWeight() {

**super**();

weight = -1;

}

// Parameterized constructor

BoxWeight(**double** len, **double** wid, **double** hgt, **double** wt) {

**super**(len, wid, hgt);

weight = wt;

}

// Copy constructor

BoxWeight(BoxWeight ob) {

**super**(ob);

weight = ob.weight;

}

BoxWeight(**double** len, **double** wt)

{

**super**(len);

weight=wt;

}

}

// Define the Shipment class that extends BoxWeight

**class** Shipment **extends** BoxWeight {

**double** cost;

// Default constructor

Shipment() {

**super**();

cost = -1;

}

// Parameterized constructor

Shipment(**double** len, **double** wid, **double** hgt, **double** wt, **double** c) {

**super**(len, wid, hgt, wt);

cost = c;

}

// Copy constructor

Shipment(Shipment ob) {

**super**(ob);

cost = ob.cost;

}

Shipment(**double** len, **double** wt, **double** c)

{

**super**(len,wt);

cost=c;

}

}

**public** **class** BoxClassApplication

{

**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);

}

}