**JAVA TEST (30.07.2024)**

**CREATE BOX CLASS WITH DATA MEMBERS HEIGHT WIDTH DEPTH INCLUDE VOLUME METHOD AND CREATE SUBCLASSES BOX WEIGHT IT HAS DATA MEMBER WEIGHT SHIPMENT ONE DATA MEMBER CALLED COST`CALCULATE THE VOLUME OF THE BOX**

class Box {

protected double height;

protected double width;

protected double depth;

public Box(double height, double width, double depth) {

this.height = height;

this.width = width;

this.depth = depth;

}

public double calculateVolume() {

return height \* width \* depth;

}

public void displayBoxDetails() {

System.out.println("Box dimensions:");

System.out.println("Height: " + height);

System.out.println("Width: " + width);

System.out.println("Depth: " + depth);

System.out.println("Volume: " + calculateVolume());

}

}

class BoxWeight extends Box {

private double weight;

public BoxWeight(double height, double width, double depth, double weight) {

super(height, width, depth);

this.weight = weight;

}

public void displayWeightDetails() {

displayBoxDetails();

System.out.println("Weight: " + weight);

}

}

class Shipment extends Box {

private double cost;

public Shipment(double height, double width, double depth, double cost) {

super(height, width, depth);

this.cost = cost;

}

public void displayShipmentDetails() {

displayBoxDetails();

System.out.println("Cost: " + cost);

}

}

public class Main {

public static void main(String[] args) {

BoxWeight boxWeight = new BoxWeight(10, 5, 2, 15.5);

boxWeight.displayWeightDetails();

System.out.println();

Shipment shipment = new Shipment(10, 5, 2, 20.0);

shipment.displayShipmentDetails();

}

}

