**TASK-08(A)-13N119**

Point.java

```java
package com;

public class Point {
	private int x;
	private int y;
	public double axis;


	public int getX() {
		return x;
	}

	public void setX(int x) {
		this.x = x;
	}

	public int getY() {
		return y;
	}

	public void setY(int y) {
		this.y = y;
	}

	public Point(int x, int y) {
		super();
		this.x = x;
		this.y = y;
	}

	public Point() {
		super();
		this.x = 0;
		this.y = 0;
	}

	public double distance() {
		return this.distance(0,0);
	}

	public double distance(int axis) {
		return this.distance(axis,axis);
	}

	public double distance(Point another) {
		return this.distance(another.x,another.y);
	}

	public double distance(int x,int y) {
		return Math.sqrt ((x-this.x) * (x-this.x) + (y-this.y) * (y-this.y));
```

```
	}

	@Override
	public String toString() {
		return "Point is "+"(" + x + ","+ y +" ) ";
	}



}
```

Line.java

```
package com;

public class Line {
	private Point begin;
	private Point end;

	private Point[] point;
	//Point point = new Point();

	public Line(int x1, int x2, int y1, int y2) {
		super();
		this.begin = new Point(x1,y1);
		this.end = new Point(x2,y2);

	}
	public Line(Point begin, Point end) {
		super();
		this.begin = begin;
		this.end = end;
	}
	public Point getBegin() {
		return begin;
	}
	public void setBegin(Point begin) {
		this.begin = begin;
	}
	public Point getEnd() {
		return end;
	}
	public void setEnd(Point end) {
		this.end = end;
	}
	public Point[] getPoint() {
		return point;
	}
	public void setPoint(Point[] point) {
		this.point = point;
	}
```

```
	public int getBeginX(){
		return this.begin.getX();
		}

	public void setBeginX(int x){
		this.begin.setX(x);
	}

	public int getBeginY(){
		return this.begin.getY();
	}

	public void setBeginY(int y){
		this.begin.setY(y);
	}


	public int getEndBeginX(){
		return end.getX();
	}

	public void setEndX(int x){
		this.end.setX(x);
	}

	public int getEndY(){
		return end.getY();
	}

	public void setEndY(int y){
		this.end.setY(y);
	}

	public double getLength() {
		return begin.distance(end);

	}

}
```

Solution.java

```
package org;

import com.Line;
import com.Point;

public class Solution {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Point point[];
		point = new Point[2];
```

```
		point[0] = new Point(3,5);
		point[1] = new Point(4,6);
		Line line = new Line(3,5,4,6);
		System.out.println(line.getLength());

	}

}
```

**TASK-08(B)-13N119**

Point.java

```
package pt;
public class Point {
	private int x;
	private int y;
	public Point(int x, int y) {
		super();
		this.x = x;
		this.y = y;
	}
	public Point() {
		super();
	}
	public int getX() {
		return x;
	}
	public void setX(int x) {
		this.x = x;
	}
	public int getY() {
		return y;
	}
	public void setY(int y) {
		this.y = y;
	}

	public String toString() {
		return "GIVEN POINT IS "+"(" + x + ","+ y;

	}

}
```

Point3D.java

```
package pt;

public class Point3D extends Point {
	private int z;
```

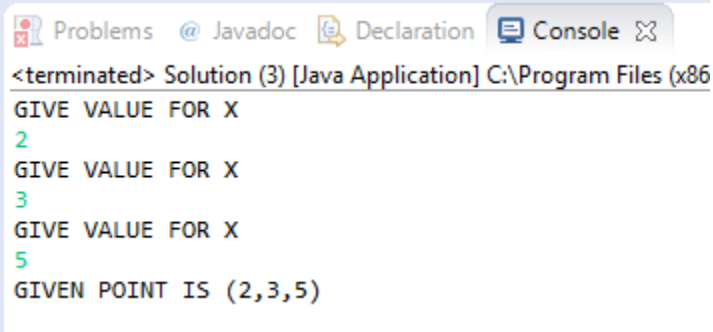
```
	public Point3D() {
		super();
	}

	public Point3D(int x, int y, int z) {
		super(x, y);
		this.z = z;
	}

	public int getZ() {
		return z;
	}

	public void setZ(int z) {
		this.z = z;
	}

	@Override
	public String toString() {
		// TODO Auto-generated method stub
		return super.toString() +","+ z +")";
	}



}
```

Solution.java

```
package org;

import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;


import pt.Point3D;

public class Solution {
	public static void main(String args[]) throws IOException {

	BufferedReader bf = new BufferedReader(new InputStreamReader(System.in));
	System.out.println("GIVE VALUE FOR X");
	int x = Integer.parseInt(bf.readLine());
	System.out.println("GIVE VALUE FOR X");
	int y = Integer.parseInt(bf.readLine());
	System.out.println("GIVE VALUE FOR X");
	int z = Integer.parseInt(bf.readLine());
	Point3D point = new Point3D(x,y,z);
	//String s = toString();
	System.out.println(point.toString());
	//return s;
}
```

}

OUTPUT




**TASK-08(C)-13N119**

Point.java

```
package pt;

public class Point {
	private int x;
	private int y;

	public int getX() {
		return x;
	}

	public void setX(int x) {
		this.x = x;
	}

	public int getY() {
		return y;
	}

	public void setY(int y) {
		this.y = y;
	}

	public Point(int x, int y) {
		super();
		this.x = x;
		this.y = y;
	}

	public Point() {
		super();
	}
```

```
	public double distance(Point another) {
		return this.distance(another.x,another.y);
	}


	public double distance(int x,int y) {
		return Math.sqrt ((x-this.x) * (x-this.x) + (y-this.y) * (y-this.y));
	}


}
```

LineSub.java

```
package pt;

public class LineSub extends Point {
	private Point begin;
	private Point end;
	public LineSub(int begin, int end) {
		super(begin,end);

	}

	public LineSub(int x1,int x2,int y1,int y2) {
		super();
		begin = new Point(x1,y1);
		end = new Point(x2,y2);
	}

	public Point getBegin() {
		return begin;
	}

	public void setBegin(Point begin) {
		this.begin = begin;
	}

	public Point getEnd() {
		return end;
	}

	public void setEnd(Point end) {
		this.end = end;
	}

	public int getBeginX(){
		return this.begin.getX();
		}

	public void setBeginX(int x){
		this.begin.setX(x);
```

```
	}

	public int getBeginY(){
		return this.begin.getY();
	}

	public void setBeginY(int y){
		this.begin.setY(y);
	}

	public int getEndBeginX(){
		return end.getX();
	}

	public void setEndX(int x){
		this.end.setX(x);
	}

	public int getEndY(){
		return end.getY();
	}

	public void setEndY(int y){
		this.end.setY(y);
	}

	public double getLength() {
		return begin.distance(end);

	}

	@Override
	public String toString() {
		return "DISTANCE BETWEEN TWO POINTS IS " +getLength();
	}



}
```

Solution.java

```
package org;

import pt.LineSub;
import pt.Point;

public class Solution {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		//Point point = new Point();
		LineSub line = new LineSub(4,2,3,5);
```

```
            //String s = toString();
            line.getLength();
            System.out.println(line.toString());
        }

}
```

OUTPUT