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Client.java

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```
package calculS;

import java.rmi.Naming;

public class Client {
    public static void main(String args[]) throws Exception {
        Geometrie obj = (Geometrie)Naming.lookup( "//localhost/RmiServer" );
        Point p1 = new PointImpl(0, 0);
        Point p2 = new PointImpl(4, 6);
        float d1 = obj.distance(p1);
        float d2 = obj.distance(p2);

        System.out.println(d1);
        System.out.println(d2);

        obj.deplace(p1, 1, 1);
        obj.deplace(p2, -4, -6);

        d1 = obj.distance(p1);
        d2 = obj.distance(p2);

        System.out.println(d1);
        System.out.println(d2);

        /* affiche
           0.0
           7.2111025
           0.0
           7.2111025
        */
    }
}
```

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GeometriImpl.java

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```

package calculS;

import java.rmi.RemoteException;
import java.rmi.server.UnicastRemoteObject;
import java.lang.Math;
import java.rmi.registry.*;
import java.rmi.Naming;
import java.rmi.server.RemoteServer;

public class GeometriImpl extends UnicastRemoteObject implements Geometrie {

    public float distance(Point p) throws java.rmi.RemoteException {
        return (float) Math.sqrt(p.getX() * p.getX() + p.getY() * p.getY());
    }

    public void deplace(Point p, float dx, float dy) throws java.rmi.RemoteException {
        p.setX(p.getX() + dx);
        p.setY(p.getY() + dy);
    }

    public GeometrieImpl() throws RemoteException {
        super();
    }

    public static void main(String args[]) throws Exception {
        System.out.println("RMI server started");

        try { //special exception handler for registry creation
            LocateRegistry.createRegistry(1099);
            System.out.println("java RMI registry created.");
        } catch (RemoteException e) {
            //do nothing, error means registry already exists
            System.out.println("java RMI registry already exists.");
        }

        //Instantiate RmiServer
        GeometrieImpl obj = new GeometrieImpl();

        // Bind this object instance to the name "RmiServer"
        Naming.rebind("//localhost/RmiServer", obj);
        System.out.println("PeerServer bound in registry");
    }
}

```

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Geometrie.java

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```
package calculS;

import java.rmi.Remote;
import java.rmi.RemoteException;

public interface Geometrie extends Remote {
    //calcul de la distance   l'origine
    float distance(Point p) throws java.rmi.RemoteException;

    //d  place, c'est   dire modifie les coordonn  es du point p
    void deplace(Point p, float dx, float dy) throws java.rmi.RemoteException;
}
```

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PointImpl.java

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```
package calculS;

public class PointImpl implements Point {
    private float x;
    private float y;

    public float getX() {
        return x;
    }

    public float getY() {
        return y;
    }

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

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

    public PointImpl(float x, float y) {
        this.x = x;
        this.y = y;
    }

    public PointImpl() {
        this.x = 0;
        this.y = 0;
    }
}
```

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Point.java

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```
package calculS;  
  
import java.io.Serializable;  
  
public interface Point extends Serializable {  
    public float getX();  
    public float getY();  
    public void setX(float x);  
    public void setY(float y);  
}
```