TASK 04

Point.java

```
import java.util.*;
 class Point {
   int x,x1;
   int y,y1;
   int axis;
   public double res;
   public Point() {
      this.x = 0;
      this.y = 0;

   }
   Point(int axis) {
      this.axis = axis;

   }

   Point(int x1,int y1) {
      this.x1 = x1;
      this.y1 = y1;
      //System.out.println(toString());
   }

   void setXY(int x,int y) {
      this.x = x;
      this.y = y;
   }

      public double distance() {
      int x1 = 0;
```

```
    int y1 =0;
    res = Math.sqrt (((x-x1)*(x-x1)) + ((y-y1)*(y-y1)));
    return res;


}

public double distance(int axis) {

    res = Math.sqrt (((x-axis)*(x-axis)) + ((y-axis)*(y-axis)));
    return res;


}


public double distance(int x1,int y1) {
    res = Math.sqrt (((this.x-x1)*(this.x-x1)) + ((this.y-y1)*(this.y-y1)));
    return res;




}


public  String toString(){

    return("DISTANCE BETWEEN THE POINTS ("+x+","+ y+") AND ("+x1+","+ y1+") IS ..."+res);
}
```

```
  }
```

Psolution.java

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

 class Psolution {
   public static void main(String args[]) throws IOException {
      BufferedReader bf = new BufferedReader(new InputStreamReader(System.in));
      Point point = new Point();
      point.x = 3;
      point.y = 2;

      //point read
      //x = Integer.parseInt(bf.readLine());
      //y = Integer.parseInt(bf.readLine());
      System.out.println("1.DISTANCE FROM POINT(0,0)");
      System.out.println("2.DISTANCE FROM POINT(X)");
      System.out.println("3.DISTANCE FROM POINT(X,Y)");
      int choice = Integer.parseInt(bf.readLine());

      switch(choice) {
      case 1:
         //double res = Double.parseDouble(bf.readLine());
         //double res;
         //point.distance();
         System.out.println("DISTANCE IS .."+point.distance());
         break;
      case 2:
         System.out.println("GIVE VALUE OF AXIS");
```

```
        int axis = Integer.parseInt(bf.readLine());
        System.out.println("DISTANCE IS .."+point.distance(axis));
        break;
    case 3:
         System.out.println("GIVE THE POINT");
        int x1 = Integer.parseInt(bf.readLine());
        int y1 = Integer.parseInt(bf.readLine());
        point = new Point(x1,y1);
        double d=point.distance(x1,y1);
        System.out.print(point.toString());
        break;
    default:System.out.println("INVALID SELECTION");
    break;
          }

     }
  }
```

OUTPUT