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/* 1次関数ラーニング */

import java.io.*;

public class learning20181223
{
	public static void main(String args[])
	{
		try{
			InputStreamReader isr = new InputStreamReader(System.in);
			BufferedReader br = new BufferedReader(isr);
			String buf = null;

			System.out.print("入力1:");
			buf = br.readLine();
			double x1 = Double.parseDouble(buf);
			System.out.print("出力1:");
			buf = br.readLine();
			double y1 = Double.parseDouble(buf);
			System.out.print("入力2:");
			buf = br.readLine();
			double x2 = Double.parseDouble(buf);
			System.out.print("出力2:");
			buf = br.readLine();
			double y2 = Double.parseDouble(buf);

			/* y1 = a * x1 + b */
			/* y2 = a * x2 + b */
```

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double a = 0;
double b = 0;

if((x1) == 0){
    b = (y1);
    if((x2) == 0){
        if((y2) == y1){
            System.out.println("x = 0, y = " + (y1));
        }else{
            System.out.println("x = 0");
        }
    }else{
        a = ((y2) - (b)) / (x2);
        if((y1) == (y2)){
            System.out.println("y = " + (b));
        }else{
            System.out.println("y = " + (a) + "x + " + (b));
        }
    }
}else{
    /* y1 = a * x1 + b */
    /* y2 = a * x2 + b */
    /* a * x1 - y1 = a * x2 - y2 */
    /* a * (x1 - x2) = y1 - y2 */

    if((x1) == (x2)){
        if((y1) == (y2)){
            System.out.println("x = " + (x1) + ", y = " + (y1));
```

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                    }
                    else{
                        System.out.println("x = " + (x1));
                    }
                }else{
                    a = ((y1) - (y2)) / ((x1) - (x2));
                    b = (y1) - ((a) * (x1));
                    if((y1) == (y2)){
                        System.out.println("y = " + (y1));
                    }else if((b) == 0){
                        System.out.println("y = " + (a) + "x");
                    }else{
                        System.out.println("y = " + (a) + "x + " + (b));
                        System.out.print("入力3:");
                        buf = br.readLine();
                        double x3 = Double.parseDouble(buf);
                        double y3 = (a) * (x3) + (b);
                        System.out.println("出力3 = " + (y3));
                    }
                }
            }
        }catch(IOException e){
            System.out.println("例外" + e + "が発生しました");
        }

        return;
    }
}
```