Informe

Aplicación para resolver una ecuación cuadrática

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Codigo:

Main:

```
/*

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 */

package ecuacionaraylist;


import java.util.ArrayList;

import java.util.Scanner;


/**

 *

 * @author labctr

 */

public class EcuacionArayList {


  /**

   * @param args the command line arguments

   */

  public static void main(String[] args) {

    Ecuacion ec = new Ecuacion();

    Scanner leer = new Scanner(System.in);


    System.out.println("aX^2+bX+c=Y");
```

```java
        int a, b, c;


        System.out.print("Ingrese el termino a: ");
        a = leer.nextInt();
        System.out.print("Ingrese el termino b: ");
        b = leer.nextInt();
        System.out.print("Ingrese el termino c: ");
        c = leer.nextInt();


        ec.cargar(a, b, c);
        ArrayList<Coordenada> tabla=ec.tabla();


        System.out.println("x\ty");
        for(Coordenada punto:tabla){
            System.out.println(punto.getX()+"\t"+punto.getY());
        }


    }

}
```

Ecuacion.java:

```java
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 */
package ecuacionaraylist;


import java.util.ArrayList;
```

```java
/**
 *
 * @author labctr
 */
public class Ecuacion {

    private int a;
    private int b;
    private int c;

    public void cargar(int a, int b, int c) {
        this.a = a;
        this.b = b;
        this.c = c;
    }

    public ArrayList<Coordenada> tabla() {
        ArrayList<Coordenada> r = new ArrayList<>();

        int i;

        for (i = (-10); i <= 10; i++) {
            Coordenada cord = new Coordenada();
            cord.setX(i);
            cord.setY(this.a * i * i + this.b * i + this.c);
            r.add(cord);

        }

        return r;
```

```
    }
}
```

Cordenada.java:

```java
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 */
package ecuacionaraylist;

/**
 *
 * @author labctr
 */
public class Coordenada {
    private double x;
    private double y;

    public double getX() {
        return x;
    }

    public double getY() {
        return y;
    }

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

```
    public void setY(double y) {

        this.y = y;

    }

}
```

Caso de prueba:

```
run:
aX^2+bX+c=Y
Ingrese el termino a: 2
Ingrese el termino b: 4
Ingrese el termino c: -5
x        y
-10.0    155.0
-9.0     121.0
-8.0     91.0
-7.0     65.0
-6.0     43.0
-5.0     25.0
-4.0     11.0
-3.0     1.0
-2.0     -5.0
-1.0     -7.0
0.0      -5.0
1.0      1.0
2.0      11.0
3.0      25.0
4.0      43.0
5.0      65.0
6.0      91.0
7.0      121.0
8.0      155.0
9.0      193.0
10.0     235.0
BUILD SUCCESSFUL (total time: 1 minute 24 seconds)
```