Task1

PART 1: Problem Description: The Distance Between two Points

Point is Represented By coordinates: The x-coordinate of point & the y-coordinate of point



 X_A means the x-coordinate of point A

1. The Distance Between the two points is:

$$c = \sqrt{(x_{\rm A} - x_{\rm B})^2 + (y_{\rm A} - y_{\rm B})^2}$$

Design a class, name it POINT that represents a Point as defined above.

	Data Member	
1	х	Int : represent The x-coordinate of point
2	у	Int : represent The y-coordinate of point
		Methods
1	POINT(String)	 Add Constructor: 1. recive a string that represent a point 2. check if the string represent a point format as (x,y) then split the text to get the values of x & y
2	Distance(POINT P2)	$\sqrt{(x_{\rm A} - x_{\rm B})^2 + (y_{\rm A} - y_{\rm B})^2}$

PART 2: Build a simple windows form that

- 1. Allow the user to insert two POINTS, the user have to insert values in this format :(x1,y1)(x2,y2) and have to be notified if not. For Example: POINTS: (-9,7) (-3,-2)
- 2. Split string that inserted based on the following delimiters:{'(', ')', ' ','\t'}
- 3. Each item generated after the split have to be represent a coordinate

The x-coordinate of point 1 = -9. The y-coordinate of point 1 = 7. The x-coordinate of point 2 = -3. The y-coordinate of point 2 = -2.

