

Function called "count_rectangles" takes a list of points as its input and returns the number of rectangles that can be formed using those points.

It first initializes the number_of_points variable with the length of the input list, and creates an empty dictionary called y_coordinates_count and sets the number_of_rectangles to 0. Then it uses two nested for loops in order to iterate through each pair of points in the input list. For each pair of points, it saves the x and y coordinates of the first point, and then checks if the y coordinate of the second point is greater than the y coordinate of the first point and if the x coordinate of the second point is equal to the x coordinate of the first point. If this condition is met, it means that the two points form the vertical sides of a rectangle.

Then it checks the y_coordinates_count dictionary to see if there are any previously encountered points that could form the horizontal sides of a rectangle with the current pair of points. If there are, it adds the number of such points to the number_of_rectangles variable because it means that they form a rectangle.

It updates the y_coordinates_count dictionary with the current pair of points, and finally, it returns the number of rectangles.