

## Programming 4

Question 4 is in the folder *Programming4*, you can run the *.pynb* file with *python == 3.8* and packages *numpy* and *matplotlib*

Results are as follows:

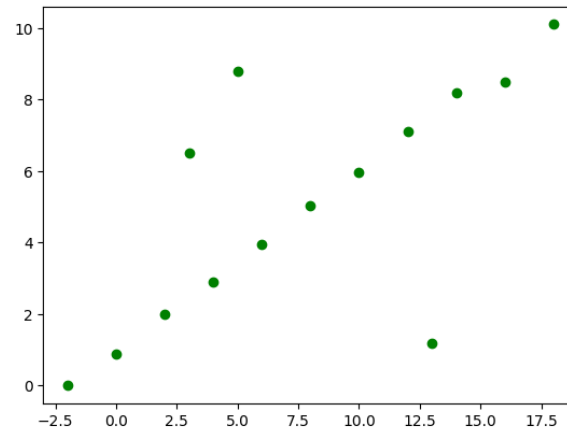


Figure 1 Original distribution

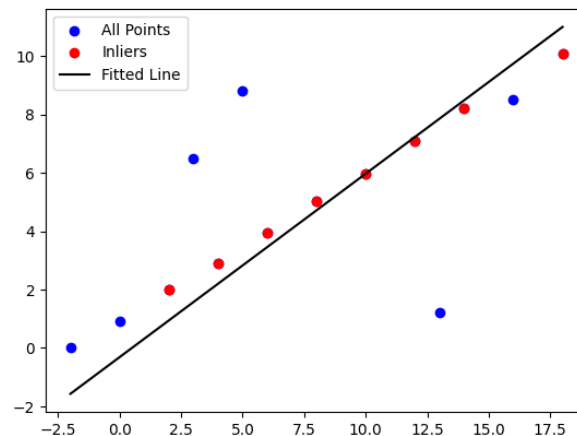


Figure 2 Fitted Line

## Programming 5

The solution of Question 5 is based on the program given by the teacher, my work is understanding what the program means and make it executable. Finally, I get the panorama view and save the result.

Results are as follows:



Figure 3 corner detection for picture 1



Figure 4 corner detection for picture 2



Figure 5 Corresponding point matching

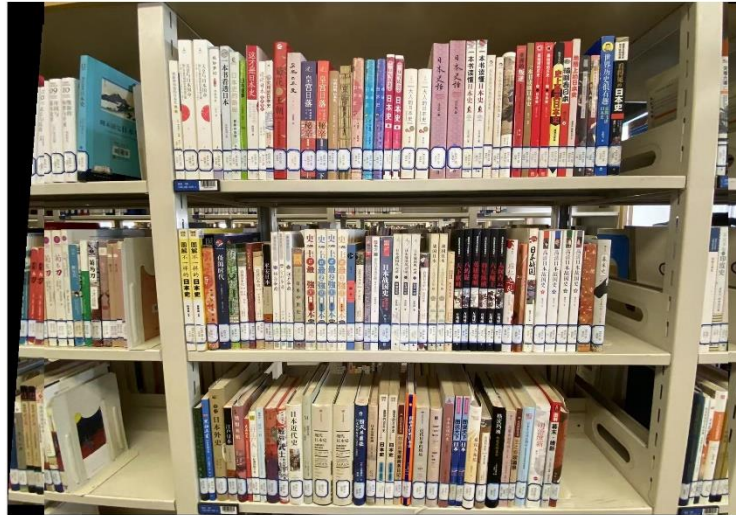


Figure 6 Matching result

## Programming 6

Question 6 is a C++ program. In order to run it, you need *OpenCV* installed. The matching result is saved in the file *matches.txt*

Results are as follows:

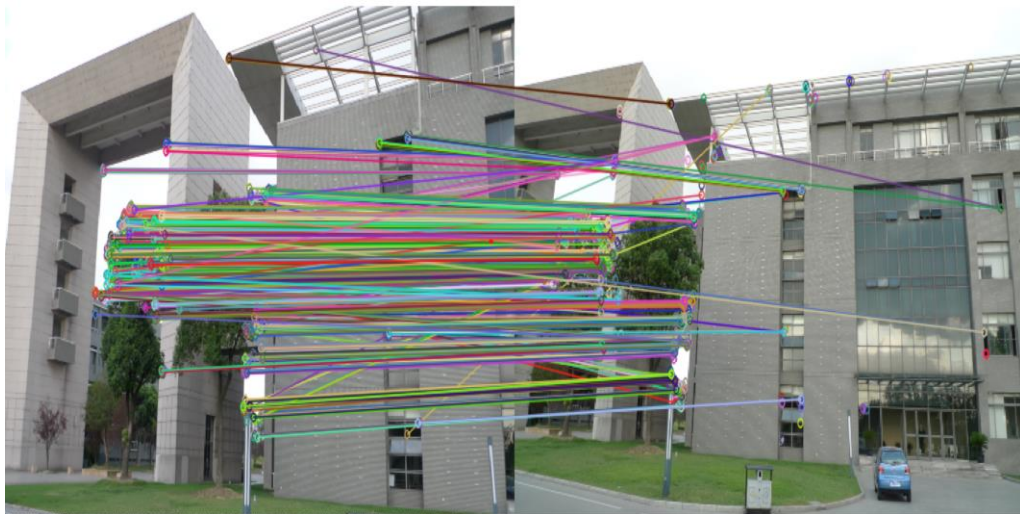


Figure 7 Matching result