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Python 3

Question 3:

 I chose threshold to be 0.65. it seems to gave a right balance of correct matches with a few outliers. Actually right balance is a trade-off between number of miss machtes that increase when we set the threshold less than around 0.65, and fasle matches(outliers) that rocket up after 0.75. As a result, setting the threshhold around 0.65 gives us a good trade-off between these two constraints.

we also check the algorithm for Basmati image(setting threshold 0.67)
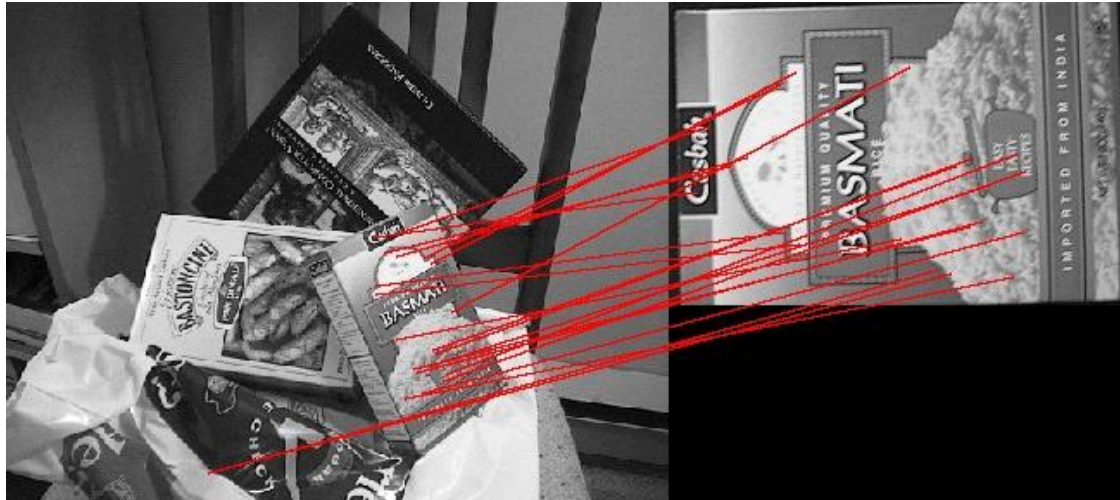
Question 4:
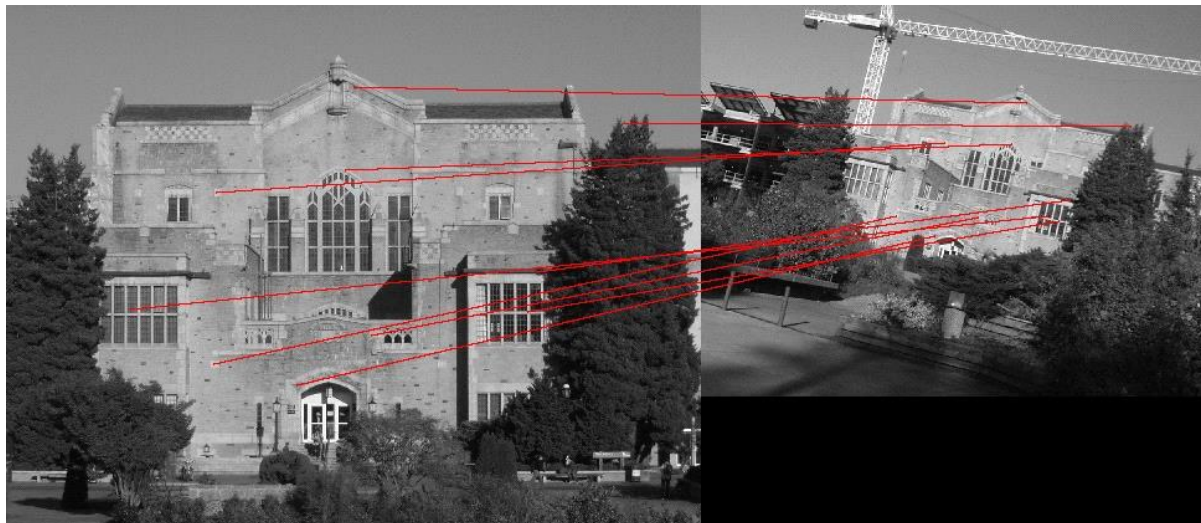
Orientation= 20 (plus or minus)

Scale = 0.8

Threshold = 0.7

If threshold increases, then the points get matches that are more probably a true matches and as a result we will have less outliers. Although, rising the threshold depends on the number of random iterations that RANSAC takes and if the number of outliers are a lot more than the number of iterations, it can not make the performance signifiacntly better.

 The "consistency checking" is more reliable and easier to work with. The reason would be that based on the given number of iterations the best subset of lines in terms of average will be picked as matches(there is a chance that the exactly best matches do not get selected because we select the matched pairs randomly). So, overall The consistency checking over a number of steps helps up to find better matches and reduce the the number of outliers significantly.