HW in ML and clustering

You just started a new job, and you received a set of samples from the different people that worked in this office before you. Since they came and left quite often, you do not know, how many people were there before you. In order to see that you fit to the job, your boss wants you to group their samples by their previous owners. The samples are attached as Exhibit\_A.csv

1. Can you please explain to the boss how to do that and convince him visually and statistically that you have the right number of previous workers.
2. Once you have done that, your boss remembered that some of the samples were left here by mistake by people who just happened to pass by and were not from the office. Please help your both find those.
3. Once you have shown him the list. Your boss remembered that he already has the list (attached here as exhibit\_B.csv, and wanted you to compare your list with his. Can you please suggest a way to do it and analyze the results, and also find out the class number of the passer by .
4. Once you settled in your new office, following the success of your initial work, you found in the drawers a new set of samples (exhibit\_C.csv). Now your boss wants you to classify each sample to the group of workers that you previously produced, can you please show him how to do it and asses the success of the task.
5. After a few weeks in the job, you got sets of ordered samples from your co-workers with worker IDs (exhibit\_D.csv), can you estimate the accuracy of the task in A.
6. Your boss was really impressed, and now he has a few task. He gave you samples are the results of a dynamic process resulting from a dice game (exhibit\_D), but basically you get time series of values between 1 and 6). The data is given as worker id, time point in serie, and value.However, two of the workers have falsified their dice. Can you please explain to the court how you found ho you found out which two worker are fraudsters, and why you were fired, because one of the fraudsters was the boss son.

The deadline for submission is Sep 1st.

Good luck

Yoram