Dear students,

Below are the most frequently asked questions of this week's lab (week 1):

Question 1: I have created a volume but when I try to start a container using the following, Docker says that the file or folder cannot be found. What did I do wrong?

How do I solve this issue?

Make sure that you have used the absolute path to the folder that you have created for your volume. Without the absolute path, Docker would not be able to figure out where the folder is actually located on your host machine. In order to check whether Docker is looking at the correct location, you can run `docker volume inspect YOUR_VOLUME_NAME`. You should see something like the image below:

Check whether the path listed in "device" under "Options" corresponds to the path that you have used to create the volume. If it does not match, then delete and recreate the volume.

Question 2: I get a lot of errors "\u0000" errors when compiling the instrumented files How do I solve this issue?

This kind of error usually occurs when you are working on a Windows machine. The files are saved in a different encoding than the one that is used by the container (in our case a Linux container). The container can therefore not recognize some of the symbols in the file. We have provided a fix in our latest commit to the repository. In order for the changes to take effect, you would need to reclone the repository again. Please follow the followings steps:

1. Back up the code that you have written in a folder. (you can use the "`cp`" command in Linux which is the copy command.
2. Remove the JavaInstrumentation folder. This can be done by running the following command: `rm -r JavaInstrumentation`. **Be careful!** Running this command will permanently remove the folder from the container (hence step 1 is **very important!**)
3. Reclone the repository again by running the following command: `git clone` https://github.com/apanichella/JavaInstrumentation.git
4. Copy back your code into the newly cloned repository

We tested the latest commit on two Windows machines and we hope that our latest commit will help resolve this issue for students that are using Windows.

Another tip for this issue is that you should only **make changes using the IDE** and **run the commands on your docker container** (so not directly from the IDE). The volume is only meant to be used for synchronizing file changes and not for running commands directly.

Question 3: I am running Linux and all the files in the docker volume are read-only/locked so I cannot edit them. How can I edit them?

How do I solve this issue?

Make sure the files in the volume are owned by your current user. For changing the ownership of the files in the folder JavaInstrumentation, run the following command on your local system (so not in the docker container):

```
> sudo chown -R $USER JavaInstrumentation
```

Question 4: What should I use for computing the distance between two strings? Answer

There are different methods that you can use to compute the distance between two strings. An example would be to use edit distance (shorturl.at/nx234). The RERS problems mostly deal with characters (represented as a string object), so you can also convert the strings to the primitive "char" type and do comparisons between characters.