Suppose a server contains log files of four departments in University X between 2000 and 2022. One day there has been a break-in. The intruder's presence was alerted to the system authority, so they had to leave as soon as possible. However, they managed to tamper with some of the files at random. After an initial investigation, it was observed that the intruder only managed to tamper with filenames and their directories. Your job as a talented bash programmer is to write an efficient shell script to determine which files have been tampered with.

1. All the files will be in **`logs`** directory. They are grouped by department name and will be in folders by department name.
2. All files will have the name format: **`<year>_<month>_<day>.log`**. For example 2022_03_10.log.
3. A file is definitely tampered with if it has an impossible date in its name. For example, 2021_03_31.log is impossible as April cannot have 31 days.
4. Additionally, files can still be tampered with if it doesn't match the signature in the first two lines of the file. The first line of any file will contain the department it belongs to while the second one will contain the date.
5. Additionally, you can start by assuming that no logs are recorded on February 29th of a leap year.

Instructions:

1. Run the python file in a directory with the command **`generate_random_logs.py <count>`** to generate test sets. You do not need to understand the python script.
2. You will have to report the number of files that have been tampered with for each department and the total number of tampered files.
3. Bonus Task: Assume the logs are now being recorded during February 29th of the leap year.

Hints:

1. Look into the command **`find`**. You can use this command to list the files in a directory relative to that directory.

Additional Notes:

1. Note that the spec might be updated a few times until the submission deadline with additional details and modifications. Check ELMS from time to time if there are any additional updates/requirements.
2. Test cases with output will be provided later this week.

Submission Guidelines:

1. Take the shell script and put it in a folder with your roll number as the name of the folder.
2. Compress it in .zip format and submit it.