AmazingDevOps

Unix File Permissions

You can obtain the below output by using the **ls -l** command, which is used to list files and directories in **a Unix-like operating system**.

```
Forex@LAPTOP-4C614INS MINGW64 ~/OneDrive/Desktop/ssh-practical-session (main)
$ ls -l
total 8
-r--r--r-- 1 Forex 197121 1674 Dec 15  2022 Apollo-florida.pem
-r--r--r-- 1 Forex 197121 1700 Jul 19 12:47 ssh-key-practical-session.pem
```

I am now going to break down the above information.

1. **-r--r--r--**: This part represents the file permissions. In Unix-like systems, file permissions are represented by a combination of characters. The first character indicates the file type, where **"-"** indicates a regular file.

   The next three characters represent the owner's permissions **(read, write, and execute),** the following three **characters represent the group's permissions,** and the last three characters represent **other users' permissions**. In this case, **the owner, group, and other users have read-only permissions for both files.**

2. **1**: The number 1 in this context indicates **the number of hard links to the file**. Hard links are multiple names (links) pointing to the same underlying data on the disk. Here, there is only one link to each file.

3. **Forex**: The user (owner) who owns the files. "Forex" is the username of the owner.

4. **197121**: The group that owns the files. "197121" represents the group name or ID.

5. **1674** and **1700**: The file sizes in bytes. "Apollo-florida.pem" is 1674 bytes, and "ssh-key-practical-session.pem" is 1700 bytes.

6. **Dec 15 2022** and **Jul 19 12:47**: The dates and times when the files were last modified. "Apollo-florida.pem" was last modified on December 15, 2022, and "ssh-key-practical-session.pem" was last modified on July 19, 2023, at 12:47.

7. **Apollo-florida.pem** and **ssh-key-practical-session.pem**: These are the filenames of the two files.