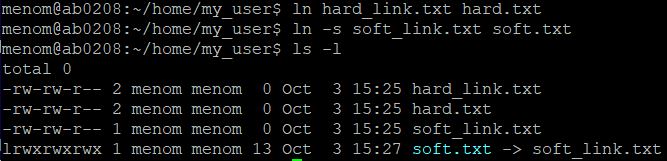
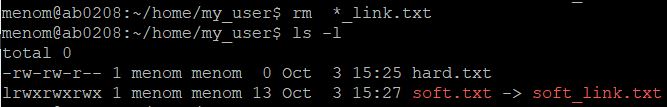
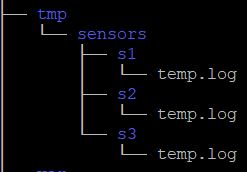
1. **Create a new file *first.txt* and a new directory *second* to your user's home directory. What are the permissions for newly created file and directory?**
2. **Change file (first.txt) permissions using numerical format in the following way: owner → all permissions, group → read and write permissions and other → no permissions. Return original permissions for the file using symbolic format.**
3. **Change root or other user for the owner for the directory (second).**
4. **Change directory permissions in a way that only owner has permissions for the directory.**
5. **Create a new file and set root or other user as a file owner.**
6. **Create two files: hard\_link.txt and soft\_link.txt. Create hard and soft link for these files according to file names. Check the results with ls -l command. What does the output of the command tell about the links and how do links differ? Remove the files you created and recheck the results with ls -l command. What differences do you notice?  
   **  
   *Link count has been increased by one for hard link files and file permissions for new soft link changed. ‘l’ is added for soft link.* *****The color changed for soft link as it’s source file does not exist. The number for hard link is reduced.*
7. **Use find command to list /etc directory contents including only files with .conf extension and starting with letter l (small l, not capital I). Do not include files from subdirectories!**sudo find /etc -maxdepth 1 -type f -name “l\*.conf”
8. **Below is a presentation of a directory structure where temperature data from sensors s1, s2 and s3 has been saved for log files under sensor specific directories. Create this directory structure with files. Important: Check the location of this directory structure within the Linux filesystem!**
9. **Users user (regular user) and root have been marked for the directory presentation below. Create the following permissions: user can only access the first sensor's temp.log file and root has access to the whole directory structure. User should have adequate permissions for reading and editing the temp.log file.**

