

Nyanshell part 3

File attributes allow the administrator to control what a file can do, and what can be done to the file. Attributes are applied by the file system for all users. The file permissions in the usual `rw-rw-rw-` control what different users can do with the file.

Answers to previous questions

- 5) A hint tells us to use `sudo -l`. What does that command tell us?

```
elf@26fcbfd45e4a:~$ sudo -l
Matching Defaults entries for elf on 26fcbfd45e4a:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin

User elf may run the following commands on 26fcbfd45e4a:
    (root) NOPASSWD: /usr/bin/chattr
elf@26fcbfd45e4a:~$
```

This tells us that we may run the command `/usr/bin/chattr` as root, without entering a password.

- 6) Look up the command you find in question 5. How can it help us? Also, there is a companion command that starts with `ls` that may help; what is it?

The `chattr` command changes attributes and its companion command is `lsattr`, or list attributes. You can find information about them in

<https://www.computerhope.com/unix/chattr.htm>

Now that you know about the `lsattr` and `chattr` commands, you should be able to change things so that you can overwrite the nasty flying cat file with a fresh version of the BASH shell. Once you've done that, switch user to Alabaster's account to check to see if it worked.

Questions

- 7) What commands did you use to rescue Alabaster?