<u>File system – assignment no. 1</u>

Tasks:

- create encrypted (using LUKS) EXT4 filesystem in a file with size of 32MiB,
- set label to 'crypt_fs', maximum mount count before check to 15, reserve 3% of the capacity for root.
- Mount the encrypted filesystem
 - supporting ACL and quota, not supporting execution of programs,
 - mount point /tmp/crypt,
 - try to run program from '/tmp/crypt'.
- Number of points: creating fs 0.5b, execution 0.5b.

<u>File system – assignment no. 2</u>

• Tasks:

- Create directories /tmp/crypt/prbit and /tmp/crypt/prbit/public and ensure that:
 - owner (root) has all privileges
 - members of group *students* cannot see (nor change) the contents of */tmp/crypt/prbit*, but can read the contents of */tmp/crypt/prbit/public*
 - others do not have access
- Create file /var/log/test.log and ensure that:
 - owner and group is root and others do not have access
 - admin who is not a member of group root can read contents of the file
 - it is possible only to append content to the file (not delete nor change)
- Use attributes and access control lists.
- Number of points: 0.5 b for each task.

References

- man losetup
- man cryptsetup, man crypttab
- man mke2fs, man tune2fs
- man mount
- man chmod, man chown, man chgrp
- man Isattr, man chattr
- man acl, man getfacl, man setfacl, man chacl