

## Questions

1. Is the open system call in UNIX absolutely essential? What would the consequences be of not having it?
2. Some OSs provide a system call rename to give a file a new name. Is there any difference at all between using this call to rename a file and just copying the file to a new file with the new name, followed by deleting the old one?
3. Describe the effects of a corrupted data block for a given file for:
  - a. contiguous,
  - b. linked,
  - c. indexed (or table based) allocation.
4. Consider a 4-TB disk that uses 4-KB blocks and the free-list method. How many block addresses can be stored in one block?
5. A certain file system uses 4-KB disk blocks. The median file size is 1 KB. If all files were exactly 1 KB, what fraction of the disk space would be wasted? Do you think the wastage for a real file system will be higher than this number or lower than it? Explain your answer.

Submit a single PDF file with answers to 5 questions above.

**Deadline: 14.05.2019**