

Operating Systems:

Assignment 1

Due Date: Aug 17, 2016

1) Reverse the File

Given a file, you need to reverse the contents of that file and store the result in a new file within a new directory named "Assignment". The file and directory thus created, can only be read/written by the user who created it. Program will be tested on **LARGE (> 1 GB)** files.

2) Test and Verify

You need to write a program, that verifies the creation of the new file and new directory created in the above part of question and checks for permissions of them. It should also open up the original file, and match up with the reverse of current file. For each check, you have to print the test, and answer to it in terms of yes/no.

(Play around with the file permission commands and check which types of permissions you can give to various users, groups and others)

For example:

Checking whether the file has been created: Yes

Checking whether file contents have been reversed: No

Checking if only the user has access to the file: No

Guidelines (Read these thoroughly)

1. **All programs must use system calls only.** Usage of printf and scanf are also restricted.
2. Use man pages exclusively.
3. Assignments **should be coded in C**. Indent your codes properly, comment wherever needed.
4. Your code should compile and run correctly at time of evaluation. Any kind of errors during evaluation will be penalised.
5. You can submit in following format RollNo_AssignNo.tar.gz on portal.
6. Deadline is strictly 9:00 P:M, 17th August. No further delays, and submission via mail will not be considered.
7. **Do not cheat in assignments, any kind of incident will have serious consequences.**