

## Lab 4 - Question 2

## ID1200 Operating Systems

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### Part One

Before link:

File 1: 77879 -rw-r--r-- 1 abhsas abhsas 32 Nov 24 08:54 file1.txt

After link:

File 1: 77879 -rw-r--r-- 2 abhsas abhsas 32 Nov 24 08:54 file1.txt

File 2: 77879 -rw-r--r-- 2 abhsas abhsas 32 Nov 24 08:54 file2.txt

Both files now have the same contents.

After editing file2, the corresponding changes are also made to file1.

After removing file1, file 2 is not removed but rather still remains.

The system call `unlinkat(AT_FDCWD, "file2.txt", 0)` is responsible for removing file2.

### Part Two

After creating a soft link, these are the inode numbers for the two files:

41180 -rw-r--r-- 1 abhsas abhsas 8 Nov 24 09:08 file3.txt

41161 lrwxrwxrwx 1 abhsas abhsas 9 Nov 24 09:08 file4.txt -> file3.txt

As can be observed above, the inodes are not the same.

Upon editing file4, file3 is updated accordingly.

After removing file3 and editing file4, since there no longer is a file linked to it, the operating system will create a new file with the same name.