

# LEK\_1

February 8, 2022

## 1 LEK 1

```
[1]: !pwd
```

```
/home/cq/LinuxClass/LEK_1
```

```
[2]: !touch file1.txt file2.txt file3.txt; ls
```

```
file1.txt  file2.txt  file3.txt  LEK_1.ipynb  script.sh
```

```
[3]: !echo -e "This file has several lines:\nThis is line 1\nThis is line 2\nThis is_\n↪line 3" > file1.txt
```

```
[4]: !cat file1.txt
```

```
This file has several lines:
This is line 1
This is line 2
This is line 3
```

```
[5]: # Exercise 1
# wc (prints new line, word, and byte counts for each line)
# parameter: -l (counts lines)
!cat file1.txt | wc -l # call
```

4

```
[6]: # Exercise 2
# head (outputs the first part of a file)
# parameter: -n (prints the number of lines defined)
! head -2 file1.txt # prints the 2 first lines within a file
```

```
This file has several lines:
This is line 1
```

```
[8]: # Exercise 3
# chmod (change mode; changes permissions)
# parameter u+x (allows a user to execute the file)
```

```
# file script.sh is created using nano
!ls -l script.sh
!./script.sh
!chmod u+x script.sh # file is executable now
!ls -l script.sh
!./script.sh
```

```
-rw-rw-r-- 1 cq cq 48 Feb  8 14:58 script.sh
/bin/bash: ./script.sh: Permission denied
-rwxrw-r-- 1 cq cq 48 Feb  8 14:58 script.sh
The file consists of 1 line
```

```
[9]: # Exercise 4
# cat (concatenates files and prints on STDOUT)
!echo -e "This file has several lines:\nThis is line 1\nThis is line 2\nThis is line 3" > file2.txt
# parameter -n (numbers all output lines)
! cat -n file1.txt file2.txt # call
```

```
1 This file has several lines:
2 This is line 1
3 This is line 2
4 This is line 3
5 This file has several lines:
6 This is line 1
7 This is line 2
8 This is line 3
```

```
[10]: # Exercise 5
# ls (lists directories/files)
# parameter -l (long list with extra info); -h (human-readable size of files)
!ls -lh
```

```
total 24K
-rw-rw-r-- 1 cq cq 74 Feb  8 16:50 file1.txt
-rw-rw-r-- 1 cq cq 74 Feb  8 16:51 file2.txt
-rw-rw-r-- 1 cq cq 106 Feb  8 16:50 file3.txt
-rw-rw-r-- 1 cq cq 5,4K Feb  8 16:48 LEK_1.ipynb
-rwxrw-r-- 1 cq cq 48 Feb  8 14:58 script.sh
```

```
[11]: # Exercise 6
!cat file1.txt file2.txt | sort | uniq -c > file3.txt
!cat file3.txt
```

```
2 This file has several lines:
2 This is line 1
2 This is line 2
2 This is line 3
```