

Experiment 2

**Execute essential Ubuntu shell commands
for file manipulation and viewing file
content.**

Pre-requisites

- Create directory of your name
- Change directory to new directory
- Within that folder, create empty file with name *fruits.txt*
- Add 7 fruits names into it (each on new line)

Tasks to be performed

1. View the Contents of the File
2. Count the Number of Lines
3. Display the First Few Lines
4. Display the Last Few Lines
5. Search for a Specific Pattern
6. Delete Lines Containing a Specific Pattern
7. Insert a Line at a Specific Position
8. Replace a Specific Pattern
9. Append Text to the End of the File
10. Sort the Contents of the File
11. Display Line Numbers
12. Reverse the Order of Lines
13. Display Lines Matching a Specific Pattern
14. Count Words in the File
15. Display Lines Within a Range
16. Remove Duplicate Lines
17. Check for a Specific Word and Display its Line Number
18. Calculate the Length of Each Line
19. Check if a File Contains a Specific Word
20. Create a Backup of a File

- Create folder of your name

mkdir DKB

- Change directory to new directory

cd DKB

- Within that folder, create empty file with name *fruits.txt*

touch fruits.txt

- Add 7 fruits names into it (each on new line)

echo -e “strawberry \norange \nkiwi \nwatermelon
\nblueberry \napple \nbanana” >> fruits.txt

1. View the Contents of the File

```
cat fruits.txt
```

2. Count the Number of Lines

```
wc -l fruits.txt
```

3. Display the First Few Lines

```
head -n 3 fruits.txt
```

4. Display the Last Few Lines

```
tail -n 3 fruits.txt
```

5. Search for a Specific Pattern

```
grep 'berry' fruits.txt
```

6. Delete Lines Containing a Specific Pattern

```
sed '/banana/d' fruits.txt > modified_fruits.txt
```

```
cat modified_fruits.txt
```

7. Insert a Line at a Specific Position

```
sed '3i\grape' fruits.txt > modified_fruits.txt
```

```
cat modified_fruits.txt
```

8. Replace a Specific Pattern

```
sed 's/banana/mango/' fruits.txt > modified_fruits.txt
```

```
cat modified_fruits.txt
```

9. Append Text to the End of the File

```
echo "grapes" >> fruits.txt
```

```
cat fruits.txt
```

10. Sort the Contents of the File

```
sort fruits.txt > sorted_fruits.txt
```

```
cat sorted_fruits.txt
```

11. Display Line Numbers

```
nl fruits.txt
```

12. Reverse order of lines

```
tac fruits.txt
```

13. Display Lines Matching a Specific Pattern

```
grep 'a' fruits.txt
```

14. Count Words in the File

```
wc -w fruits.txt
```

15. Display lines within a range

```
sed -n '3,5p' fruits.txt
```

16. Remove Duplicate Lines

```
sort fruits.txt / uniq > modified_fruits.txt
```

```
cat modified_fruits.txt
```

17. Check for a Specific Word and Display its Line Number

```
grep -n 'watermelon' fruits.txt
```

18. Calculate the Length of Each Line

```
awk '{ print length, $0 }' fruits.txt
```

19. Check if a File Contains a Specific Word

```
grep -q 'banana' fruits.txt && echo "Found" // echo "Not  
Found"
```

20. Create a Backup of a File

```
cp fruits.txt backup_fruits.txt
```