PIPING AND REDIRECTION

Making a directory and adding files

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~$ mkdir chaitra-lab4
vjti@vjti-ThinkCentre-M70a-Gen-3:~$ cd chaitra-lab4
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ touch chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls
chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ echo "Hello this is the content of chai.txt" > chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt
Hello this is the content of chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ echo "This is line2 of chai.txt" >>chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ catchai.txt
catchai.txt: command not found
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt
Hello this is the content of chai.txt
This is line2 of chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ echo "Im Chaitra from  SY CE with reg no. 231070055" >>chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt
Hello this is the content of chai.txt
This is line2 of chai.txt
Im Chaitra from  SY CE with reg no. 231070055
```

Counting Lines in a Text File

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt
Hello this is the content of chai.txt
This is line2 of chai.txt
Im Chaitra from  SY CE with reg no. 231070055
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt | wc -l
3
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
```

Search for a Specific String in Files:

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ touch samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ echo "This is the second file" > samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls
chai.txt  samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt
Hello this is the content of chai.txt
This is line2 of chai.txt
Im Chaitra from  SY CE with reg no. 231070055
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat samant.txt
This is the second file
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ grep "Chaitra from" chai.txt | wc -l
1
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ grep "Chaitra from" samant.txt | wc -l
0
```

Sort and Remove Duplicates:

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ touch fruits.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls
chai.txt  fruits.txt  samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat fruits.txt
apple
banana
orange
banana
apple
grape

vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat fruits.txt | sort | uniq

apple
banana
grape
orange
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
```

Counting the number of files and directories

```
3
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls -a
.  ..  chai.txt  fruits.txt  samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls -a | wc -l
5
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
```

```
4
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls -l
total 12
-rw-rw-r-- 1 vjti vjti 110 Jan 28 10:05 chai.txt
-rw-rw-r-- 1 vjti vjti  40 Jan 28 10:11 fruits.txt
-rw-rw-r-- 1 vjti vjti  24 Jan 28 10:08 samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ find . -maxdepth 1 -type f | wc -l
3
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls -a
```

Sorting a list of files and directories

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ls -p | sort
chai.txt
fruits.txt
samant.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
```

Sort and display unique words from a file.

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ sort chai.txt | tr -s '[:space:]' '\n' | uniq
Hello
this
is
the
content
of
chai.txt
Im
Chaitra
from
SY
CE
with
reg
no.
231070055
This
is
line2
of
chai.txt
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat filename.txt | tr -s '[:space:]' '\n' | sort -f | uniq
```

```
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ cat chai.txt | tr -s '[:space:]' '\n' | sort -f | uniq -i
231070055
CE
Chaitra
chai.txt
content
from
Hello
Im
is
line2
no.
of
reg
SY
the
this
with
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$ ^C
vjti@vjti-ThinkCentre-M70a-Gen-3:~/chaitra-lab4$
```