mkdir iti-0
 touch iti-0/file1.txt
 echo hell9 all > iti-0/file1.txt
 cat iti-0/file1.txt | tr "9" "o" > iti-0/file2.txt
 rm iti-0/file1.txt
 ls /var>listing.txt> iti-0/listing.txt
 mv iti-0/listing.txt iti-0/list_output.txt
 cat iti-0/list_output.txt | nl > iti-0/list_output_number.txt

8. tail –n 5 iti-0/list output number.txt

```
To run a command as administrator (user "root"), use "sudo <command>". See "man sudo_root" for details.
donia@donia-VirtualBox:~/Desktop$ mkdir iti-0
donia@donia-VirtualBox:~/Desktop$ ls
donia@donia-VirtualBox:~/Desktop$ touch iti-0/file1.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file1.txt
donia@donia-VirtualBox:~/Desktop$ echo hell9 all > iti-0/file1.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/file1.txt
hell9 all
donia@donia-VirtualBox:~/Desktop$ cat iti-0/file1.txt | tr "9" "o"
hello all
donia@donia-VirtualBox:~/Desktop$ cat iti-0/file1.txt
hell9 all
donia@donia-VirtualBox:~/Desktop$ cat iti-0/file1.txt | tr "9" "o" > iti-0/file
2.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file1.txt file2.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/file2.txt
hello all
donia@donia-VirtualBox:~/Desktop$ rm iti-0/file1.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file2.txt
donia@donia-VirtualBox:~/Desktop$
```

```
donia@donia-VirtualBox:~/Desktop$ ls /var
                                metrics run
backups <mark>crash</mark> local log
                         mail opt
                                          snap tmp
donia@donia-VirtualBox:~/Desktop$ ls /var>listing.txt
donia@donia-VirtualBox:~/Desktop$ cat listing.txt
backups
cache
crash
lib
local
lock
log
mail
metrics
opt
run
snap
spool
tmp
donia@donia-VirtualBox:~/Desktop$ ls /var>listing.txt> iti-0/listing.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file2.txt listing.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/listing.txt
backups
cache
crash
lib
local
lock
donia@donia-VirtualBox:~/Desktop$ mv iti-0/listing.txt iti-0/list-output.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file2.txt list-output.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/list-output.txt
backups
cache
crash
lib
local
lock
log
mail
metrics
opt
run
snap
spool
tmp
donia@donia-VirtualBox:~/Desktop$ cat iti-0/list-output.txt | nl
        backups
        cache
     3
        crash
         lib
         local
     6
        lock
         log
        mail
     8
         metrics
     10 opt
```

```
donia@donia-VirtualBox:~/Desktop$ cat iti-0/list-output.txt | nl > iti-0/list o
utput_number
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file2.txt list output number list-output.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/list-output.txt | nl > iti-0/list_o
utput number.txt
donia@donia-VirtualBox:~/Desktop$ ls iti-0/
file2.txt list output number list output number.txt list-output.txt
donia@donia-VirtualBox:~/Desktop$ cat iti-0/list_output_number.txt
    1 backups
    2 cache
    3 crash
    4 lib
    5 local
    6 lock
    7 log
    8 mail
    9 metrics
   10 opt
   11 run
   12 snap
   13 spool
   14 tmp
onia@donia-VirtualBox:~/Desktop$ tail -n 5 iti-0/list_output_number.txt
   10 opt
   11 run
   12 snap
   13 spool
   14 tmp
onia@donia-VirtualBox:~/Desktop$
```