**Muskan Malhotra: Unix Assignement 3**

**Q1.Get only the employee id of all employees from file “employees.txt”**

**~$ awk '{print $1}' employees.txt**

E1001

E1002

E1003

E1004

E1005

E1006

**Q2.Get the total number of employees**

**~$ awk 'END { print NR }' employees.txt**

6

**3.Mask employee mobiles numbers and change them with \***

**$ sed -E 's|[0-9]{9}|\*\*\*\*\*\*\*\*\*\*|g' employees.txt**

E1001 James FIN 50000 \*\*\*\*\*\*\*\*\*\*

E1002 Smith BD 73000 \*\*\*\*\*\*\*\*\*\*

E1003 Kelvin TECH 78000 \*\*\*\*\*\*\*\*\*\*

E1004 Raj TECH 145000 \*\*\*\*\*\*\*\*\*\*

E1005 Prem FIN 95000 \*\*\*\*\*\*\*\*\*\*

E1006 Guru BD 195000 \*\*\*\*\*\*\*\*\*\*

E1006 Guru BD 195000 \*\*\*\*\*\*\*\*\*\*

**Q4.Open employees.txt and write the following data. (if you do not have employees.txt ready)?**

**E1001:James:FIN:50000:987654371**

**E1002:Smith:BD:73000:987654381**

**E1003:Kevin:TECH:78000:987654341**

**E1004:Raj:TECH:145000:987654351**

**E1005:Prem:FIN:95000:987654321**

**E1006:Guru:BD:195000:987654311**

**E1006:Guru:BD:195000:987654311**

**~$ cat > employees.txt**

E1001 James FIN 50000 987654371

E1002 Smith BD 73000 987654381

E1003 Kelvin TECH 78000 987654341

E1004 Raj TECH 145000 987654351

E1005 Prem FIN 95000 987654321

E1006 Guru BD 195000 987654311

**Q5.Get the last used employee id**

**$ tail -1 employees.txt**

E1006 Guru BD 195000 987654311

**Q6.Get maximum salary earned by the employees**

**~$ sort -t'|' -k4nr employees.txt -r | head -1**

E1006 Guru BD 195000 987654311

**Q7.Hide duplicate rows from the employees.txt**

**$ uniq employees.txt**

E1001 James FIN 50000 987654371

E1002 Smith BD 73000 987654381

E1003 Kelvin TECH 78000 987654341

E1004 Raj TECH 145000 987654351

E1005 Prem FIN 95000 987654321

E1006 Guru BD 195000 987654311

**Q8.Change the permission of employees.txt to**

**a.       user = rwx**

**b.       group = rw-**

**c.       others = r--**

**~$ chmod u+rwx employees.txt**

**~$ chmod g+rw- employees.txt**

**~$ chmod o+r-- employees.txt**

**~$ ls -lrt**

total 13

-rw-r--r-- 1 user user 0 Oct 12 10:00 2022-10-12-153007

-rw-r--r-- 1 user user 0 Oct 12 10:01 apple

-rw-r--r-- 1 user user 23 Oct 12 10:15 file2

-rw-r--r-- 1 user user 49 Oct 12 10:23 sample

-rw-r--r-- 1 user user 0 Oct 12 16:04 new.term

-rw-r--r-- 1 user user 0 Oct 12 16:05 file.term

drwxr-xr-x 2 user user 2 Oct 12 16:08 muskan

-rw-r--r-- 1 user user 0 Oct 12 16:08 sampl1

-rw-r--r-- 1 user user 20 Oct 12 16:08 sample1

-rw-r--r-- 1 user user 21 Oct 12 16:10 demo

-rw-r--r-- 1 user user 57 Oct 12 16:17 f1

-rw-r--r-- 1 user user 20 Oct 12 16:19 demo1

-rw-r--r-- 1 user user 18 Oct 12 16:36 f011

drwxr-xr-x 2 user user 2 Oct 13 07:35 EmployeeManagement

-rw-r--r-- 1 user user 0 Oct 14 04:12 file1.term

-rw-r--r-- 1 user user 0 Oct 14 04:25 assignement1.term

-rwxrw-r-- 1 user user 191 Oct 14 04:35 employees.txt

**Q9. Change the permission of employees.txt to**

**a.       user = r--**

**b.       group = ---**

**c.       others = ---**

**~$ chmod u-rwx employees.txt**

**~$ chmod g-rw employees.txt**

**~$ chmod o-r employees.txt**

**~$ ls -lrt**

total 13

-rw-r--r-- 1 user user 0 Oct 12 10:00 2022-10-12-153007

-rw-r--r-- 1 user user 0 Oct 12 10:01 apple

-rw-r--r-- 1 user user 23 Oct 12 10:15 file2

-rw-r--r-- 1 user user 49 Oct 12 10:23 sample

-rw-r--r-- 1 user user 0 Oct 12 16:04 new.term

-rw-r--r-- 1 user user 0 Oct 12 16:05 file.term

drwxr-xr-x 2 user user 2 Oct 12 16:08 muskan

-rw-r--r-- 1 user user 0 Oct 12 16:08 sampl1

-rw-r--r-- 1 user user 20 Oct 12 16:08 sample1

-rw-r--r-- 1 user user 21 Oct 12 16:10 demo

-rw-r--r-- 1 user user 57 Oct 12 16:17 f1

-rw-r--r-- 1 user user 20 Oct 12 16:19 demo1

-rw-r--r-- 1 user user 18 Oct 12 16:36 f011

drwxr-xr-x 2 user user 2 Oct 13 07:35 EmployeeManagement

-r-------- 1 user user 191 Oct 14 04:53 employees.txt

-rw-r--r-- 1 user user 0 Oct 14 05:14 file1.term

-rw-r--r-- 1 user user 0 Oct 14 05:14 assignement1.term

**Q10.Try cat >> employees.txt**

**~$ cat >> employees.txt**

bash: employees.txt: Permission denied

**Q11.Change the permission of employees.txt to**

**a.       user = -w-**

**b.       group = ---**

**c.       others = ---**

-r-------- 1 user user 191 Oct 14 04:53 employees.txt

**~$ chmod u-r+w employees.txt**

**12. Try cat employees.txt**

**~$ cat>employees.txt**

**Working**

**~$ cat employees.txt**

**Working**

**~$ ls -lrt**

total 13

-rw-r--r-- 1 user user 0 Oct 12 10:00 2022-10-12-153007

-rw-r--r-- 1 user user 0 Oct 12 10:01 apple

-rw-r--r-- 1 user user 23 Oct 12 10:15 file2

-rw-r--r-- 1 user user 49 Oct 12 10:23 sample

-rw-r--r-- 1 user user 0 Oct 12 16:04 new.term

-rw-r--r-- 1 user user 0 Oct 12 16:05 file.term

drwxr-xr-x 2 user user 2 Oct 12 16:08 muskan

-rw-r--r-- 1 user user 0 Oct 12 16:08 sampl1

-rw-r--r-- 1 user user 20 Oct 12 16:08 sample1

-rw-r--r-- 1 user user 21 Oct 12 16:10 demo

-rw-r--r-- 1 user user 57 Oct 12 16:17 f1

-rw-r--r-- 1 user user 20 Oct 12 16:19 demo1

-rw-r--r-- 1 user user 18 Oct 12 16:36 f011

drwxr-xr-x 2 user user 2 Oct 13 07:35 EmployeeManagement

--w------- 1 user user 191 Oct 14 04:53 employees.txt

-rw-r--r-- 1 user user 0 Oct 14 05:14 file1.term

-rw-r--r-- 1 user user 0 Oct 14 05:14 assignement1.term

**13.Find all the open directories by the current logged in user**

**~$ lsof -au user -d cwd**

COMMAND PID USER FD TYPE DEVICE SIZE/OFF NODE NAME

tini 1 user cwd DIR 0,568 4096 2323734 /

sh 7 user cwd DIR 0,568 4096 2323734 /

node 8 user cwd DIR 0,554 37 34 /home/user

sshd 20 user cwd DIR 0,568 4096 2323734 /

bash 286 user cwd DIR 0,554 37 34 /home/user

bash 299 user cwd DIR 0,554 37 34 /home/user

lsof 604 user cwd DIR 0,554 37 34 /home/user

lsof 605 user cwd DIR 0,554 37 34 /home/user

**14.Find the identical files in the present working directory**

**~$#cp employees.txt file.txt**

**~$ ls employees.txt file.txt**

**~$ diff employees.txt file.txt**