

LAB ASSIGNMENT

Name: E.SHYAM

ROLL NO: 422144

section-A

Question: Write shell script for searching for various patterns using grep, pr, head, tail, cut, paste, sort, uniq, and tr.

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort file1.txt
```

Hello

I an chandu

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort -r file1.txt
```

I an chandu

Hello

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort -n file1.txt
```

Hello

I an chandu

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort -nr file1.txt
```

I an chandu

Hello

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort -c file1.txt
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ sort -u file1.txt
```

Hello

I an chandu

```
student@da-OptiPlex-7070:~/Desktop/422271$ head file1.txt
```

```
Hello
```

```
I an chandu
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ head -n 3 file1.txt
```

```
Hello
```

```
I an chandu
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ head -v file1.txt
```

```
==> file1.txt <==
```

```
Hello
```

```
I an chandu
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ tail file1.txt
```

```
Hello
```

```
I an chandu
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ tail -v file1.txt
```

```
==> file1.txt <==
```

```
Hello
```

```
I an chandu
```

```
student@da-OptiPlex-7070:~/Desktop/422271$ tail -c 100 file1.txt
```

```
Hello
```

```
I an chandu
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >uniq.sh
```

```
#!/bin/bash
```

```
sort file8.txt |uniq
```

```
echo -e "\n"
```

```
sort file8.txt |uniq -c
```

```
echo -e "\n"
```

```
sort file8.txt | uniq -d
```

```
echo -e "\n"
```

```
sort file8.txt |uniq -u
```

```
echo -e "\n"
```

```
sort file8.txt | uniq -u -d
```

```
echo -e "\n"
```

```
sort file8.txt |uniq -i
```

```
echo -e "\n"
```

```
uniq --version
```

```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ chmod +x uniq.sh
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >grep.sh
#!/bin/bash
echo "Search for lines containing shell"
grep 'shell' file4.txt

echo "case insensitive search"
grep -i 'shell' file4.txt

echo "display line numbers for lines containing 'input'"
grep -n 'input' file4.txt

echo "count the number of lines containing 'shell'"
grep -c 'shell' file4.txt

echo "show lines that do not contain 'shell'"
grep -v 'shell' file4.txt

echo "show lines after the pattern 'input'"
grep -A 3 'input' file4.txt

echo "show lines before the pattern 'input'"
grep -B 4 'input' file4.txt

echo "show lines before and after the pattern 'input'"
grep -C 2 'input' file4.txt

echo "show lines with shell at the beginning of the line"
grep '^Shell' file4.txt

echo "show lines with etc. at the end of the lines "
grep 'lab$' file4.txt
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ ./uniq.sh
```

```
ap amaravathi  
ks bangalore  
tn chennai  
ts hyderabad
```

```
2 ap amaravathi  
1 ks bangalore  
2 tn chennai  
1 ts hyderabad
```

```
ap amaravathi  
tn chennai
```

```
ks bangalore  
ts hyderabad
```

```
ap amaravathi  
ks bangalore  
tn chennai  
ts hyderabad
```

```
uniq (GNU coreutils) 8.30
```

```
Copyright (C) 2018 Free Software Foundation, Inc.
```

```
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
```

```
This is free software: you are free to change and redistribute it.
```

```
There is NO WARRANTY, to the extent permitted by law.
```

```
Written by Richard M. Stallman and David MacKenzie.
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ chmod +x grep.sh
student@da-OptiPlex-7070:~/Desktop/unix_lab$ ./grep.sh
Search for lines containing shell
i am working on shell scripting.
case insensitive search
i am working on shell scripting.
Shell scripting is so interesting to learn
display line numbers for lines containing 'input'
3:creating this file for some input.
count the number of lines containing 'shell'
1
show lines that do not contain 'shell'
hi guys '
i am in unix lab
creating this file for some input.
Shell scripting is so interesting to learn

show lins after the pattern 'input'
creating this file for some input.
i am working on shell scripting.
Shell scripting is so interesting to learn

show lines before the pattern 'input'
hi guys '
i am in unix lab
creating this file for some input.
show lines before and after the pattern 'input'
hi guys '
i am in unix lab
creating this file for some input.
i am working on shell scripting.
Shell scripting is so interesting to learn
show lines with shell at the beggining of the line
Shell scripting is so interesting to learn
show lines with etc. at the end of the lines
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >tr.sh
#!/bin/bash

echo "abc123"|tr 'a-z' 'A-Z'
echo "XYZ456" |tr 'A-Z' 'a-z'
echo "this is a test" | tr ' ' '_'
echo "abc123"|tr -d '0-9'
echo "hello" | tr 'a-z' 'A-Za-z'
echo "hello" |tr -d 'aeiou'
echo "aaabbbccc" | tr -s 'a-z'
echo "12345" | tr '0-9' 'X'
echo "abc123" | tr -c 'a-z' 'X'
echo -e "one\ttwo\tthree" | tr '\t' ' '
echo -e "line1\nline2\nline3" |tr '\n' ' '
echo "  remove  Spaces  " | tr -d ' '
echo "a1b2c3" |tr '123' 'XYZ'
```

```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ chmod +x tr.sh
student@da-OptiPlex-7070:~/Desktop/unix_lab$ ./tr.sh
ABC123
xyz456
this_is_a_test
abc
HELLO
hll
abc
XXXXX
abcXXXXone two three
line1 line2 line3 removeSpaces
aXbYcZ
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >pr.sh
#!/bin/bash

pr -2 "file4.txt"
pr -d "file4.txt"
pr -n "file4.txt"
pr -2 -d -n "file4.txt"
student@da-OptiPlex-7070:~/Desktop/unix_lab$ chmod +x pr.sh
student@da-OptiPlex-7070:~/Desktop/unix_lab$ ./pr.sh
```

2024-01-31 11:16 file4.txt Page 1

```
hi guys '
i am in unix lab
creating this file for some input.

i am working on shell scripting.
Shell scripting is so interesting t
```

2024-01-31 11:16 file4.txt Page 1

```
hi guys '

i am in unix lab

creating this file for some input.

i am working on shell scripting.

Shell scripting is so interesting to learn
```

2024-01-31 11:16 file4.txt Page 1

```
1 hi guys '
2 i am in unix lab
3 creating this file for some input.
4 i am working on shell scripting.
5 Shell scripting is so interesting to learn
6
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >paste.sh
#!/bin/bash

paste file5.txt file6.txt
echo -e "\n"
paste -d ',' file5.txt file6.txt
echo -e "\n"
paste -s file5.txt file6.txt
echo -e "\n"
paste -d '\0' file5.txt file6.txt
echo -e "\n"
paste -d '\n' file5.txt file6.txt
echo -e "\n"
paste -d '\t' --<file5.txt
echo -e "\n"
paste -d '\n' file5.txt file6.txt
```


paste -s -d "" file1.txt file2.txt

student@da-OptiPlex-7070:~/Desktop/unix_lab\$ chmod +x paste.sh

student@da-OptiPlex-7070:~/Desktop/unix_lab\$./paste.sh

```
ap      amaravathi
tn      chennai
ts      hyderabad
```

```
ap,amaravathi
tn,chennai
ts,hyderabad
```

```
ap      tn      ts
amaravathi      chennai hyderabad
```

```
apamaravathi
tnchennai
tshyderabad
```

```
ap
amaravathi
tn
chennai
ts
hyderabad
```

```
ap
tn
ts
```

```
ap
amaravathi
tn
chennai
ts
hyderabad
```

```
amaravathi
chennai
hyderabad
```



```
student@da-OptiPlex-7070:~/Desktop/unix_lab$ cat >paste.sh
#!/bin/bash

paste file5.txt file6.txt
echo -e "\n"
paste -d ',' file5.txt file6.txt
echo -e "\n"
paste -s file5.txt file6.txt
echo -e "\n"
paste -d '\0' file5.txt file6.txt
echo -e "\n"
paste -d '\n' file5.txt file6.txt
echo -e "\n"
paste -d '\t' --<file5.txt
echo -e "\n"
paste -d '\n' file5.txt file6.txt
```