July-2024
Q-5 (A) Write a command for any six. [6]
1. Display last line of file f1.
Tail -1 f1
Sed –n ‘$p’ data
1. Replace all occurrences of ‘he’ with ‘she’ and ‘his’ with ‘her’ in file f1.
sed –e 's/he/she/' –e ‘s/his/her/’ f1
1. Display only the count of duplicate words in file f1.
Sort f1 | uniq –dc (d to print only duplicate words, c to count)
1. Convert file content of f1 to upper case.
tr

1
'[:lower:]' '[:upper:]' < f1
awk '{ print toupper($0) }' input.txt
1. Display files of current directory that contains ‘unix’ in it.
Grep –l “unix” ./* (-l to list file names only)
1. Insert blank lines after each line in file f1 except last line.
Sed ‘a\
>
‘ f1
1. Display length of longest line of file f1.
wc –L f1 (-L for max line length)
1. Convert decimal number 1234 into hexadecimal.
echo

2
"ibase=10;obase=16;1234" | bc
(B) Write commands using AWK utility. (Any three) [6]
1. Display longest word in each line of file f1.
```
{
l="";
for(i=1; i<=NF; i++)
{
if(length($i) > length(l))
l=$i;
}
print l
}
```
2. Display number of words in each line of file f1 without using NF.
```
{
count=0;
for (i = 1; i <= length($0); i++)
{
if (substr($0, i, 1) ~ /[[:space:]]/)
count++;
}
print count+1;
}
```
3.

3
Display lines of file f1 which consists of only alphabets.
awk '/^[a-zA-Z ]*$/' filename.txt
4. Display lines 5 to 10 of file f1 that do not contain ‘unix’.
awk 'NR >= 5 && NR <= 10 && !/unix/' f1
5. Display each line of file f1 in reverse.
```
{
line = $0;
l = length(line);
rev = "";
for (i=l;i>0;i--)
{
rev=rev substr(line, i, 1);
}
print rev;
}
```
March-2024
Q-5 (A) Answer following using grep or sed

4
utility (any six). [6]
1. Display lines of file f1 that begin with ‘The’.
Grep “^The” f1
Sed –n ‘/^The/p’ f1
1. Count total number of blank lines of file f1.
Grep –c “^$” f1
sed -n '/^$/p' filename.txt | wc -l
1. Display the lines of file f1 that do not contain “Unix”.
Grep –v “Unix” f1
Sed ‘/Unix/d’ f1
1. Replace all occurrences of “unix” with “linux” of file f1.
Sed ‘s/unix/linux/’ f1
1. Display

5
the lines of file f1 that contain “VB.net” and/or “Asp.net”.
Grep –e “VB.net” –e “Asp.net” f1
1. Display lines of file f1 which have exactly 4 chars.
grep "^[a-Z]\{4\}$" f1
grep “^. . . . $” f1
sed -n '/^....$/p' f1
1. Does not display line number 3 to 5 of file f1.
Sed ‘3,5d’ f1
1. Insert blank line after each line of file f1.
Sed ‘a\
‘ f1

(B) Write commands using AWK utility. (Any three) [6]
1.

6
Display those words of file f1 whose length are greater than 5 chars and consist of only alphabets.

```
{
for (i = 1; i <= NF; i++) {
if (length($i) > 5 && $i ~ /^[a-zA-Z]+$/) {
print $i
}
}
}
```

2. Display even numbers of words in each line of file f1.

```
Awk ‘NF%2==0’ f1
```

3. Count occurrences of pattern “unix” in file f1.

```
{
for (i = 1; i <= NF; i++) {
if ($i == “unix”) {
c++;
}
}
} END {print c}
```

4. Count

7
number of vowels in file f1.

```
{
for (i = 1; i <= length($0); i++) {
char = tolower(substr($0, i, 1))
if (char ~ /[aeiou]/) {
count++
}
}
}
END {
print count
}
```

5. Display all palindrome words in file f1.

```
{
for (i = 1; i <= NF; i++) {
word = $i
rev = ""
for (j = length(word); j > 0; j--) {
rev = rev substr(word, j, 1)
}
if (word == rev) {
```

print word
}
}
}
November-2023
Q-4 (A) Write unix commands for

8
following (Any 7) [7]
1. To count number of words from line 10 to 20 of file test.txt.
Sed –n ’10,20p’ test.txt | wc –w
1. Display the lines which are not starting with 2 at the beginning.
Grep –v “^2” test.txt
Sed ‘/^2/d’ test.txt
1. Display lines of file f1 having 1
st
and last same characters.
awk 'substr($0, 1, 1) == substr($0, length($0), 1)' filename.txt
1. Remove repeated lines from file

9
test.txt
sort test.txt | uniq
1. Append dashed line after each line of file test.txt
sed ‘a\
---
‘ test.txt
1. Replace all occurrences of “SYBCA” with “TYBCA” on lines 5 to 10 of file f1.
sed ‘5,10s/SYBCA/TYBCA/’ f1
1. To delete all special characters from file test.txt
sed 's/[^a-zA-Z0-9]//g' test.txt
1. To run a utility Pr1 at 11:00 am
at 11:00 am Pr1
1. Display

10
file names from current directory whose name start with an alphabet and ends with digit.
ls | grep '^[a-zA-Z].*[0-9]$'
Q-5 (B) Write commands using AWK utility. (Any four) [4]
1. Print even numbers of words in each line of file test.txt
{
for (i = 1; i <= NF; i++) {
if (i % 2 == 0) {
printf "%s ", $i
}
}

print ""
}
1. Display words whose length is greater than 6 characters and consists of only

11
alphabets.
{
for (i = 1; i <= NF; i++) {
if (length($i) > 6 && $i ~ /^[a-zA-Z]+$/) {
print $i
}
}
}
1. Print lines 6 to 12 from file text.txt
awk 'NR >= 6 && NR <= 12' text.txt
1. Count all occurrences of pattern “TYBCA” in file test.txt
awk '/nana/ {count++} END{print count}' f1 (1
st
 occurrence only)
OR
{
for (i = 1; i <= NF; i++) {
if ($i == “TYBCA”)
count++;
}
} END {print count}
1. Display

12
lines of file f1 in uppercase
awk '{ print toupper($0) }' f1
1. Display lines of file f1 in reverse
{
line = $0
rev = ""
for (i = length(line); i > 0; i--) {
rev = rev substr(line, i, 1)
}
print rev
}

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