**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 '[: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 "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. 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 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 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. 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 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 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 1st and last same characters.**

awk 'substr($0, 1, 1) == substr($0, length($0), 1)' filename.txt

1. **Remove repeated lines from file 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 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 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 (1st occurrence only)

OR

{

for (i = 1; i <= NF; i++) {

if ($i == “TYBCA”)

count++;

}

} END {print count}

1. **Display 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

}