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