1. **Write a shell script to find greatest amongst three numbers.**

**Script:**

#finding gretest amont three numbers a,b,c

echo -n "Enter Number A: "

read A

echo -n "Enter Number B: "

read B

echo -n "Enter Number C: "

read C

if test $A -gt $B

then

if test $A -gt $C

then

echo "Number A $A is gretest"

else

echo "Number C $C is gretest"

fi

else

if test $B -gt $C

then

echo "Number B $B is gretest"

else

echo "Number C $C is gretest"

fi

fi

**Output:**

$ sh q1gretestNum.sh

Enter Number A: 520

Enter Number B: 23

Enter Number C: 362

Number A 520 is gretest

1. **Write a shell script to find all prime numbers in given range.**

**Script:**

echo -n "Enter Minimum Number: "

read MIN

echo -n "Enter Maximum Number: "

read MAX

J=$MIN

while [ $J -lt $MAX ]

do

I=2

FLAG=0

while [ $I -le $(expr $J / 2) ]

do

if [ $(expr $J % $I) -eq 0 ]

then

FLAG=1

break;

fi

I=$(expr $I + 1)

done

if [ $FLAG -eq 0 ]

then

echo $J

fi

J=$(expr $J + 1)

done

**Output:**

$ sh q2allPrimeNum.sh

Enter Minimum Number: 2

Enter Maximum Number: 25

2

3

5

7

11

13

17

19

23

1. **Write a shell script to find if the number is even, odd or zero.**

**Script:**

echo -n "Enter Number: "

read NUM

if test $NUM -eq 0

then

echo "Number is Zero"

exit

fi

M=`expr $NUM % 2`

if test $M -eq 0

then

echo "Number is Even"

else

echo "Number is Odd"

fi

**Output:**

$ sh q3evenOrOdd.sh

Enter Number: 5

Number is Odd

1. **Write a shell script to draw following pattern.**

**\***

**\* \***

**\* \* \***

**\* \* \* \***

**\* \* \* \* \***

**Script:**

NUM=5

I=0

while test $I -le $NUM

do

J=0

while test $J -le $I

do

echo -n "\* "

J=`expr $J + 1`

done

I=`expr $I + 1`

echo ""

Done

**Output:**

$ sh q4Pattern.sh

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\* \* \* \* \* \*

1. **Write a shell script to find sum of digits of a number.**

**Script:**

echo -n "Enter Number: "

read NUM

SUM=0

until test $NUM -eq 0

do

RES=`expr $NUM % 10`

SUM=`expr $SUM + $RES`

NUM=`expr $NUM / 10`

done

echo "SUM : $SUM"

**Output:**

$ sh q5SumOfDigits.sh

Enter Number: 254

SUM : 11

1. **Write a shell script to find if a year is leap year or not. (Please put necessary validations)**

**Script:**

echo -n "Enter Year: "

read YEAR

if test $YEAR -lt 0

then

echo "Year Must Be Positive Integer"

else

if test $(expr $YEAR % 4) -eq 0

then

echo "It is Leap Year"

else

echo "It is Not Leap Year"

fi

fi

**Output:**

$ sh q6leapYear.sh

Enter Year: 2018

It is Not Leap Year

1. **Write a shell script to print fibonacci series upto entered value N.**

**Script:**

echo -n "Enter Number N: "

read N

N1=0

N2=1

while test $N2 -le $N

do

echo $N2

T=$N2

N2=`expr $N1 + $N2`

N1=$T

done

**Output:**

sh q7fibonacci.sh

Enter Number N: 20

1

1

2

3

5

8

13

1. **Write a menu driven shell script which accepts basic amount as an input and displays following options.**

**a. Dearness allowance (90% of basic)**

**b. Provident Fund F (12% of basic)**

**c. House Rent Allowance ( 20% of basic + DA)**

**d. Income tax deducted (5% of basic + DA + HRA)**

**e. Take home salary (basic + DA + HRA – IT)**

**Script:**

echo -n "Enter Basic Salary: "

read basic

echo "Choose what to find: "

echo "a. for Dearness allowance"

echo "b. for Provident Func"

echo "c. for Hourse Rent"

echo "d. for Income Tax deducted"

echo "e. for Take Home Salary"

#read opt

da="$((( $basic \* 90 ) / 100 ))"

pf="$((( $basic \* 12 ) / 100 ))"

hra="$(((( $basic \* 20 ) / 100 ) + $da))"

it="$((( (($basic + $da) + $hra ) \* 5 ) / 100 ))"

ths=`expr $basic + $da + $hra - $it`

read opt

case $opt in

a)

echo $da

;;

b)

echo $pf

;;

c)

echo $hra

;;

d)

echo $it

;;

e)

echo $ths

;;

\*)

echo "No valid Option Selected"

Esac

**Output:**

sh q8salaryCale.sh

Enter Basic Salary: 5 15000

Choose what to find:

a. for Dearness allowance

b. for Provident Func

c. for Hourse Rent

d. for Income Tax deducted

e. for Take Home Salary

e

42750

1. **Write a shell script to find file permissions of user, group and others.**

**Script:**

echo -n "Enter File Name: "

read FILE

if [ ! -f $FILE ]

then

echo "File do not exist."

exit

fi

LSO=`ls -l $FILE`

FP=`expr substr "$LSO" 2 9`

# checking every rwx latters in FP

ur=`expr substr $FP 1 1`

uw=`expr substr $FP 2 1`

ux=`expr substr $FP 3 1`

gr=`expr substr $FP 4 1`

gw=`expr substr $FP 5 1`

gx=`expr substr $FP 6 1`

or=`expr substr $FP 7 1`

ow=`expr substr $FP 8 1`

ox=`expr substr $FP 9 1`

echo "User's permissions: "

if test $ur != ""-""

then

echo "\tRead"

fi

if test $uw != "-"

then

echo "\tWrite"

fi

if test $ux != "-"

then

echo "\tExecute"

fi

echo "Group's permissions: "

if test $gr != "-"

then

echo "\tRead"

fi

if test $gw != "-"

then

echo "\tWrite"

fi

if test $gx != "-"

then

echo "\tExecute"

fi

echo "Other's permissions: "

if test $or != "-"

then

echo "\tRead"

fi

if test $ow != "-"

then

echo "\tWrite"

fi

if test $ox != "-"

then

echo "\tExecute"

fi

**Output:**

sh q9filePermissionUGA.sh

Enter File Name: f1.txt

User's permissions:

Read

Write

Group's permissions:

Read

Write

Other's permissions:

Read

1. **Write a shell script that accepts two files are identical or not.**

**Script:**

echo -n "Enter File1 Name: "

read FILE1

if [ ! -f $FILE1 ]

then

echo "File $FILE1 do not exist."

exit

fi

echo -n "Enter File2 Name: "

read FILE2

if [ ! -f $FILE2 ]

then

echo "File $FILE2 do not exist."

exit

fi

if cmp --silent $FILE1 $FILE2

then

echo "Files $FILE1 and $FILE2 are Identical"

else

echo "Files $FILE1 and $FILE2 are not Identical"

fi

**Output:**

sh q10cmpFiles.sh

Enter File1 Name: f1

Enter File2 Name: f2

Files f1 and f2 are not Identical

1. **Write a shell script to display all the words, having length <4 characters, of a file f1.txt**

**Script:**

FL="f1.txt"

CNT=`cat $FL`

for i in $CNT

do

if [ "$(expr length "$i")" -lt 4 ]

then

echo $i

fi

done

**Output:**

sh q11wordslt4.sh

is

of

but

we

to

4.

so

are

to

do

is

Yes

i

not

is

my|

a

in

is

2nd

is

of

end

1. **Write a shell script to find total number of files and total number of directories in current working directory.**

**Script:**

FLS=$(ls -a)

FILES=0

DIRS=0

for i in $FLS

do

if test -f $i

then

FILES=$(expr $FILES + 1)

elif test -d $i

then

DIRS=$(expr $DIRS + 1)

fi

done

echo "Total Files: $FILES"

echo "Total Directories: $DIRS"

**Output:**

sh q13wordcount.sh

Total Files: 35

Total Directories: 4

1. **Write a shell script to find total number of characters, words and lines of a file. (Do not use wc command.**

**Script:**

echo -n "Enter File Name: "

read FILE

if [ ! -f $FILE ]

then

echo "File $FILE do not exist."

exit

fi

CHARS=0

WORDS=0

LINES=0

while read ln

do

for w in $ln

do

clen=$(expr length $w)

CHARS=$(expr $CHARS + 1 + $clen)

WORDS=$(expr $WORDS + 1)

done

LINES=$(expr $LINES + 1)

done < $FILE

echo "Total Characters: $CHARS"

echo "Total Words: $WORDS"

echo "Total Lines: $LINES"

**Output:**

sh q13wordcount.sh

Enter File Name: f1.txt

Total Characters: 330

Total Words: 64

Total Lines: 19

1. **Write a shell script which accepts a username and check the entered user is currently logge in or not.**

**Script:**

echo -n "Enter Username: "

read User

if [ $(whoami) = $User ]

then

echo "Entered Username is currently logged in"

else

echo "Entered Username is currently not logged in"

fi

**Output:**

sh q14UserLogged.sh

Enter Username: hamid

Entered Username is currently logged in

1. **Write a shell script to find total number of occurrences of SDJIC in given file. (Please provide necessary validations)**

**Script:**

echo -n "Enter File Name: "

read FILE

if [ ! -f $FILE ]

then

echo "File $FILE do not exist."

exit

fi

echo $(grep -c "SDJIC" $FILE )

**Output:**

sh 1Kq15countSDJIC.sh

Enter File Name: f1.txt

2

1. **Write a shell script which accepts filename as input and reverse individual words from it. (Please provide necessary validations)**

**Script:**

echo -n "Enter File Name: "

read FILE

if [ ! -f $FILE ]

then

echo "File $FILE do not exist."

exit

fi

while read ln

do

for w in $ln

do

REV=$(echo "$w" | rev)

echo -n "$REV "

done

echo ""

done < $FILE

**Output:**

sh q16revWords.sh

Enter File Name: f1.txt

siht si elif htiw stol fo senil

siht senil sedulcni ynam sdrow tub ew deen ot wohs

ylno esoht sdrow hcihw evah htgneL ssel neht .4

os era |uoy ydaer ot od ??taht

CIJDS egelloc

siht si morf CIJDS

XINUSOTSEB

seY

i lliw ton liaf

cijds si |ym egelloc

a taerg egelloc ni tarus si cijds

dn2 rebotco si yadhtrib fo ihdnaG

6333152652

1. **Write a shell script to display all the lines from a file (11.txt), which starts with text “unix”. (not case sensitive)**

**Script:**

FILE="11.txt"

while read ln

do

WD=`expr substr "$ln" 1 4`

UN=`echo $WD | tr [:A-Z] [:a-z]`

if [ $UN = "unix" ]

then

echo $ln

fi

done < $FILE

**Output:**

$ sh q17StartsWithUnix.sh

Unix is very good os

unix is pwoerful

UNIX is multi use

1. **Write grep command to perform following actions:**
2. **a. Count number of blank lines in file f1.txt**
3. **b. print all lines containing sdjic**
4. **c. print the lines that starts with sdjic.**
5. **d. Search the files in CPROGRAMS directory which has the string "include"**
6. **e. print lines having exactly 50 characters in file f1.txt**
7. **f. Count number of blank lines in file f1.txt**
8. **g. Display lines having atleast one characters in file f1.txt**
9. **h. Display lines having sdjic text in any case in file f1.txt**
10. **i. Display line of file f1.txt having exactly 3 characters**
11. **j. Display lines of file f1.txt which begin with any alphabetk. Display lines whose last word is “UNIX” in file f1.txt**
12. **l. Display filenames having last character as digit [0-9]**
13. **m. Display list of filenames that only consist digits**
14. **n. Display line of file f1.txt which only consist digits**
15. **o. Display lines of file f1.txt which only consist capital alphabets**
16. **p. Search all lines in file f1.txt which ends with “.”**

**Script:**

echo "a. Count number of blank lines in file f1.txt"

grep -c "^$" f1.txt

echo "--------------------------------------------------------"

echo "b. print all lines containing sdjic."

grep "sdjic" f1.txt

echo "--------------------------------------------------------"

echo "c. print the lines that starts with sdjic."

grep "^sdjic" f1.txt

echo "--------------------------------------------------------"

echo "d. Search the files in CPROGRAMS directory which has the string 'include'"

grep -l "include" CPROGRAMS/\*

echo "--------------------------------------------------------"

echo "e. print lines having exactly 50 characters in file f1.txt"

grep "^.\{50\}$" f1.txt

echo "--------------------------------------------------------"

echo "f. Count number of blank lines in file f1.txt"

grep -c "^$" f1.txt

echo "--------------------------------------------------------"

echo "g. Display lines having atleast one characters in file f1.txt"

grep "." f1.txt

echo "--------------------------------------------------------"

echo "h. Display lines having sdjic text in any case in file f1.txt"

grep -i "sdjic" f1.txt

echo "--------------------------------------------------------"

echo "i. Display line of file f1.txt having exactly 3 characters"

grep "^...$" f1.txt

echo "--------------------------------------------------------"

echo "j. Display lines of file f1.txt which begin with any alphabet"

grep "^[a-zA-Z]" f1.txt

echo "--------------------------------------------------------"

echo "k. Display lines whose last word is “UNIX” in file f1.txt"

grep "UNIX$" f1.txt

echo "--------------------------------------------------------"

echo "l. Display filenames having last character as digit [0-9]"

grep "[0-9]$" f1.txt

echo "--------------------------------------------------------"

echo "m. Display list of filenames that only consist digits"

grep -r -l "^[0-9]\{1,\}$" \*

echo "--------------------------------------------------------"

echo "n. Display line of file f1.txt which only consist digits"

grep "^[0-9]\{1,\}$" f1.txt

echo "--------------------------------------------------------"

echo "o. Display lines of file f1.txt which only consist capital alphabets"

grep "^[A-Z]\{1,\}$" f1.txt

echo "--------------------------------------------------------"

echo "p. Search all lines in file f1.txt which ends with '.'"

grep "\. $" f1.txt

echo "--------------------------------------------------------"

**Output:**

**Content Of File f1.txt:**

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

a. Count number of blank lines in file f1.txt

5

--------------------------------------------------------

b. print all lines containing sdjic.

sdjic is my| college

a great college in surat is sdjic

--------------------------------------------------------

c. print the lines that starts with sdjic.

sdjic is my| college

--------------------------------------------------------

d. Search the files in CPROGRAMS directory which has the string 'include'

CPROGRAMS/arrayInputOutput.c

CPROGRAMS/assQ1.c

--------------------------------------------------------

e. print lines having exactly 50 characters in file f1.txt

this lines includes many words but we need to show

--------------------------------------------------------

f. Count number of blank lines in file f1.txt

5

--------------------------------------------------------

g. Display lines having atleast one characters in file f1.txt

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

--------------------------------------------------------

h. Display lines having sdjic text in any case in file f1.txt

SDJIC college

this is from SDJIC

sdjic is my| college

a great college in surat is sdjic

--------------------------------------------------------

i. Display line of file f1.txt having exactly 3 characters

Yes

end

--------------------------------------------------------

j. Display lines of file f1.txt which begin with any alphabet

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

end

--------------------------------------------------------

k. Display lines whose last word is “UNIX” in file f1.txt

BESTOSUNIX

--------------------------------------------------------

l. Display filenames having last character as digit [0-9]

2562513336

--------------------------------------------------------

m. Display list of filenames that only consist digits

f1.txt

--------------------------------------------------------

n. Display line of file f1.txt which only consist digits

2562513336

--------------------------------------------------------

o. Display lines of file f1.txt which only consist capital alphabets

BESTOSUNIX

--------------------------------------------------------

p. Search all lines in file f1.txt which ends with '.'

only those words which have Length less then 4.

1. **Write sed command to perform following tasks**
2. **a. To print only last line of f1.txt**
3. **b. To print line number 1-3, 6-7 and 10 of f1.txt**
4. **c. To print lines beginning with SDJIC of f1.txt**
5. **d. Print three lines starting from fourth line of f1.txt**
6. **e. Print all blank lines of file f1.txt**
7. **f. Print lines having either of “sdjic” or “sdjyc”**
8. **g. Lines beginning with either alphabet or digit**
9. **h. To insert a line “additional line” before every line**
10. **i. To replace every occurrence of | with : of first three lines**
11. **j. To replace every occurrence of “|” with “:” of every line**
12. **k. To remove all the lines having word “fail” from file f1.txt (delete command)**

**Script:**

echo "a. To print only last line of f1.txt"

sed -n "$ p" f1.txt

echo "-------------------------------------------------------"

echo "b. To print line number 1-3, 6-7 and 10 of f1.txt"

sed -n -e "1,3 p" -e "6,7 p" -e "10 p" f1.txt

echo "-------------------------------------------------------"

echo "c. To print lines beginning with SDJIC of f1.txt"

sed -n "/^SDJIC/ p" f1.txt

echo "-------------------------------------------------------"

echo "d. Print three lines starting from fourth line of f1.txt"

sed -n "4,$ p" f1.txt | sed "3 q"

echo "-------------------------------------------------------"

echo "e. Print all blank lines of file f1.txt"

sed -n "/^$/ p" f1.txt

echo "-------------------------------------------------------"

echo "f. Print lines having either of “sdjic” or “sdjyc”"

sed -n "/sdj[iy]c/ p" f1.txt

echo "-------------------------------------------------------"

echo "g. Lines beginning with either alphabet or digit"

sed -n "/[a-zA-Z0-9]/ p" f1.txt

echo "-------------------------------------------------------"

echo "h. To insert a line “additional line” before every line"

sed "i \ additional line \ " f1.txt

echo "-------------------------------------------------------"

echo "i. To replace every occurrence of \| with : of first three lines"

sed "1,3 s/|/:/g" f1.txt

echo "-------------------------------------------------------"

echo "j. To replace every occurrence of '|' with ':' of every line"

sed "s/|/:/g" f1.txt

echo "-------------------------------------------------------"

echo "k. To remove all the lines having word \“fail\” from file f1.txt \(delete command\)"

sed "/fail/ d" f1.txt

**Output:**

**Content Of File f1.txt:**

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

a. To print only last line of f1.txt

end

-------------------------------------------------------

b. To print line number 1-3, 6-7 and 10 of f1.txt

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

this is from SDJIC

BESTOSUNIX

-------------------------------------------------------

c. To print lines beginning with SDJIC of f1.txt

SDJIC college

-------------------------------------------------------

d. Print three lines starting from fourth line of f1.txt

so are you| ready to do that??

SDJIC college

this is from SDJIC

-------------------------------------------------------

e. Print all blank lines of file f1.txt

-------------------------------------------------------

f. Print lines having either of “sdjic” or “sdjyc”

sdjic is my| college

a great college in surat is sdjic

-------------------------------------------------------

g. Lines beginning with either alphabet or digit

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

-------------------------------------------------------

h. To insert a line “additional line” before every line

additional line

this is file with lots of lines

additional line

this lines includes many words but we need to show

additional line

only those words which have Length less then 4.

additional line

so are you| ready to do that??

additional line

SDJIC college

additional line

this is from SDJIC

additional line

BESTOSUNIX

additional line

additional line

additional line

additional line

Yes

additional line

i will not fail

additional line

sdjic is my| college

additional line

a great college in surat is sdjic

additional line

2nd october is birthday of Gandhi

additional line

2562513336

additional line

additional line

additional line

end

-------------------------------------------------------

i. To replace every occurrence of \| with : of first three lines

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

-------------------------------------------------------

j. To replace every occurrence of '|' with ':' of every line

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you: ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

i will not fail

sdjic is my: college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

-------------------------------------------------------

k. To remove all the lines having word \“fail\” from file f1.txt \(delete command\)

this is file with lots of lines

this lines includes many words but we need to show

only those words which have Length less then 4.

so are you| ready to do that??

SDJIC college

this is from SDJIC

BESTOSUNIX

Yes

sdjic is my| college

a great college in surat is sdjic

2nd october is birthday of Gandhi

2562513336

end

1. **Write awk command on a file f2.txt having format**

**<EmpNo>|<EmpName>|<Designation>|<Department>|<DateOfJoining(DD/MM/YYYY)>|<Salary>**

1. **Print name of the employee and designation of employee number 1021**
2. **Print name of the employee and designation of employees having salary > 10000**
3. **Print name of the employee and designation of employee of Finance department**
4. **Same as 17(c) using printf statement.**
5. **Same as 17(c) using printf statement and redirect the output to out.txt file**
6. **Print Serial number, employee number and employee name using printf statement of all managers and presidents.**
7. **Print Serial number, employee number, employee name and salary with header title “Manager Details” and footer average salary. (Use separate c1.awk script file and call it in awk command).**
8. **Same as 17(g) but accept designation as input (using getline).**

Script:

echo "a. Print name of the employee and designation of employee number 1021"

awk -F"|" '$1 == 1006 {print $2,$3}' f2.txt

echo "-------------------------------------------------------"

echo "b. Print name of the employee and designation of employees having salary > 10000"

awk -F"|" '$6 > 10000 {print $2,$3}' f2.txt

echo "-------------------------------------------------------"

echo "c. Print name of the employee and designation of employee of Finance department"

awk -F"|" '$4 == "finance" {print $2,$3}' f2.txt

echo "-------------------------------------------------------"

echo "d. Same as 20(c) using printf statement."

awk -F"|" '$4 == "finance" {printf "%-20s %-15s\n",$2,$3}' f2.txt

echo "-------------------------------------------------------"

echo "e. Same as 20(c) using printf statement and redirect the output to out.txt file"

awk -F"|" '$4 == "finance" {printf "%-20s %-15s\n",$2,$3 > "out.txt"} ' f2.txt

echo "-------------------------------------------------------"

echo "f. Print Serial number, employee number and employee name using printf statement of all managers and presidents."

awk -F"|" '$3=="manager"||$3=="president" {printf "%3d %-20s %-12s \n",NR,$1,$2}' f2.txt

echo "-------------------------------------------------------"

echo "g. Print Serial number, employee number, employee name and salary with header title “Manager Details” and footer average salary. (Use separate c1.awk script file and call it in"

awk -F"|" -f c1.awk f2.txt

echo "-------------------------------------------------------"

echo "h. Same as 20(g) but accept designation as input (using getline)."

awk -F"|" -f c2.awk f2.txt

**Output:**

**Content Of File f2.txt:**

2233|a.k. shukla|g.m.|sales|12/12/52|6000

9876|jai sharma|director|production|12/03/50|7000

5678|sumit chakrobarty|d.g.m.|marketing|19/04/43|6000

2365|barun sengupta|director|personnel|11/05/47|7800

5423|n.k. gupta|chairman|admin|30/08/56|5400

1006|chanchal singhvi|director|sales|03/09/38|6700

6213|karuna ganguly|g.m.|accounts|05/06/62|6300

1265|s.n. dasgupta|manager|sales|12/09/63|5600

4290|jayant Choudhury|executive|production|07/09/50|6000

2476|anil aggarwal|manager|finance|01/05/59|5000

6521|lalit chowdury|director|marketing|26/09/45|82200

3212|shyam saksena|d.g.m.|accounts|12/12/55|6000

3564|sudhir Agarwal|executive|personnel|06/07/47|17500

2345|j.b. saxena|g.m.|marketing|12/03/45|80000

0110|v.k. agrawal|g.m.|marketing|31/12/40|9000

**C1.awk:**

BEGIN{

print "Manager Details"

} $3=="manager"||$3=="president"{

count++;

total += $6

printf "%3d %-20s %-12s %10.2f \n",NR,$1,$2,$6

}

END{

printf "Average Salary: %d\n",total/count

}

**C2.awk:**

BEGIN{

printf "Enter Designation: "

getline deg < "/dev/tty"

print "Manager Details"

} $3==deg{

count++;

total += $6

printf "%3d %-20s %-12s %10.2f \n",NR,$1,$2,$6

}

END{

printf "Average Salary: %d\n",total/count

}

a. Print name of the employee and designation of employee number 1021

chanchal singhvi director

-------------------------------------------------------

b. Print name of the employee and designation of employees having salary > 10000

lalit chowdury director

sudhir Agarwal executive

j.b. saxena g.m.

-------------------------------------------------------

c. Print name of the employee and designation of employee of Finance department

anil aggarwal manager

-------------------------------------------------------

d. Same as 20(c) using printf statement.

anil aggarwal manager

-------------------------------------------------------

e. Same as 20(c) using printf statement and redirect the output to out.txt file

-------------------------------------------------------

f. Print Serial number, employee number and employee name using printf statement of all managers and presidents.

8 1265 s.n. dasgupta

10 2476 anil aggarwal

-------------------------------------------------------

g. Print Serial number, employee number, employee name and salary with header title “Manager Details” and footer average salary. (Use separate c1.awk script file and call it in

Manager Details

8 1265 s.n. dasgupta 5600.00

10 2476 anil aggarwal 5000.00

Average Salary: 5300

-------------------------------------------------------

h. Same as 20(g) but accept designation as input (using getline).

Enter Designation: manager

Manager Details

8 1265 s.n. dasgupta 5600.00

10 2476 anil aggarwal 5000.00

Average Salary: 5300