**LAB PROGRAMS**

**1.Write a shell script to compare two files, find common between two files and difference between two files. Write a shell script using pipe to list the first five largest files in the current directory.**

#! /bin/sh

if [ $# -ne 2]

then

echo Argument count doesn’t match

exit

fi

if [! -f $1]

then

echo $1 does not exist

exit

fi

if [ ! -f $2 ]

then

echo $2 does not exist

exit

fi

cmp $1 $2

if [ $? -eq 0 ]

then

echo Compare command executed successfully

fi

echo Common between the files is

comm $1 $2

if [ $? -eq 0 ]

then

echo Common command executed successfully

fi

echo Difference between files is

diff $1 $2

if [ $? -eq 0 ]

then

echo Difference command executed successfully

fi

echo The five largest files among the current dircetory are

ls -l | sort -n -k 5 | tail -5

**2.Write a shell code that accepts two directory names, and deletes those files in bar2 which are identical to their namesakes in bar1.**

#!/bin/sh

cd $1

ls>list1.lst

cd ..

cd $2

ls>list2.lst

cd ..

cd $1

for word in `cat list1.lst`

do

cd ..

cd $2

grep "$word" "list2.lst"

if [ $? -eq 0 ]

then

rm $word

fi

cd ..

cd $1

done

**3.Write a shell script to know the size of individual files, permissions, existence of link and filename. Display only these attributes.**

set `ls -l`

echo $7 $3 $4 $11

**4.Consider the emp.lst file. Write a shell script to display name and date of join of employees who are managers and salary greater than INR 60000.**

#!/bin/sh

grep "manager" emp.lst>temp

while read line

do

echo $line>temporary

v=$(cut -d ' ' -f 5 temporary)

if [ $v -gt 60000 ]

then

cut -d ' ' -f 1,2 temporary>emp1

cat emp1

fi

done<temp

**5.Write a shell script to read a filename and patterns as variables and search the pattern in given file. Display suitable message if wrong entries are made.**

#!/bin/sh

echo Enter the filename

read f

echo Enter the pattern to be searched

read pat

if [ ! -f $f ]

then

echo File does not exist

exit

fi

grep "$pat" $f

if [ $? -eq 0 ]

then

echo Command executed successfully

else

echo Command failed

fi

**6.Write an interactive shell script using variables to check the existence of a particular user login account. Display suitable messages if wrong entries are made.**

#! /bin/sh

echo Enter the name to be searched

read l

cd $HOME

ls > list1.txt

cut -d " " -f 1 list1.txt > loginname

grep $l loginname

if [ $? -eq 0]

then

echo User exists

else

echo Not exists

fi

**7.Design a menu to display different shell commands. Provide the user the choice to execute different shell commands.**

#!/bin/sh

echo 1.who 2.whoami 3.date 4.ls -l 5.exit

echo Enter the choice

read choice

case $choice in

1)who;;

2)whoami;;

3)date;;

4)ls -l;;

5)exit;;

\*)echo Invalid entry

esac

**8.Write an interactive code to accept a list of items and itemcode and append the itemcode and itemname in a file named item.txt.**

#! /bin/sh

echo set y as 1

read y

while [ $y -eq 1]

do

echo "enter the item:"

read item

echo "enter the itemcode:"

read itemcode

echo $item $itemcode >> item.txt

echo "enter 1 if you want to enter item or 0 if you don’t want"

read y

done

cat item.txt

**9.Write a shell script to accept a designation code and its description from terminal and perform validation and then add an entry to file desig.lst. The designation code should be numeric only and designation description should be alphabetical only.**

#! /bin/sh

if echo $1 | egrep -q '^[0-9]+$’; then

echo Valid code

else

echo Invalid code...Code must be numeric

exit

fi

if echo $2 | egrep -q '^[a-zA-Z]+$' ; then

echo Valid designation

else

echo Invalid code...Designation must contain alphabets

exit

fi

echo $1 $2 >> desig.list

echo Data added successfully

cat desig. list

**10.Write a shell script that searches for a pattern in all the files in the directory path specified.**

#! /bin/sh

echo "enter the directory path"

read path

echo "enter to pattern to be searched"

read pat

cd $path

ls > just

for word in `cat just`

do

grep "$pat" $word

done

**11.Write a script to calculate and display the DA, HRA and gross salary of all the employees in emp.lst. Assume DA 25% for those having salary > INR 60000 and 30% for others. HRA is 10% of basic.**

#! /bin/sh

while read line

do

echo $line > tempo

v=$(cut -d ' ' -f 5 tempo)

echo $v

if [ $v -gt 60000]

then

da=$(echo $v\*0.25 | bc)

else

da=$(echo $v\*0.30 | bc)

fi

hra=$(echo $v\*0.10 | bc)

gs=$(echo $da+$hra+$v | bc)

echo $line $da $hra $gs

done < emp.list