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
```