**USP Lab**

**Week 9**

1. Create a text file named stud.dat by writing a shell script to receive the input from the user with srn, name, mark1, mark2, sgpa and store it as text file with an Internal Field separator=”|”
2. Create a shell script called statistics which performs the following on the stud.dat according to the user’s choice.
   1. Prints the first 5 records
   2. Prints Last five records
   3. Prints from 7th record onwards
   4. Prints the top 3 records based on SGPA
   5. Print the failed students
3. Write a shell script that accepts two file names as arguments, check if the permissions for these files are identical and if the permission are identical, output common permissions and otherwise output each file name followed by its permissions."
4. Write a shell script called File\_Properties of your source file & output it's attribute value upon user choice.
5. Write a shell script that accepts a file name starting and ending line numbers as arguments and displays all the lines between the given line numbers.

**Answers**

* + - 1. echo "Enter the name for the data file to be created"

read file

ans="y"

while [ $ans = "y" ]

do

echo "Enter the SRN:"

read srn

echo "Enter the Name:"

read name

echo "Enter the Subject1 Marks:"

read mark1

echo "Enter the Subject2 Marks:"

read mark2

echo "Enter the CGPA:"

read cgpa

echo "$srn|$name|$mark1|$mark2|$cgpa" >> "$file.dat"

echo "Do you want to continue(y/n):"

read ans

done

echo -e "\n Menu \n 1. Print first 5 records \n

2. Prints Last five records \n

3.Prints from 7th record onwards \n

4.Prints the top 3 records based on SGPA \n

5. Print the failed students \n"

echo -e "\n Enter the choice"

read ch

case $ch in

1)

echo -e "First 5 Records of the file stud.dat:\n"

cat stud.dat | head -n 5

;;

2)

echo -e "Last 5 Records of the file stud.dat:\n"

cat stud.dat | tail -n 5

;;

3)

echo -e "From 7th Records of the file stud.dat:\n"

cat stud.dat | tail -n +7

;;

4)

echo -e "Top 3 Students are:\n"

sort -t "|" -n -r -k 5 stud.dat| head -n 3

;;

5)

count=`wc -l stud.dat | cut -d " " -f 1`

echo $count

for (( i=1 ; i<=count;i++ ))

do

echo $i

head -n $i stud.dat | tail -n 1 > ans.dat

a=`cut -d "|" -f 3 ans.dat`

b=`cut -d "|" -f 4 ans.dat`

if test $a -gt 40 -a $b -gt 40

then

echo "$i is passed"

else

echo "$i is failed"

fi

done

\*)

echo "Invalid Choice"

;;

esac

3.

if [ -e $1 ]

then

if [ -e $2 ]

then

x=`ls -l $1|cut -d " " -f1`

y=`ls -l $2|cut -d " " -f1`

if [ $x = $y ]

then

echo "common permission $x"

else

echo "diffrent permissons"

echo "filename is $1 permisson is $x"

echo "filename is $2 permisson is $y"

fi

else

echo "$2 not existing"

fi

else

echo "$1 not existing"

fi

4.

x=1

while [ $x -eq 1 ]

do

echo "enter u r choice";

read ch

echo "u r choice is $ch"

case $ch in

1 ) echo "file permission `ls -l $0|cut -d ' ' -f1`";;

2 )echo "link info `ls -l $0|cut -d ' ' -f2`";;

3 )echo "owner info `ls -l $0|cut -d ' ' -f3`";;

4 )echo "group info `ls -l $0|cut -d ' ' -f4`";;

5 )echo "file size `ls -l $0|cut -d ' ' -f5` bytes";;

6 )echo "date of creation `ls -l $0|cut -d ' ' -f 6,7`";;

7 )echo "time `ls -l $0|cut -d ' ' -f8`";;

8 )echo "file name `ls -l $0|cut -d ' ' -f9`";;

\* )echo "invald option"

esac

echo "Do you want to contine yes=1 or not=0";

read x

done

5.

if [ $# -ne 3 ]

then

echo “chech the arguments once”

lastline=`wc –l `

if [ $2 –lt $lastline –a $3 -le $lastline ]

then

nline=`expr $3 -$2 + 1`

echo `tail +$2 $1 | head -$nline`

else

echo “invalid range specification”

fi

fi