**LAB 3 OS SUBMISSION**

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**QUESTION 1: COMMANDS**

* cat\*txt
* Type the name of the browser **“ nohup firefox & ”** on the command line to simply open a new browsing window.
* grep –v <filename>
* gzip\*.dat
* ls -a
* ls –R
* export
* sort –r
* ln {source} {link} source is an existing file.link is the file to create (a hard link).
* grep [options] pattern <filename>

**QUESTION 2: CODES**

1) **Write a shell script to scan two variables and to display their sum, mul, div, sub and modulo division.**

clear

echo "enter a number"

read p

echo "enteranother number"

read q

echo "choose your oprand"

echo "1 : Add"

echo "2 : Subtract"

echo "3 : Multiply"

echo "4 : devide"

echo "5 : modulo"

read ch

case $ch in

1) echo `expr $p + $q` ;;

2)echo `expr $p - $q` ;;

3)echo `expr $p \\* $q` ;;

4) echo `expr $p \/ $q` ;;

5) echo `expr $p \% $q` ;;

\*) echo "wrong choice" ;;

Esac

2**) Write a shell script to perform all Arithmetic Operations using Command line arguments**.

clear

echo `expr $1 + $2`

echo `expr $1 - $2`

echo `expr $1 \\* $2`

echo `expr $1 \/ $2`

echo `expr $1 \% $2`

4) **Write a shell script to find greatest of two. Script must consider the case where two numbers are equal.**

clear

echo "enter first number"

read a

echo "enter second number"

read b

if [ $a == $b ]

then

echo "numbers are equal"

elif [ $a \> $b ]

then

echo "a is greater then b"

else

echo "b is greater then a"

fi

5) **Write a shell script to accept numbers below 50 and to display the square of each. This should continue as long as the user wishes.**

clear

ch=1

while [ $ch = 1 ]

echo "enter your number"

read n

do

echo `expr $n \\* $n`

echo "do you want to contniue? press 1 for yes 0 ottherwise"

read ch

if [ $ch = 0 ]

then exit

fi

done

6) **Write a shell script, which scans the name of the command and executes it.**

clear

echo "enter command: "

read string

$string

7) **Write a shell script which displays January if we enter Jan, Janu, Janua or January.(use of case)**

clear

echo "enter text: "

read string

case $string in

Jan) echo January ;;

Janu) echo "January" ;;

Janua) echo "January" ;;

Esac

8) **Write a shell script to generate Fibonacci series.**

clear

echo "Enter How many numbers:"

read num

num1=0

num2=1

echo "Fibonacci series:"

echo $num1

echo $num2

count=2

while [ $count -le $num ]

do

num3=`expr $num1 + $num2`

echo $num3

num1=$num2

num2=$num3

count=`expr $count + 1`

done

9) **Write a shell script that asks the capital of Gujarat and repeats the question until the user gives correct answer.**

clear

ch=Gandhinagar

while [ $ch = $n ]

echo "what is the capital of Gujarat ?"

read n

do

if [ $n = $ch ]

then echo "correct"

exit

fi

done

10 )**Write a shell script program to search whether element is present in the list or not and also display its position in the list.**

clear

a=(1 2 3 4 5 6 7 8 9 10)

echo list is ${a[@]}

n=10

echo "enter a number to find in the list: "

read num

index=0

while [ $index -le $n ]

do

if [ $num == ${a[index]} ]

then echo element found at position ` expr $index + 1`

exit

else

index=` expr $index + 1`

fi

done

echo "element not found"