**LINUX PROGRAMS**

PROGRAM NO: 1

**EVEN NUMBER OR NOT**

echo -n “Enter number : ”

read n

rem=$(( $n % 2 ))

if [ $rem -eq 0 ]

then

echo “$n is even number”

else

echo “$n is odd number”

fi;

**OUTPUT**

**Enter the number : 10**

**10 is even number**

**Enter the number : 5**

**5 is odd number**

PROGRAM NO: 2

**LARGEST OF THREE NUMBER**

echo “Enter first number”

read num1

echo “Enter second number”

read num2

echo “Enter third number”

read num3

if [ $num1 -gt $num2 ] && [ $num1 -gt $num3 ]

then

echo $num1

elif [ $num2 -gt $num1 ] && [ $num2 -gt $num3 ]

then

echo $num2

else

echo $num3

fi

**OUTPUT**

**Enter first number**

**3**

**Enter second number**

**7**

**Enter third number**

**5**

**7**

PROGRAM NO: 3

**SUM OF FIRST 100 NATURAL NUMBERS**

count=1

sum=0

While test $count -le 100

Do

sum= ‘expr $count + 1’

done

echo $sum

**OUTPUT**

PROGRAM NO: 4

**FACTORIAL OF A NUMBER**

echo -n “Enter a number : ”

read num

fact=1

while [[ $num -gt 1 ]]

do

fact=$((fact\*num))

num=$((num – 1))

done

echo “Factorial is: ” $fact

**OUTPUT**

**Enter a number : 4**

**Factorial is: 24**

PROGRAM NO: 5

**FIBONACCI SERIES**

echo “enter number”

read n

a=0

b=1

echo $a

echo $b

for((i=2;i<=n;i++))

do

c= ‘expr $a + $b’

echo $c

a=$b

b=$c

done

**OUTPUT**

**Enter number**

**5**

**0**

**1**

**1**

**2**

**3**

**5**

PROGRAM NO: 6

**REVERSE OF A NUMBER**

echo “Enter the number”

read n

s=0

while [ $n -gt 0 ]

do

r=‘expr $n % 10’

s=‘expr $s \\* 10 + $r’

n=‘expr $n / 10’

done

echo “reverse of a given number is $s”

**OUTPUT**

**Enter the number**

**123**

**reverse of a given number is 321**

PROGRAM NO: 7

**PALINDROME NUMBERS**

echo “Enter the number”

read n

temp=$n

rev=0

while [ $n -gt 0 ]

do

a=‘expr $n % 10’

n=‘expr $n / 10’

rev=‘expr $rev \\* 10 + $a’

done

echo $rev

if [ $temp -eq $rev ]

then

echo “number is palindrome”

else

echo “number is not palindrome”

fi

**OUTPUT**

**Enter the number**

**123454321**

**123454321**

**number is palindrome**

**Enter the number**

**123455**

**554321**

**number is not palindrome**

PROGRAM NO: 8

**ARITHMETIC OPERATIONS**

echo Enter two numbers :

read a

read b

c=‘expr $a + $b’

echo Addition = $c

c=‘expr $a - $b’

echo Substration = $c

c=‘expr $a \\* $b’

echo Multiplication = $c

c= ‘expr $a \/ $b’

echo Division = $c

**OUTPUT**

**Enter two numbers :**

**20**

**10**

**Addition = 30**

**Substration = 10**

**Multiplication = 200**

**Division = 2**

PROGRAM NO: 9

**SUMMATION OF NUMBER**

sum=0

for i in $ \*

do

sum=‘expr $ sum + $i’

done

echo “summation of “$#" number is : ” $sum

**OUTPUT**

**\*/chmmt \* sh 2 3**

**Summation of 2 number is : 5**

PROGRAM NO: 10

**LIST OF MENU**

echo “what you want to do ? (1 to 5)”

echo “1. Show the current date”

echo “2. Show the file in the current directory”

echo “3. Show the calender 2019”

echo “4. Start vi”

echo “5. Exit”

echo “enter your choice :”

read n

case “$n” in

1. date;;
2. ls;;
3. cal 2019;;
4. vi;;

\*) echo “invalid operation”;;

esac

**OUTPUT**

**what you want to do ? (1 to 5)**

**1. Show the current date**

**2. Show the file in the current directory**

**3. Show the calender 2019**

**4. Start vi**

**5. Exit**

**enter your choice :**

**1**

**Sat Jul 6 15:53:09 IST 2019**

PROGRAM NO: 11

**FILE OPEARTION**

echo " 1. Create a file called text and store name, age and addvers in it"

echo "2. Display the content of the file text on the screen "

echo "3. Create the directory mydir"

echo "4. Delete the directories mydir"

echo" 5. Sort a nummeric file"

echo" 6. Change the permission for the file new text to 777"

echo" enter your choice”

read ch

Case "$ch” in

1) echo "Create a file called text and store name, age, address in it "

echo" enter the filename"

read fn

Cat > $fn;;

2) echo "Display the contents of the file text on the screen"

echo "enter the filename"

read fn

cat $ fn;;

3) echo “Create the directory mydir"

mydir mydir;;

4) echo “Delete the directories mydir and new dir at one shot”

rmdir mydir;;

5) echo “Sort a numeric file”

echo “enter the filename”

read fn

sort n $fn;;

6) echo “Change the permission for the file new text to 777”

chmod 777 new.text;;

\*) echo “invalid choice”;;

esac

**OUTPUT**

1. **Create a file called text and store name, age, address in it**
2. **Display the contents of the file text on the screen**
3. **Create the directory mydir**
4. **Delete the directories mydir**
5. **Sort a numeric file**
6. **Change the permission for the file new text to 777**

**enter your choice**

**1**

**Create a file called text and store name, age, address in it**

**enter the filename**

**text**

**Achu**

**20**

**Puthuparambil**

PROGRAM NO: 12

**CURRENT TIME**

hours= ‘data cut -c 12-13’

if [ $hours -le 12 ]

then

echo “Good morning”

else

if [ $hours -le 20 ]

then

echo “Good evening”

else

echo “Good night”

fi

fi

**OUTPUT**

**Good morning**

**FILE COMMANDS**

1. Touch

Syntax : touch filename

Eg: touch file1.txt

1. Cat
2. Cat > file1.txt

Anu

101

1. Cat file1.txt
2. MV

touch file2.txt

MV file1.txt file2.txt

Cat file2.txt

1. More

Syntax: $more filename

Eg: $more +5 file1.txt

1. Less

Syntax: $less filename

Eg: $less file.txt

**OUTPUT**

**2. Anu**

**101**

**3. Anu**

**101**

**FILE COMPARISON**

1. Cmp

Syntax: cmp [options] file1.file2

Eg:

Cmp file1.txt file2.txt

1. Comm

Syntax: comm [options] file1.file2

$cat file1.txt

Rose

Dalia

Orchid

Lilly

$cat file2.txt

Rose

Orchid

Anthorium

Shoe flower

$comm file1.txt file2.txt

1. Diif

Syntax: diff [options] file1.file2

Eg:

$ls

a.txt b.txt

$cat a.txt

Gujarat

Uttar Pradesh

Kolkata

Bihar

Jammu Kashmir

$cat b.txt

Kerala

Gujarat

Bihar

Andra Pradesh

Uttar Pradesh

$diff a.txt b.txt

**OUTPUT**

**2. Rose Rose Rose**

**Dalia Orchid Orchid**

**Orchid Anthorium**

**Lilly Shoe flower**

**3 . 0 a 1**

**> kerala**

**2,3 C3**

**< Uttar Pradesh**

**5 C5**

**Uttar Pradesh**

**FILTER COMMANDS**

1. Head

Syntax:

Head [options] [file]

Eg:

$cat state.txt

Goa

Assam

Kerala

Gujarat

Bihar

Jammu

Karnataka

Andra Pradesh

Punjab

Manipur

Orissa

$head state.txt

1. Tail

Syntax:

$tail [options] [file]

Eg;

$cat state.txt

Andra Pradesh

Assam

Bihar

Jammu & Kashmir

Karnataka

Orissa

Meghalaya

Manipur

Mizoram

$tail -3 state.txt

1. Wc

Syntax:

Wc [option] [file]

$cat state.txt

Andra Pradesh

Arunachal Pradesh

Assam

Bihar

Chattisgrah

$wc state.txt

1. Sort

Syntax:

$sort filename

Eg;

$cat > file1.txt

Harsh

Abhishek

Satish

Divya

$sort file1.txt

1. Paste

Syntax:

$paste [option] [file]

$cat state

Assam

Bihar

Arunachal Pradesh

$cat capital

Dispur

Patna

Itanagar

$paste number state capital

1. Cut

Syntax:

$cat [option] [file]

Eg:

$cat state.txt

Bihar

Kerala

$cut -b 1,2,3 state.txt

1. Join

Syntax:

Join [option] file1 file2

$cat file2.txt

1. AAgush
2. Apaar
3. Karthik

$cat file2.txt

1. 101
2. 102
3. 103

$join file1.txt file2.txt

**OUPUT**

**1. Goa**

**Assam**

**Kerala**

**Gujarat**

**Bihar**

**Jammu**

**Karnataka**

**Andra Pradesh**

**Punjab**

**Manipur**

**2. Meghalaya**

**Manipur**

**Mizoram**

**3.5 7 63 state.php**

**4. Abhishek**

**Divya**

**Harsh**

**Satish**

**5. 1. Assam Dispur**

**2. Bihar Patna**

**3. Arunachal Pradesh Itanagar**

**6. Bih**

**Ker**

**7.1) AAgush 101**

**2) Apaar 102**

**3) Karthik 103**