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Assignment No. 01

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date: / /**

Signature:

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Q. Demonstration of General purpose utilities.

Program:

Rupesh Desai
@RupS2010
#RupS
@GCG
#GCG
#py
#java
Padhai kar Bhai, kuch ni rakha in batonm main.!!
hello
Hiiiii

1)Different uses of cal command:

```
ubuntu@ubuntu-desktop:~$ cal
     March 2023
Su Mo Tu We Th Fr Sa
          1  2  3  4
 5  6  7  8  9 10 11
12 13 14 15 16 17 18
19 20 21 22 23 24 25
26 27 28 29 30 31

ubuntu@ubuntu-desktop:~$ cal 10 2020
    October 2020
Su Mo Tu We Th Fr Sa
           1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

2) Use of Date Command

```
ubuntu@ubuntu-desktop:~$ date
Wed Mar 29 13:53:15 IST 2023
```

3)Use of bc command

```
ubuntu@ubuntu-desktop:~$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation,
Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
60+70
130
90/3
30
500*0
0
```

4)Use of who command:

```
ubuntu@ubuntu-desktop:~$ who
ubuntu   :0           2023-03-29 13:24 (:0)
```

5)Use of tty command:

```
ubuntu@ubuntu-desktop:~$ tty
/dev/pts/0
```

6)Use of uname command:

```
ubuntu@ubuntu-desktop:~$ uname
Linux
```

7)Use of script command:

```
ubuntu@ubuntu-desktop:~$ script Rupesh
Script started, file is Rupesh
```

8)Use of wc command:

```
ubuntu@ubuntu-desktop:~$ wc Assign1.sh
 10  19 111 Assign1.sh
ubuntu@ubuntu-desktop:~$ wc -l Assign1.sh
10 Assign1.sh
ubuntu@ubuntu-desktop:~$ wc -w Assign1.sh
19 Assign1.sh
ubuntu@ubuntu-desktop:~$ wc -c Assign1.sh
111 Assign1.sh
```

9)Use of ls command:

```
ubuntu@ubuntu-desktop:~$ ls
Anuradha23     Assign11.sh    Downloads          Neha    Niru8       Sem6Assign1.sh  test
Ass2           Assign12.sh    evenodd.sh         Neha1   Niru9       Sem6Assign2.sh  test.txt
Ass2.sh        Assign1.sh     examples.desktop   Niru1   patil       shruti          typing
Ass3           Assign6.sh     f1.sh              Niru10  Patil       snehal          Videos
Ass4.sh        Assign7.sh     f2.sh              Niru11  Pictures    Snehal
Ass5           Assign8.sh     f3.sh              Niru12  Public      Snehal_linux
Ass5.sh        Assign9.sh     File               Niru4   purushottam Snehal_python
Ass6.sh        Avinash        filePermission.sh  Niru5   Rupesh      studentgrade
assig1.sh      Desktop        fy_samruddhi       Niru6   sanika      technoparv
Assign10.sh    Documents      Music              Niru7   sedProgram  Templates
```

10)Use of cat command:

```
ubuntu@ubuntu-desktop:~$ cat >Rupesh
```

11)Use of whoami command:

```
ubuntu@ubuntu-desktop:~$ whoami
ubuntu
```

12)Use of head command:

```
ubuntu@ubuntu-desktop:~$ head -3 Assign1.sh
Rupesh Desai
@RupS2010
#RupS
```

13)Use of tail command:

```
ubuntu@ubuntu-desktop:~$ tail -3 Assign1.sh
Padhai kar Bhai, kuch ni rakha in batonm main.!!
hello
Hiiiii
```

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Assignment No. 02

Name of Student: Rupesh Ramesh Desai **Roll No.:**

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Q. Write a shell script using if statements to check file exists or not.

Program:

```
ffile=RupS
if [ -f"$file" ]
then
echo "$file exists"
else
echo "$file does not exists"
fi
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi Assign2.sh
ubuntu@ubuntu-desktop:~$ sh Assign2.sh
RupS exists
ubuntu@ubuntu-desktop:~$

ubuntu@ubuntu-desktop:~$ vi Rupesh
ubuntu@ubuntu-desktop:~$ sh Rupesh
Rupesh does not exists
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 03

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date: / /**

Signature:

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Q. Write a shell script to copy a file.

Program:

```
ubuntu@ubuntu-desktop:~$ cat>f2.sh
This is My file
ubuntu@ubuntu-desktop:~$ cat >f3.sh
Rupesh
ubuntu@ubuntu-desktop:~$ cp f3.sh f2.sh
ubuntu@ubuntu-desktop:~$ cat f2.sh
Rupesh
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 04

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date: / /**

Signature:

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Q. Write a shell script to check the given number is odd or even.

Program:

```
echo "...even or odd in shell script..."
echo -n "enter a number:"
read n
echo -n "result:"
a=$(( $n%2 ))
if [ $a -eq 0 ]
then
echo " $n is even "
else
echo " $n is odd "
fi
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign4.sh
ubuntu@ubuntu-desktop:~$ sh assign4.sh
...even or odd in shell script...
enter a number:8999
result: 8999 is odd

ubuntu@ubuntu-desktop:~$ sh assign4.sh
...even or odd in shell script...
enter a number:5348
result: 5348 is even
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 05

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date: / /**

Signature:

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Q. Write a shell script to check file permission.

Program:

```
echo -n "Enter file Name"
read file

[ -w $file ] && W="Write = yes " ||W=" Write = no "
[ -x $file ] && X=" Execute = no " ||X=" Execute = no "
[ -r $file ] && R=" Read = yes " ||R=" Read = no "

echo "$file permission"
echo "$W"
echo "$R"
echo "$X"
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ sh assign5.sh
Enter file Name Rupesh
Rupesh permission
Write = yes
 Read = yes
 Execute = no


ubuntu@ubuntu-desktop:~$ sh assign5.sh
Enter file Name Pranali
Pranali permission
 Write = no
 Read = no
 Execute = no
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 06

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date: / /**

Signature:

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Q. Write a shell script to calculate the grade of student.

Program:

```
read -p "please enter your marks:" response

if [ $response -le 35 ]
then
echo " Fail "
elif [ $response -le 59 ]
then
echo " D "
elif  [ $response -le 69 ]
then
echo " C "
elif [ $response -le 79 ]
then
echo " B "
elif [ $response -le 89 ]
then
echo " A "
elif [ $response -le 100 ]
then
echo " Distinction "
elif [ $response -gt 100 ]
then
echo " please enter number between 1 to 100 "
fi
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign6.sh
ubuntu@ubuntu-desktop:~$ sh assign6.sh
please enter your marks:99
 Distinction

ubuntu@ubuntu-desktop:~$ sh assign6.sh
please enter your marks:88
 A

ubuntu@ubuntu-desktop:~$ sh assign6.sh
```

```
please enter your marks:67
 C

ubuntu@ubuntu-desktop:~$ sh assign6.sh
please enter your marks:45
 D

ubuntu@ubuntu-desktop:~$ sh assign6.sh
please enter your marks:29
 Fail
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 07

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date:** / /

Signature:

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Q. Write a shell script to find out given word contains vowel and also the entered vowel is small case.

Program:

```
echo "Enter a string to find the number of vowels"
read st
len=$(expr length $st)

count=0
while [ $len -gt 0 ]
do
ch=$(echo $st | cut -c $len)
case $ch in

[aeiouAEIOU])

count=$(($count + 1))
echo $ch
;;

esac
len=$(($len - 1))
done
echo "Number of vowels in the given string is $count"
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign7.sh
ubuntu@ubuntu-desktop:~$ sh assign7.sh
Enter a string to find the number of vowels
RupS
u
Number of vowels in the given string is 1

ubuntu@ubuntu-desktop:~$ sh assign7.sh
Enter a string to find the number of vowels
Pranali
i
a
```

a
Number of vowels in the given string is 3

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Assignment No. 08

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date:** / /

Signature:

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Q. Write a shell script to diplay given year is leap or not.

Program:

```
clear
echo "Leap Year Shell Script"
echo -n "Enter the year:"
read year_checker
a=$(( $year_checker % 4 ))
if [ $a -eq 0 ]
then
echo "$year_checker is a leap year"
else
echo "$year_checker is not a leap year"
fi
```

**********OUTPUT**********

```
Leap Year Shell Script
Enter the year:2099
2099 is not a leap year
ubuntu@ubuntu-desktop:~$

Leap Year Shell Script
Enter the year:2024
2024 is a leap year
ubuntu@ubuntu-desktop:~$
```

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Assignment No. 09

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date:** / /

Signature:

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Q. Write a shell script to greet message according to time.

Program:

```
n=$(date +"%H")
if [ $n -gt 6 -a $n -le 12 ]
then
echo "Good Morning"
elif [ $n -gt 12 -a $n -le 16 ]
then
echo "Good Afternoon"
elif [ $n -gt 16 -a $n -le 20 ]
then
echo "Good Evening"
else
echo "Good Night"
fi
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign9.sh
ubuntu@ubuntu-desktop:~$ sh assign9.sh
Good Afternoon
```

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Assignment No. 10

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date:** / /

Signature:

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Q. Write a shell script to print fibonacci series.

Program:

```
echo "Enter the value:"
read n
a=0
b=1
count=2
echo "Fibonacci series:"
echo $a
echo $b
while [ $count -le $n ]
do

fib=`expr $a + $b`
a=$b
b=$fib
echo $fib

count=`expr $count + 1`
done
~
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ sh assign10.sh
Enter the value:
8
Fibonacci series:
0
1
1
2
3
5
8
13
21
```

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Assignment No. 11

Name of Student: Rupesh Ramesh Desai **Roll No.:**

Class: B.Sc III **Date:** / /

Signature:

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Q. Write a shell script to print the numbers between 1 to 10.

Program:

```
echo "press enter to print 1 to 10 numbers"

read i
i=1

while [ $i -le 10 ]
do
echo $i
i=$(($i+1))
done
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign11.sh
ubuntu@ubuntu-desktop:~$ sh assign11.sh
press enter to print 1 to 10 numbers

1
2
3
4
5
6
7
8
9
10
```

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Assignment No. 12

Name of Student: Rupesh Ramesh Desai **Roll No.:**

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Signature:

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Q. Write a shell script to read name, sex and marital status and display the same.

Program:

```
echo "Enter name"
read name
echo "Enter gender"
read gender
echo "Marital status"
read Maritalstatus

echo "name: "$name
echo "gender: "$gender
echo "Maritalstatus: "$Maritalstatus
```

**********OUTPUT**********

```
ubuntu@ubuntu-desktop:~$ vi assign12.sh
ubuntu@ubuntu-desktop:~$ sh assign12.sh
Enter name
Rupesh
Enter gender
Male
Marital status
Single
name: Rupesh
gender: Male
Maritalstatus: Single
```

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