1. Write a script to create 10 directories, say a1,a2,...,a10

Report error if a directory/file exists with the same name.

#!/bin/bash

for((i=1 ;i<=10; i++))

do

mkdir a$i

done

mkdir: cannot create directory ‘a1’: File exists

mkdir: cannot create directory ‘a2’: File exists

mkdir: cannot create directory ‘a3’: File exists

mkdir: cannot create directory ‘a4’: File exists

mkdir: cannot create directory ‘a5’: File exists

mkdir: cannot create directory ‘a6’: File exists

mkdir: cannot create directory ‘a7’: File exists

mkdir: cannot create directory ‘a8’: File exists

mkdir: cannot create directory ‘a9’: File exists

mkdir: cannot create directory ‘a10’: File exists

2. Write a menu based script to perform following string operations

a) To find length of a string

c) Copying string

d) Concatenation of strings

e) Compare two strings

f) Reversing a string

#!/bin/bash

do

echo '1.Find length'

echo '2.Copying string'

echo '3.Concate of string'

echo '4.compare to sring'

echo '5.Reverse string'

read str1

read option

case $option in

1) echo ${#str1;;

2) str2=$str1

echo $str2 ;;

3)str2="Shruti"

echo $str1$str2 ;;

4) str2="Jamdade"

if [ $str1 == $str2 ]

then

echo "Equal"

else

echo "Not equal"

fi

;;

5) echo $str1 | rev

;;

3.Write a shell script to rename all files in the current directory with numeric continuous value(Warning: Do this in a personal folder. Don't use Home directory)

for((i=1;i<10;i++))

do

mv a$i new$i

done

4. Write a script that print environment variable(Print $HOME,$PATH,$SHELL,$HISTORY,$LOGNAME,$TERM)

echo "Path = $PATH"

echo "Shell = $SHELL"

echo "History = $HISTORY"

echo "Logname = $LOGNAME"

echo "Term = $TERM"

5. Write a shell script to print all files permissions in current directory(Not name or other details)(Use cut commands)

ls -la | cut -b 1-10

ls -la | cut -c 1-10

6. Write a shell script to print all files permissions and name of file

#!/bin/bash

ls -l | awk '{ print $1 }'

7.Write a shell script to print all files name and size greater than 5K

#!/bin/bash

for i in \*

do

if [ -e $i ]

then

file=`ls -l $i | awk '{print $5}'`

if (( $file > 5000 ))

then

ls -l $i

fi

fi

done

1.Write a script To check given year is leap or not.

#!/bin/bash

echo 'Enter a year : '

read year

if (( $year%4 == 0 && $year%100 != 0 || $year%400 == 0))

then

echo 'Leap Year'

else

echo 'Not a Leap Year'

fi

2. Write a script to print day of the week using

a) elif b) case

#!/bin/bash

echo 'Enter the no of Day : '

read day

if [ $day == 1 ]

then

echo 'Sunday'

elif [ $day == 2 ]

then

echo 'Monday'

elif [ $day == 3 ]

then

echo 'Tuesday'

elif [ $day == 4 ]

then

echo 'Wednesday'

elif [ $day == 5 ]

then

echo 'Thrusday'

elif [ $day == 6 ]

then

echo 'Friday'

elif [ $day == 7 ]

then

echo 'Saturday'

else

echo 'Invalid Entry'

fi

3. a) Write a script to find biggest of three no.s

b) To find avg of 3 no.s, read no.s from keyboard

#!/bin/bash

echo 'Enter num1 : '

read num1

echo 'Enter num2 : '

read num2

echo 'Enter num3 : '

read num3

if (( num1 > num2 && num1 > num3 ))

then

echo $num1

elif (( num2 > num1 && num2 > num3 ))

then

echo $num2

else

echo $num3

fi0

4. Write a program to check weather given no.is even or odd

#!/bin/bash

echo 'Enter a number : '

read num

if (( num%2 == 0 ))

then

echo $num 'is Even.'

else

echo $num 'is Odd.'

fi

5. Write a program to print calendar of current month in next year,previous years.

For eg:-sep 2014,sep 2012 if current month is sep 2013

#!/bin/bash

mon=$(date | awk '{print $3}')

year=$(date | awk '{print $4}')

let "prev=year-1" "next=year+1"

cal $mon $prev

cal $mon $year

cal $mon $next

6. Write a program to find sum and product of two no.s using

a) let

b)expr

c)bc

#!/bin/bash

echo 'Enter num1 : '

read num1

echo 'Enter num2 : '

read num2

echo 'Enter num3 : '

read num3

(( avg = (( $num1+$num2+$num3 ))/3 ))

echo 'Average : '$avg

#!/bin/bash

echo 'Enter num1 : '

read num1

echo 'Enter num2 : '

read num2

let "prodlet=num1\*num2"

prodExp=$(expr $num1 \\* $num2)

echo 'Let : '

echo $prodlet

echo 'Expr : '

echo $prodExp

echo 'BC : '

echo $num1 \\* $num2 | bc

7. Write a script to generate Fibonacci series.

#!/bin/bash

echo 'Enter the range till you want to calculate the Fibonaccci Series : '

read range

i=1

prev=0

newprev=0

while (( $i+$prev < $range ))

do

echo $(expr $prev + $i)

newprev=$prev

prev=$i

i=$(expr $newprev + $i)

done

8. Write a shell script to reverse the single strings.

#!/bin/bash

echo 'Enter a string : '

read str

rev=""

len=${#str}

for (( i=$len; i>0; i-- ))

do

temp=$(expr $str | cut -c $i)

rev=$rev$temp

done

echo $rev

9.Write a shell script to reverse the list of strings and reverse each string further in the list.

#!/bin/bash

echo 'Enter array of Strings : '

read -a arr

min=0

max=`expr ${#arr[@]} - 1`

x=$max

while (( $min <= $max ))

do

newArr[$min]=${arr[$max]}

newArr[$max]=${arr[$min]}

(( min++ ))

(( max-- ))

done

max=$x

for (( i=0; i<=max; i++ ))

do

rev=""

str=${newArr[$i]}

let "len=${#str} -1"

for (( j=$len; j>=0; j-- ))

do

rev="$rev${str:$j:1}"

done

newArr[$i]=$rev

done

echo ${newArr[@]}

10. Write a shell script to print the reverse of an input number.

#!/bin/bash

echo 'Enter a number : '

read num

n=$num

sum=0

rem=0

while (( $n > 0 ))

do

rem=`expr $n % 10`

sum=`expr $sum \\* 10`

sum=`expr $sum + $rem`

n=`expr $n / 10`

done

echo 'Reverse : ' $sum

1.Write a shell script to validate password strength. Here are a few assumptions for the password string.

Length – minimum of 8 characters.

Contain both alphabet and number.

Include both the small and capital case letters.

If the password doesn’t comply with any of the above conditions, then the script should report it as a <Weak Password>.