Assignment 2

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

|  |
| --- |
| for (( i=0 ; i<=10 ; i++ )) |
| do |
| mkdir "$i" |
| done |

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

|  |
| --- |
| for (( i=0 ; i<=10 ; i++ )) |
| do |
| if [ "-d" "$i" ]; then |
| echo "$i dir exists!!!" |
| Else |
| mkdir "$i" |
| Fi |
| Done |

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

a) To find length of a string

=> echo ${#str}

c) Copying string

=> str1=$str

d) Concatenation of strings

=> str2=$str""$str1

e) Compare two strings

|  |
| --- |
| => str1="Wel" |
| str2="come" |
| if [ "$str1" == "$str2" ];then |
| echo "string is same" |
| Else |
| echo "not same" |
| fi |

f) Reversing a string

=> 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=0 ; i<`du | wc -l` ; i++ )) |
| Do |
| mv "a$i" "$i" |
| done |

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

|  |
| --- |
| for env in "$HOME " " $PATH " " $LOGNAME " " $HISTORY " " $TERM" |
| do |
| echo "$env" |
| done |

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

ls -l | cut -b 1-10

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

=> ls -l | cut -b 1-10 && ls -l | cut -b 52-""

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

#!/bin/bash

filename=./testfile.txt

maxsize=5

filesize=$(stat -c%s "$filename")

echo "Size of $filename = $filesize bytes."

if (( filesize > 5000 )); then

echo "nope"

else

echo "fine"

fi

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

|  |
| --- |
| #!bin/bash |
| read -p "Enter year:" year |
| if [ $((year%4)) -eq 0 ]; then |
| if [ $((year%100)) -eq 0 ]; then |
| if [ $((year%400)) -eq 0 ]; then |
| echo "$year is LEAP" |
| else |
| echo "$year is NOT leap" |
| fi |
| else |
| echo "$year is leap" |
| fi |
| else |
| echo "$year is NOT leap" |
| fi |

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

a) elif b) case

|  |
| --- |
| #!bin/bash |
| read -p "Enter no of day in week:" day |
|  |
| if [ $day -eq 1 ]; then |
| echo "Sunday" |
| elif [ $day -eq 2 ]; then |
| echo "Monday" |
| elif [ $day -eq 3 ]; then |
| echo "Tuesday" |
| elif [ $day -eq 4 ]; then |
| echo "Wednesday" |
| elif [ $day -eq 5 ]; then |
| echo "Thursday" |
| elif [ $day -eq 6 ]; then |
| echo "Friday" |
| elif [ $day -eq 7 ]; then |
| echo "Saturday" |
| else |
| echo "Invalid entry" |
| fi |
|  |
|  |
|  |
| b)=> |
| #!bin/bash |
| read -p "Enter no of day in week:" day |
|  |
| case "$day" in |
| 1) echo "Sunday";; |
|  |
| 2) echo "Monday";; |
|  |
| 3) echo "Tuesday";; |
|  |
| 4) echo "Wednesday";; |
|  |
| 5) echo "Thursday";; |
|  |
| 6) echo "Friday";; |
|  |
| 7) echo "Saturday";; |
|  |
| \*) echo "Invalid entry";; |
| esac |

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

|  |
| --- |
| #!bin/bash |
| read x |
| read y |
| read z |
|  |
| if [ $x -gt $y ] && [ $x -gt $z ]; then |
| echo "$x is Greater" |
| elif [ $y -gt $x ] && [ $y -gt $z ]; then |
| echo "$y is Greater" |
| elif [ $z -gt $y ] && [ $z -gt $x ]; then |
| echo "$z is Greater" |
| else |
| echo "All are equal" |
| fi |
|  |
|  |
|  |
|  |

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

|  |
| --- |
| => |
| #!bin/bash |
| read x |
| read y |
| read z |
|  |
| avg=$((x+y+z)) |
| echo " scale = 2 ; $avg/3 " | bc |

1. Write a program to check wahether given no.is even or odd

|  |
| --- |
| #!bin/bash |
| read x |
|  |
| if [ $((x%2)) -eq 0 ]; then |
| echo "Number is Even" |
| else |
| echo "Number 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 |
|  |
| x=`date +%Y` |
| y=`date +%m` |
| z=$((x-1)) |
| a=$((x+1)) |
| prev=`cal $y $z` |
| next=`cal $y $a` |
| echo "$prev" |
| echo " $next" |

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

a) let

b)expr

c)bc

7. Write a script to generate Fibonacci series.

|  |
| --- |
| #!bin/bash |
|  |
| read a |
| n1=0 |
| n2=1 |
| echo "$n1" |
| echo "$n2" |
| for (( i=1 ; i<$a ; i++ )) |
| Do |
| n3=$((n1+n2)) |
| echo "$n3" |
| n1="$n2" |
| n2="$n3" |
| Done |

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

|  |
| --- |
| #!bin/bash |
| read a |
| echo "$a" | rev |

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

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

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>.