**Assignment – 8**

1. Write a shell script to print the number in reverse order.

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano RevOrder.sh

#!/bin/bash

read -p "Enter number" num

echo "Original: " $num

let t=0

while [ $num -gt 0 ]

do

let t\*=10

let t+=$num%10

let num=$num/10

done

echo "Reverse: " $t

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./RevOrder.sh

Enter number1456

Original: 1456

Reverse: 6541

2. Write a shell script to print the count of files and subdirectories in the specified directory.

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano FSDCtr.sh

#!/bin/bash

let FCtr=0

let SDCtr=0

read -p "Choose directory " num

for i in $num/\*

do

if [ -d $i ]

then

let SDCtr=$SDCtr+1

else

let FCtr=$FCtr+1

fi

done

echo " Number of files " $FCtr

echo " Number of sub directories " $SDCtr

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./FSDCtr.sh

Choose directory ..

Number of files 0

Number of sub directories 9

3. Write a menu driven shell script to count number of .txt, .sh, .c, other files in the current directory

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano FileType.sh

#!/bin/bash

echo "Choose extension "

select i in .txt .sh .c '.\*';

do

let f=0

for file in \*

do

if [[ $file == \*$i ]]

then

let f=$f+1

fi

done

echo "Number of $i files is " $f

done

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./FileType.sh

Choose extension

1) .txt

2) .sh

3) .c

4) .\*

#? 1

Number of .txt files is 1

#? 2

Number of .sh files is 3

#? 3

Number of .c files is 0

#? 4

Number of .\* files is 7

#?

4. Write a shell script to count the number of occurrences of given word in the file. (Note: File name and word to be passed as an argument to the script)

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano WordOccur.sh

#!/bin/bash

file=$1

word=$2

count=$(grep -c $word $file)

echo "Number of occurences: " $count

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./WordOccur.sh List.txt x

Number of occurences: 3

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ cat List.txt

bash programming.pdf

FSDCtr.sh

List.txt

RevOrder.sh

shell examples.pdf

Shell Script.docx

5. Write a shell script to implement arithmetic calculator. (Note: Don’t use variable name to get the choice from the user)

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano Calculator.sh

#!/bin/bash

echo "Enter two numbers "

read a b

select word in "Add" "Subtract" "Multiply" "Divide"

do

if [[ $word == "Add" ]];

then

let sum=$a+$b

echo "Sum is " $sum

elif [[ $word == "Subtract" ]];

then

let diff=$a-$b

echo "Difference is " $diff

elif [[ $word == "Multiply" ]];

then

let pdt=$a\*$b

echo "Product is " $pdt

else

let quot=$a/$b

echo "Quotient is " $quot

fi

done

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./Calculator.sh

Enter two numbers

63 5

1) Add

2) Subtract

3) Multiply

4) Divide

#? 1

Sum is 68

#? 2

Difference is 58

#? 3

Product is 315

#? 4

Quotient is 12

#?

6. Write a shell script to check the user input is a integer number, floating point number or string.

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano checkForm.sh

#!/bin/bash

read -p "Input value " ip

if [[ $ip =~ ^[0-9]\*$ ]];

then

echo "Integer"

elif [[ $ip =~ ^[0-9]\*\.[0-9]\*$ ]];

then

echo "Floating point"

else

echo "String"

fi

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./checkForm.sh

Input value 5

Integer

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./checkForm.sh

Input value 5.0

Floating point

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./checkForm.sh

Input value "5.0"

String

7. 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 satisfy with any of the above conditions, then the script should print it as a “Weak Password”.

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ nano passCheck.sh

#!/bin/bash

read -p "Enter password " pw

if [[ $pw =~ [0-9]+ && $pw =~ [a-z]+ && $pw =~ [A-Z]+ && $pw =~ ^[A-Za-z0$

then

echo "Strong password "

else

echo "Weak password "

fi

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./passCheck.sh

Enter password asdfghj12345

Weak password

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./passCheck.sh

Enter password Asd1234

Weak password

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./passCheck.sh

Enter password asdf;asq1242

Weak password

shivanirudh@shiva-ideapad:~/Desktop/UNIX/ShellScript$ ./passCheck.sh

Enter password Ashfgqo1391j2

Strong password