**1. Write a shell script to get current date, time, user name and current working directory.**

Answer : The commands logname, date, who I am and pwd will output username, current date and time, and current working directory. Just implementing these commands in the script and making it a bit interactive.

Now create a file called ‘userstats.sh‘ and add the following code to it.

#!/bin/bash

echo "Hello, $LOGNAME"

echo "Current date is `date`"

echo "User is `who i am`"

echo "Current directory `pwd`"

Place execute permission and run the script as shown below.

# chmod 755 userstats.sh

# ./userstats.sh

Sample Output

Hello, ec2-user

Current date is Sat Jun 7 13:05:29 IST 2014

User is ec2-user pts/0 2014-06-07 11:59 (:0)

Current directory /home/ec2-user/scripts

**2. Write a Shell Script that adds two numbers if provided as the command Line Argument and if the two numbers are not entered it outputs an Error Message along with a one-Line of how-to use description.**

Answer : Here is the simple Shell Script along with description which adds two number if provided as Command-Line argument, if not it throws error with single line on how to use the script.

Again create a file called ‘two-numbers.sh‘ and add the following content to it.

#!/bin/bash

if [ $# -ne 2 ]

# If two Inputs are not received from Standard Input

then

# then execute the below statements

echo "Usage - $0 x y"

# print on standard output, how-to use the script (Usage - ./1.sh x y )

echo " Where x and y are two nos for which I will print sum"

# print on standard output, “Where x and y are two nos for which I will print sum ”

exit 1

# Leave shell in Error Stage and before the task was successfully carried out.

fi

# End of the if Statement.

echo "Sum of $1 and $2 is `expr $1 + $2`"

# If the above condition was false and user Entered two numbers as a command Line Argument,

it will show the sum of the entered numbers.

Set executer permission on the file and run the script as shown below.

# chmod 755 two-numbers.sh

Condition 1: Running the script without entering two numbers as command line argument, you will get the following output.

Sample Output

# ./two-numbers.sh

Usage - ./two-numbers.sh x y

Where x and y are two nos for which I will print sum

Condition 2: When Numbers are entered as command line argument you will get the result as shown.

$ ./two-numbers.sh 4 5

Sum of 4 and 5 is 9

Hence the above shell script fulfills the condition as suggested in the question.

**3. You needs to print a given Number say 10572, in reverse order using a Shell script such that the input is provided using command Line Argument only. If the input data is not provided as Command Line Argument, it should throw and error and should suggest, how to use the script. Write the script but before that tell me the algorithm that needs to be implemented here.**

Algorithm

1. Let the Input Number = n
2. 2. Set rev=0, sd=0 (Reverse and single digitis set to 0)
3. 3. n % 10, will find and give single left most digit
4. 4. reverse number is generated as rev \* 10 + sd
5. 5. Decrease Input Number (n) by 1.
6. 6. if n > 0, then goto step 3 else goto setp 7
7. 7. Print rev

Now again, create a file called ‘numbers.sh‘ and add the following given code it.

#!/bin/bash

if [ $# -ne 1 ]

then

echo "Usage: $0 number"

echo " I will find reverse of given number"

echo " For eg. $0 0123, I will print 3210"

exit 1

fi

n=$1

rev=0

sd=0

while [ $n -gt 0 ]

do

sd=`expr $n % 10`

rev=`expr $rev \\* 10 + $sd`

n=`expr $n / 10`

done

echo "Reverse number is $rev"

Grant a execute permission on the file and run the script as shown below.

# chmod 755 numbers.h

Condition 1: When Input is not provided as command line argument, you will get the following output.

Sample Output

./numbers.sh

Usage: ./numbers.sh number

I will find reverse of given number

For eg. ./2.sh 123, I will print 321

Condition 2: When Input was provided as command line Argument.

$ ./numbers.sh 10572

Reverse number is 27501

The above script worked perfectly and the output was just what we needed.