**BASH FUNCTION**

#### A **Bash function** is essentially a set of commands that can be called numerous times. The purpose of a function is to help you make your bash scripts more readable and to avoid writing the same code repeatedly. Compared to most programming languages, Bash functions are somewhat limited.

Following are some key points about bash functions:

• A function has to be declared in the shell script before we can use it.

• Arguments can be passed to the functions and accessed inside the function as $1, $2, etc.

• Local variables can be assigned within the function, and the scope of such variables will only be that particular function.

• Built-in commands of Bash shell can be overridden using functions.

* Make a directory.

gedit for.sh (here for.sh is your file name with bash file extinction)

**#Declaring function using the reserved keyboard function**

**#Multiple function**

* **Input**

#! /bin/bash

function f1 {

echo "Hello i am function "

echo "Bye"

}

f1

* **Output**

Hello I am function

Bye

**#single line**

* **Input**

#! /bin/bash

function f2 { echo "welcome to this world" ; echo "How are you" ; }

f2

* **Output**

Welcome to this world

How are you

**#without function keyboard**

* **Input**

#! /bin/bash

Hello () {

echo "Hello welcome to NSTI"

}

Hello

* **Output**

Hello welcome to NSTI

* **Input**

#! /bin/bash

Hello () { echo "Hello welcome to NSTI" ; }

Hello

* **Output**

**#Passing a string Argument to a function**

* **Input**

#! /bin/bash

Hello () {

echo "Hello $1"

}

Hello "PGLU"

* **Output**

Hello PGLU

* **Input**

#! /bin/bash

Hello () {

echo "Hello $1"

echo "Hello $2"

}

Hello "PGLU" "GMR"

* **Output**

Hello PGLU

Hello GMR

* **Input**

Hello () {

echo "Hello $1"

echo "$2"

}

Hello "PGLU" "GMR"

* **Output**

Hello PGLU

GMR

**#Passing an Integer Arguments to a function for addition**.

* **Input**

#! /bin/bash

Sum () {

add=$(($1+$2))

echo "The Sum of $1 and $2 is $add"

}

Sum 220 20

* **Output**

The sum of 220 and 20 is 240

* **Input**

#! /bin/bash

Sum () {

add=$(($1+$2))

echo "The sum of $1 and $2 is $add"

}

Sum 50 500

* **Output**

The sum of 50 and 500 is 550

* **Input**

#! /bin/bash

Multiplication () {

multiplication=$(($1\*$2))

echo "The multiplication of $1 and $2 is $multiplication"

}

Multiplication 5 7

* **Output**

The multiplication of 5 and 7 is 35

* **Input**

#! /bin/bash

Division () {

division=$(($1/$2))

echo "The division of $1 and $2 is $division"

}

Division 10 2

* **Output**

The division of 10 and 2 is 5

* **Input**

#! /bin/bash

f3 () {

if [ $1 -ge 50 ]

then

echo "$1 is larger"

else

echo "$1 is smaller"

fi

}

f3 14

* **Output**

14 is smaller

* **Input**

#! /bin/bash

f4 () {

for i in 1 2 3 4 5

do

echo "Welcome to $i times"

done

}

f4

* **Output**

Welcome to 1 time

Welcome to 2 time

Welcome to 3 time

Welcome to 4 time

Welcome to 5 time

* **Input**

#! /bin/bash

f5 () {

for i in {1..10}

do

echo "Welcome to $i times"

done

}

f5

* **Output**

Welcome to 1 times

Welcome to 2 times

Welcome to 3 times

Welcome to 4 times

Welcome to 5 times

Welcome to 6 times

Welcome to 7 times

Welcome to 8 times

Welcome to 9 times

Welcome to 10 times