

Aim: Shell program to find GCD of two numbers using cmd args.

output:

```
upreti@himanshu-upreti:~$ ./gcd.sh 18 22  
GCD of 18 and 22 is 2
```

```
upreti@himanshu-upreti:~$ ./gcd.sh 12 24  
GCD of 12 and 24 is 12
```

Conclusion:

We have completed GCD of two numbers taken through command argument.

Aim: Shell program to find GCD

Software Required: Ubuntu 18.04, terminal

Program:

```
num = $1  
den = $2  
if [ $2 -gt $1 ]  
then num = $2  
den = $1
```

```
fi  
r = 'expr $num % $den'  
while [ $r -ne 0 ]  
do
```

```
num = $den
```

```
den = $r
```

```
r = 'expr $num 90 $den'
```

```
done
```

```
echo "GCD of $1 & $2 is $den"
```

Conclusion:

In this experiment, we have complete the GCD of two numbers taken through cmd.

Aim: Shell program to print multiplication table of a number using commands argument.

Output:

uprethi@himanshu-uprethi:~\$./box.sh 50

Multiplication table of 50

$$50 \times 1 = 50$$

$$50 \times 2 = 100$$

$$50 \times 3 = 150$$

$$50 \times 4 = 200$$

$$50 \times 5 = 250$$

$$50 \times 6 = 300$$

$$50 \times 7 = 350$$

$$50 \times 8 = 400$$

$$50 \times 9 = 450$$

$$50 \times 10 = 500$$

Conclusion:

We have successfully computed the multiplication table of a number given as command.

Aim: Shell program to print multiplication table for a number using command.

Software Required: Ubuntu 18.04 LTS

Program :

(1) Using for loop

```
echo "Multiplication Table of $1"  
for ((i=1; i<=10; i++))  
do  
    echo "$1 * $i = `expr $1 \* $i`"  
done
```

(2) Using while .. do loop

```
echo "Multiplication table of $1"  
j=1  
while [ $j -le 10 ]  
do  
    echo "$1 * $j = `expr $1 \* $j`"  
j=`expr $j + 1`  
done
```

Conclusion:

In this experiment, we have computed the multiplication table of a number given as command.

Aim: Shell program to create a user, change user password & delete user using case statement.
Software Required: Ubuntu 18.04, terminal

Program:

while [true]

do

echo " "

echo "Menu..."

echo "1. Create a user"

echo "2. Change user password"

echo "3. Delete a user"

echo "4. Exit"

read -p "Enter your choice (1-4):" i

case \$i in

"1")

read -p "Enter a new username:" user

sudo useradd \$user

echo "Creating a new user"

;;

2) echo " "

read -p "Enter a username:" user

sudo passwd \$user

;;


```
3) echo " "
read P
echo $P
sleep 1
done
```

```
4) break;
* ) echo "Invalid choice"
sleep 1
done
```

Conclusion : In this experiment we have demonstrated case statement in shell programming by creating a menu-driven program.