

DTL – Assignment : Bash Scripting

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Division: 2

Batch: S3

1. Making new file and entering text into it
2. Making the file executable
3. Listing all the files in directory
4. Executing the file

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ echo echo Hello World! > hello_world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ chmod 755 hello_world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ ls
hello_world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ bash hello_world.sh
Hello World!
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ █
```

1. Adding multiple lines to a file
2. Changing permission of the file created
3. Listing all the files in the directory
4. Executing the file

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ cat << ALLDONE > hello_world_multiline.sh
> echo This is DTL Assignment.
> echo Hello, I am Abhishek Shinde.
> echo This is a multiline file.
> ALLDONE
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ chmod 755 hello_world_multiline.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ ls
hello_world.sh  hello_world_multiline.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ bash hello_world_multiline.sh
This is DTL Assignment.
Hello, I am Abhishek Shinde.
This is a multiline file.
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ █
```

1. Opening Downloads directory
2. Creating a new file with current timestamp
3. Opening the file
4. Changing permissions
5. Listing the files in the directory
6. Executing the file

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2$ cd DTL
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ touch hello-world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano hello-world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod +x hello-world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./hello-world.sh
"Hello World, I am Abhi."
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

```
GNU nano 6.2                                hello-world.sh *
# !/bin/bash -xv

# This is DTL Assignment of bash scripting.

echo "Hello World, I am Abhi."
```

Special Parameters:

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano file1.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 file1.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls
file1.sh  hello-world.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ bash file1.sh {A..Z}
A B H I
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

```
GNU nano 6.2                                file1.sh
# !/bin/bash -xv

echo ${1} ${2} ${8} ${9}
```

Exploring all special parameters:

```
GNU nano 6.2                                file2.sh *
# !/bin/bash

echo
echo $* Represents all arguments as single string
echo
echo $@ Represents all arguments as an Array rather than a string
echo
echo $# Total number of positional arguments
echo
echo $- Current flag position
echo
echo $$ PID of the shell
echo
echo $! PID of the last executed background command
echo
echo $0 Name of the shell or shell script
echo
echo $_ Final argument of the last executed foreground command
echo
echo $? Represents exit status of the last executed foreground command
echo
```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano file2.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 file2.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ bash file2.sh {A..Z}

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Represents all arguments as single string
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Represents all arguments as an Array rather than a string

26 Total number of positional arguments

hB Current flag position

559 PID of the shell

PID of the last executed background command

file2.sh Name of the shell or shell script

echo Final argument of the last executed foreground command

0 Represents exit status of the last executed foreground command

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

```

Bracket Expansion:

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo a{b,d,c}e
abe ade ace
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo {A..Z}
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ mkdir z{1..10}
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls
file1.sh file2.sh hello-world.sh z1 z10 z2 z3 z4 z5 z6 z7 z8 z9
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $BASH
/bin/bash
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

```

Using variables:

```

GNU nano 6.2 variable.sh *
#!/bin/bash

name="Abhishek Shinde"
echo My name is ${name}.█

```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano variable.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 variable.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./variable.sh
My name is Abhishek Shinde.
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

```

```

GNU nano 6.2 roommates.sh *
#!/bin/bash

friend1=Himanshu
friend2=Harshal
friend3=Abhishek

echo ${friend1}, ${friend2} and ${friend3} are my roommates.
█

```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano roommates.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 roommates.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./roommates.sh
Himanshu, Harshal and Abhishek are my roommates.
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

```

Arithmetic Expansion:

```
GNU nano 6.2 arithmetic.sh *
#!/bin/bash

a=15
b=20

echo a=${a} and b=${b}
echo a+b = $((a+b))
echo $((a=a+b))
echo ${a}
echo $((a++))
echo
echo ${a}
echo
unset b
echo $((b--))
echo ${b}
echo
a=1
let a++
echo ${a}
```

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano arithmetic.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 arithmetic.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./arithmetic.sh
a=15 and b=20
a+b = 35
35
35

36

-1

2
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

Command Substitution:

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ file arithmetic.sh
arithmetic.sh: Bourne-Again shell script, ASCII text executable
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

```
GNU nano 6.2 greetings.sh *
#!/bin/bash

greeting="Heyy, Welcome"
user=$(whoami)
date=$(date +%F)

echo "$greeting $user! Today is $date"
echo "Your bash shell version is: $BASH_VERSION.!"
```

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano greetings.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 greetings.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./greetings.sh
Heyy, Welcome abhishek! Today is 2023-01-22
Your bash shell version is: 5.1.16(1)-release.!
```

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ a=25
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ b=12
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $a
25
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $b
12
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $[a + b]
37
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```


Creating Backup:

```
GNU nano 6.2 file3.sh *
#!/bin/bash
# This bash script is used to backup a user's home directory to /test/.

user=$(whoami)
input=/home/${user}
output=/tmp/${user}_home_$(date +%Y-%m-%d_%H%M%S).tar.gz

tar -cvf $output $input

echo "$input backup is complete! Details of the backup are:"
ls -l $output

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano file3.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 file3.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./file3.sh
tar: Removing leading '/' from member names
/home/abhishek/
/home/abhishek/.python_history
/home/abhishek/.sudo_as_admin_successful
/home/abhishek/.bash_history
/home/abhishek/.motd_shown
/home/abhishek/.config/
/home/abhishek/.config/procps/

/home/abhishek/112103134/Assg2/DTL/arithmetic.sh
/home/abhishek/112103134/Assg2/DTL/variable.sh
/home/abhishek/.local/
/home/abhishek/.local/share/
/home/abhishek/.local/share/nano/
/home/abhishek/.lessht
/home/abhishek/7930
/home/abhishek backup is complete! Details of the backup are:
-rw-r--r-- 1 abhishek abhishek 440320 Jan 22 19:55 /tmp/abhishek_home_2023-01-22_195528.tar.gz
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

Environment:

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ env
SHELL=/bin/bash
WSL_DISTRO_NAME=Ubuntu
WT_SESSION=2b087f5b-a9a5-4d92-86e5-1ca1d39efd92
NAME=DESKTOP-JFQGD3E
PWD=/home/abhishek/112103134/Assg2/DTL
LOGNAME=abhishek
HOME=/home/abhishek
LANG=C.UTF-8
WSL_INTEROP=/run/WSL/479_interop
LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=
37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lzh=01;31:*.lzm=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01
;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.
tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo=01;31:*.
cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35
:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;
35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.webp=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob
=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.xcf=01
;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00
0;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:
LESSCLOSE=/usr/bin/lesspipe %s %s
TERM=xterm-256color
LESSOPEN=| /usr/bin/lesspipe %s
USER=abhishek
SHLVL=1
WSLENV=WT_SESSION:WT_PROFILE_ID
XDG_DATA_DIRS=/usr/local/share:/usr/share:/var/lib/snapd/desktop
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/usr/lib/wsl/lib:/mnt/c/Windows/system32:/mnt/c/Windows:/mnt/c
/Windows/System32/Wbem:/mnt/c/Windows/System32/WindowsPowerShell/v1.0:/mnt/c/Windows/System32/OpenSSH:/mnt/c/Program Files/NVIDIA Corporation/NVIDIA NvDLI
SR:/mnt/c/Program Files/dotnet:/mnt/c/Program Files (x86)/NVIDIA Corporation/PhysX/Common:/mnt/c/Program Files/Git/cmd:/mnt/c/Program Files/nodejs:/mnt/c
/Users/DELL/AppData/Local/Programs/Python/Python310/Scripts:/mnt/c/Users/DELL/AppData/Local/Programs/Python/Python310:/mnt/c/Users/DELL/AppData/Local/Micro
soft/WindowsApps:/mnt/c/Users/DELL/AppData/Local/Programs/Microsoft VS Code/bin:/mnt/c/MinGW/bin:/mnt/c/Users/DELL/AppData/Roaming/npm:/mnt/c/MiKTeX/miktex/
bin/x64:/snap/bin
HOSTTYPE=x86_64
WT_PROFILE_ID={51855cb2-8cce-5362-8f54-464b92b32386}
OLDPWD=/home/abhishek/112103134/Assg2
_=/usr/bin/env
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat /etc/environment
PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin"
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$
```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat /etc/profile
# /etc/profile: system-wide .profile file for the Bourne shell (sh(1))
# and Bourne compatible shells (bash(1), ksh(1), ash(1), ...).

if [ "${PS1}" ]; then
  if [ "${BASH}" ] && [ "$BASH" != "/bin/sh" ]; then
    # The file bash.bashrc already sets the default PS1.
    # PS1='\h:\w\$ '
    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
    fi
  else
    if [ "$(id -u)" -eq 0 ]; then
      PS1='# '
    else
      PS1='$ '
    fi
  fi
fi

if [ -d /etc/profile.d ]; then
  for i in /etc/profile.d/*.sh; do
    if [ -r $i ]; then
      . $i
    fi
  done
unset i
fi
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$

```

Input and Output Redirection:

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ~/.bashrc
-bash: /home/abhishek/.bashrc: Permission denied
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cmd < x.in
-bash: x.in: No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ touch foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls -l foobar
-rw-r--r-- 1 abhishek abhishek 0 Jan 22 20:03 foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls foobar barfoo
ls: cannot access 'barfoo': No such file or directory
foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls foobar barfoo > stdout.txt
ls: cannot access 'barfoo': No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls foobar barfoo 2> stdout.txt
foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls foobar barfoo &> stdoutandstderr.txt
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat stdout.txt
ls: cannot access 'barfoo': No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 stdout.txt
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat stdout.txt
ls: cannot access 'barfoo': No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat stderr.txt
cat: stderr.txt: No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ls foobar barfoo 2> stderr.txt
foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat stderr.txt
ls: cannot access 'barfoo': No such file or directory
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ cat stdoutandstderr.txt
ls: cannot access 'barfoo': No such file or directory
foobar
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$

```

Functions:

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ function status { date; uptime; who | grep $USER; }
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ status
Sun Jan 22 20:10:55 IST 2023
 20:10:55 up 1:41,  0 users,  load average: 0.06, 0.01, 0.00
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$

```

```

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ my_function() { echo "Hello I'm a function"; echo "Bye!"; }
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ my_function
Hello I'm a function
Bye!
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ bash --debugger
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ declare -f my_function
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ declare -f my_function
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ unset my_function
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ my_funtion
my_funtion: command not found
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$

```

Numeric and String comparison:

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ a=4
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ b=6
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ [ $a -lt $b ]
0
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ [ $a -gt $b ]
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $?
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ [ "appels" = "oranges" ]
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $?
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ str1="appels"
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ str2="oranges"
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ [ $str1 = $str2 ]
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $?
1
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █
```

Conditional statements:

```
GNU nano 6.2 file4.sh *
#!/bin/bash

a=19
if ((a==30))
then echo YES;
else
echo NO;
fi

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ nano file4.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ chmod 755 file4.sh
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ ./file4.sh
NO
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █
```

Arithmetic Expression:

```
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $(( 24+4 ))
28
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $(( 46-8 ))
38
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $(( 13*4 ))
52
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $(( 200/10 ))
20

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ m=25; n=4
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $(( $m * $n ))
100
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ expr 8 + 6
14
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ expr 8 - 6
2
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ expr 30 / 6
5

abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ let x=6+55
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ echo $x
61
abhishek@DESKTOP-JFQGD3E:~/112103134/Assg2/DTL$ █
```