

Shell test for file and directory types

Test	Meaning
-s file	Non empty file
-f file	Is File exist or normal file and not a directory
-d dir	Is Directory exist and not a file
-w file	Is writeable file
-r file	Is read-only file
-x file	Is file is executable

-f file

Is File exist or normal file and not a directory

```
ubuntu@ubuntu:~$ touch file1
ubuntu@ubuntu:~$ if test -f file1 ; then echo "FILE EXIST" ;fi
FILE EXIST
ubuntu@ubuntu:~$ if test -f file2 ; then echo "FILE EXIST" ; fi
ubuntu@ubuntu:~$
```

-s file**Non empty file**

```
ubuntu@ubuntu:~$ touch myFile
```

```
ubuntu@ubuntu:~$ echo " This is my file * _ " > myFile
```

```
ubuntu@ubuntu:~$ cat myFile
```

```
This is my file * _
```

```
ubuntu@ubuntu:~$ touch myFile2
```

```
ubuntu@ubuntu:~$ if test -s myFile;then echo "NON EMPTY FILE";else echo "EMPTY FILE";fi
NON EMPTY FILE
```

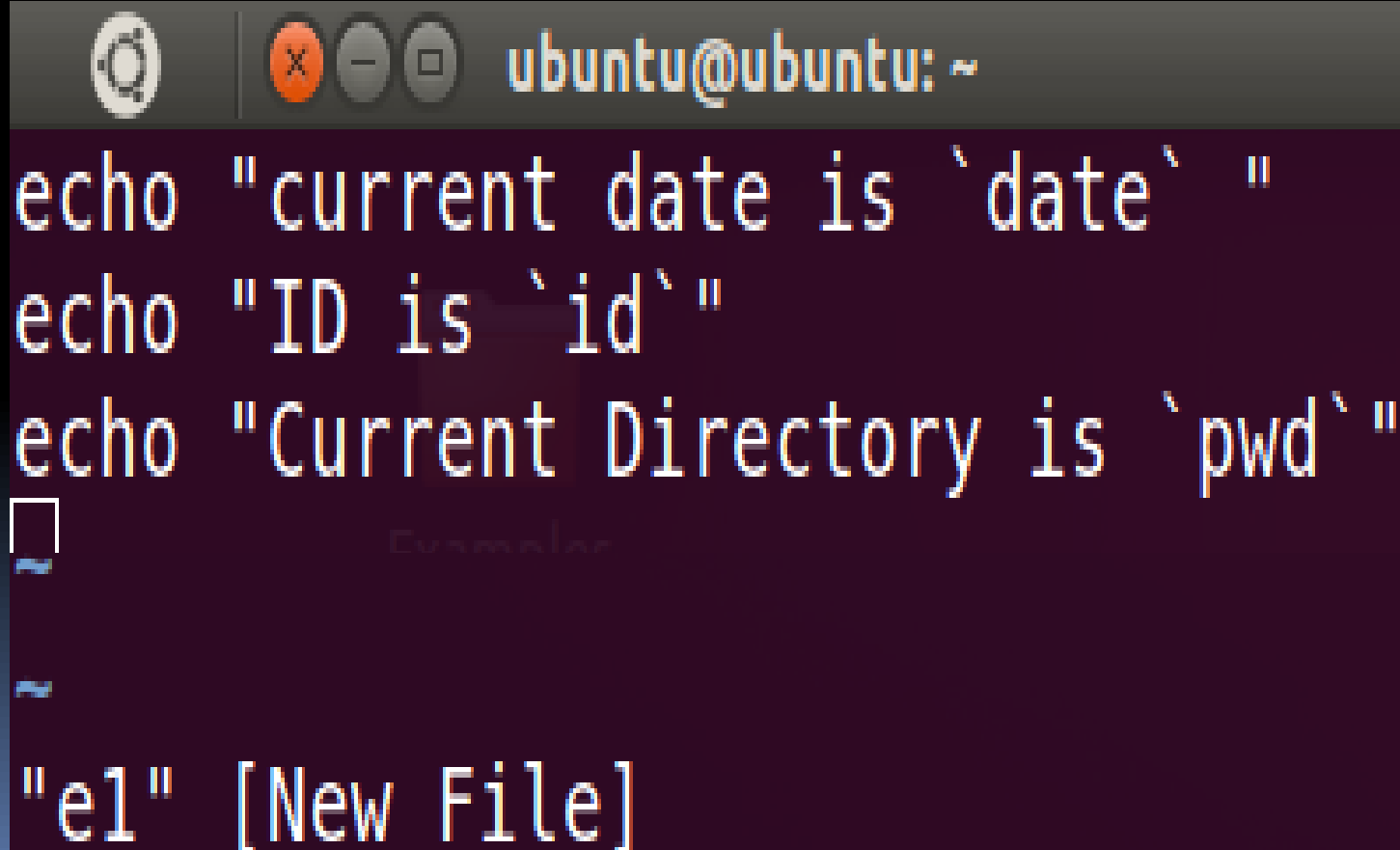
```
ubuntu@ubuntu:~$ if test -s myFile2;then echo "NON EMPTY FILE";else echo "EMPTY FILE";fi
EMPTY FILE
```

```
ubuntu@ubuntu:~$
```

1- Write shell script to determine whether given file exist or not.

```
if [ $# -ne 1 ]
then
    echo "Enter the file-name"
    exit 1
fi
if [ -f $1 ]
then
    echo "$1 file exist"
else
    echo "Sorry, $1 file does not exist"
fi
```

2. Write Script to see current date & time, display information about your identity and current directory.



A terminal window titled 'ubuntu@ubuntu: ~' with standard window control buttons. The terminal contains a script with three lines: 'echo "current date is `date`"', 'echo "ID is `id`"', and 'echo "Current Directory is `pwd`"'. The cursor is on the first line. Below the terminal, a file manager window shows a file named 'e1' with the label '[New File]'.

```
ubuntu@ubuntu: ~  
echo "current date is `date`"  
echo "ID is `id`"  
echo "Current Directory is `pwd`"  
~  
~  
"e1" [New File]
```

3. Write shell script that will add two numbers, which are supplied as command line argument, and if this two numbers are not given show error message.

```
if [ $# -ne 2 ]
```

```
then
```

```
    echo " Enter 2 number to find the sum"
```

```
else
```

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

```
fi
```

4- find out biggest number from given three numbers.

```
if [ $# -ne 3 ]
then
echo "enter 3 nums to compare them"
exit 1
fi

if [ $1 -gt $2 -a $1 -gt $3 ]
then
echo "$1 is biggest num"
else

if [ $2 -gt $1 -a $2 -gt $3 ]
then
echo " $2 is biggest num "
else
echo "$3 is biggest num"
fi
fi
```

```
ubuntu@ubuntu:~$ sh e3 4 5
enter 3 nums to compare them
ubuntu@ubuntu:~$ sh e3 2 5 1
5 is biggest num
```


5- Write shell script using for loop to print the following patterns

```
1
11
111
1111
11111
```

```
ubuntu@ubuntu: ~  
for (( i=1 ; i<=5 ; i++ ))  
do  
    for (( j=1 ; j<=i ; j++ ))  
    do  
        echo -n "1"  
    done  
done  
echo ""  
done
```

```
ubuntu@ubuntu:~$ vi myFor  
ubuntu@ubuntu:~$ bash myFor  
1  
11  
111  
1111  
11111
```