

[CS242] OPERATING SYSTEMS

Αντρέας

Εντολή	Λειτουργία	Ερώτηση
pwd :	Displays the path name of the working directory.	(A1)
ls :	Displays the contents of a directory	(A2)
cd :	Changes the current directory	(A3)

Δώστε pwd και σημειώστε τι εμφανίζεται. _____ /home/user _____ (A4)

```
~$ pwd
/home/user
```

Τι κάνουν οι παρακάτω παράμετροι στο ls

-a : _ Lists all entries in the directory, including the entries that begin with a . (dot)._ (A5)

```
~$ ls -a
. .__ 'Welcome to CoCalc.term' .bash_history .bash_profile .bashrc .gitconfig .gitexcludes .jupyter-blobs-v0.db .sage .smc .snapshots .ssh 'Welcome to CoCalc.term'
```

-l (“ελ μικρό”) : _ Displays the mode, number of links, owner, group, size (in bytes), and time of last modification for each file _____ (A6)

```
~$ ls -l
total 1
-rw-r--r-- 1 user user 0 Mar 29 18:41 'Welcome to CoCalc.term'
```

-S : Sorts with the primary key being file size (in decreasing order) and the secondary key being file name in the collating sequence (in increasing order). _____ (A7)

```
~$ ls -S
'Welcome to CoCalc.term'
```

Βρείτε τι κάνουν οι παρακάτω εντολές

less :_ displays the contents of a file or a command output, one page at a time. It is similar to more , but has more advanced features and allows you to navigate both forward and backward through the file_____ (A8)

file : Determines the file type.

The file command reads the files specified by the File parameter or the FileList variable, performs a series of tests on each file, and attempts to classify them by type_____ (A9)

```
~$ file
Usage: file [-bcCdEhikLlNnprsSvzZ0] [--apple] [--extension] [--mime-encoding]
          [--mime-type] [-e <testname>] [-F <separator>] [-f <namefile>]
          [-m <magicfiles>] [-P <parameter=value>] <file> ...
file -C [-m <magicfiles>]
file [--help]
```

4. Χειρισμός αρχείων – Καταλόγων

Εντολή	Λειτουργία	Ερώτηση
cp:	Copies files (Copy source to DEST, or multiple SOURCE(s) to DIRECTORY)	(A10)
mv:	Rename SOURCE to DEST, or move SOURCE(s) to DIRECTORY	(A11)
rm:	Removes (unlinks) files or directories.	(A12)
mkdir:	Creates one or more new directories.	(A13)
rmdir:	Removes a directory	(A14)

Κατασκευάστε τον κατάλογο myfolder

Ποια εντολή χρησιμοποιήσατε;_____ mkdir myfolder_____ (A15)

```
~$ mkdir myfolder
```

Επιβεβαιώστε με

ls -l

Εμφανίζεται στην λίστα ο κατάλογος myfolder ; _____ΝΑΙ_____ (A16)

```
~$ ls -l
total 1
-rw-r--r-- 1 user user 0 Mar 29 20:00 'Welcome to CoCalc.term'
drwxr-xr-x 2 user user 2 Mar 29 20:01 myfolder
```

Διαγράψτε τον κατάλογο myfolder

Ποια εντολή χρησιμοποιήσατε; _____ rmdir _____ (A17)

```
~$ rmdir myfolder
~$ ls -l
total 1
-rw-r--r-- 1 user user 0 Mar 29 20:00 'Welcome to CoCalc.term'
```

Δημιουργήστε τον κατάλογο lab-name

Μέσα στον κατάλογο lab-name δημιουργήστε τον κατάλογο linux-midterm

Ποιες εντολές χρησιμοποιήσατε; _mkdir, cd, mkdir _____ (A18)

```
~$ mkdir lab-name
~$ cd lab-name
~/lab-name$ mkdir linux-midterm
```

5. Εισαγωγή στα σενάρια φλοιού

Κώδικας:

```
#!/bin/sh
```

```
myname="Test"
```

```
echo "Hello, $LOGNAME by $myname"
```

```
echo "Current date is `date`"
```

```
echo "Current directory `pwd`"
```

```
~$ chmod +x myfirst.sh
~$ ./myfirst.sh
Hello,  by Test
Current date is Tue Mar 30 21:30:57 UTC 2021
Current directory /home/user
```

(C1)

Κώδικας:

```
#!/bin/sh  
  
var1="Hello"  
  
myname="Andreas"  
  
echo "$var1, $myname"
```

```
~$ chmod +x c1.sh  
~$ ./c1.sh  
Hello, Andreas
```

6. Μεταβλητές της γραμμής εντολών

(C2)

Κώδικας:

```
#!/bin/sh  
  
var1=$1  
  
echo "Hello $var1"
```

```
~$ chmod +x c2.sh  
~$ ./c2.sh Neapolis  
Hello Neapolis  
~$ ./c2.sh Neapolis University  
Hello Neapolis
```

Πώς μπορούμε να τροποποιήσουμε τον κώδικα για να εμφανίζει στην οθόνη μας και την λέξη University?

Κώδικας:

```
#!/bin/sh  
  
var1=$2  
  
echo "Hello $var1"
```

```
~$ chmod +x c2.sh  
~$ ./c2.sh Neapolis University  
Hello University
```

8. Συνθήκες

(C3)

Κώδικας:

```
#!/bin/sh

echo "What is your name;"

read name

if [ "$name" = "Andreas" ] ; then

echo "Hello admin $name. How are you?"

elif [ "$name" = "" ] ; then

    echo "What is your name;"

    read name

    if [ "$name" = "Andreas" ] ; then

        echo "Hello admin $name. How are you?"

    else

        echo "Who are you?"

    fi

else

echo "Who are you?"

fi
```

```
~$ chmod +x c3.sh
~$ ./c3.sh
What is your name;
Andreas
Hello admin Andreas. How are you?

~$ chmod +x c3.sh
~$ ./c3.sh
What is your name;
Antonis
Who are you?
```

```

~$ chmod +x c3.sh
~$ ./c3.sh
What is your name;

What is your name;
Andreas
Hello admin Andreas. How are you?

~$ chmod +x c3.sh
~$ ./c3.sh
What is your name;

What is your name;
Paulos
Who are you?

```

9. Βρόγχοι Ανατροφοδότησης

(C4)

Κώδικας:

```

#!/bin/sh

echo "Type your name:"

read name

echo "How many times want to print your name?"

read times

i=1

while [ "$i" -le $times ]

do

echo $i $name

i=`expr $i + 1`

done

~$ chmod +x c4.sh
~$ ./c4.sh
Type your name:
Andreas
How many times want to print your name?
12
1 Andreas
2 Andreas
3 Andreas
4 Andreas
5 Andreas
6 Andreas
7 Andreas
8 Andreas
9 Andreas
10 Andreas
11 Andreas
12 Andreas

```

(C5)

Κώδικας:

```
#!/bin/sh

echo "Type your name:"

read name

echo "How many times want to print your name?"

read times

i=1

while [ "$i" -le $times ]

do

echo $i $name

i=`expr $i + 1`

    if [ "$i" = "6" -o "$i" = "11" -o "$i" = "16" -o "$i" = "21" ] ; then

        echo "Press Y,y for YES or N,n for NO:"

        read answer

        if [ "$answer" = "Y" -o "$answer" = "y" ] ; then

            continue

        fi

        if [ "$answer" = "N" -o "$answer" = "n" ] ; then

            break

        fi

    fi

done
```

```
~$ chmod +x c5.sh
~$ ./c5.sh
Type your name:
Andreas
How many times want to print your name?
14
1 Andreas
2 Andreas
3 Andreas
4 Andreas
5 Andreas
Press Y,y for YES or N,n for NO:
y
6 Andreas
7 Andreas
8 Andreas
9 Andreas
10 Andreas
Press Y,y for YES or N,n for NO:
Y
11 Andreas
12 Andreas
13 Andreas
14 Andreas
```

```
~$ chmod +x c5.sh
~$ ./c5.sh
Type your name:
Andreas
How many times want to print your name?
12
1 Andreas
2 Andreas
3 Andreas
4 Andreas
5 Andreas
Press Y,y for YES or N,n for NO:
y
6 Andreas
7 Andreas
8 Andreas
9 Andreas
10 Andreas
Press Y,y for YES or N,n for NO:
n
~$ chmod +x c5.sh
~$ ./c5.sh
Type your name:
Andreas
How many times want to print your name?
9
1 Andreas
2 Andreas
3 Andreas
4 Andreas
5 Andreas
Press Y,y for YES or N,n for NO:
N
```