Bài th?c hành s? 1

Câu 1: thay ??i password

```
[root@localhost sinhvien]# passwd sinhvien
Changing password for user sinhvien.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost sinhvien]# ■
```

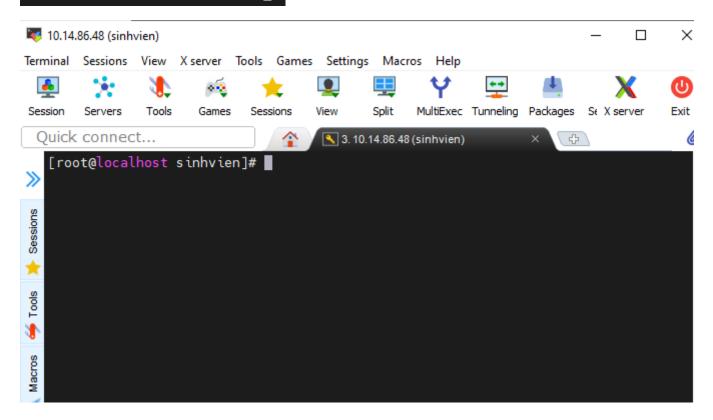
Cau 2 : xem ngay gio

```
[root@localhost sinhvien]# date
Mon Feb 21 08:36:23 +07 2022
[root@localhost sinhvien]# ■

[root@localhost sinhvien]# date "+Hom nay la ngay: %D"
Hom nay la ngay: 02/21/22
[root@localhost sinhvien]# ■
```

Cau 3: clear man hinh

[sinhvien@localhost ~]\$ \$clear



Câu 4: xem th?i gian s? d?ng

```
[root@localhost sinhvien]# uptime
08:42:04 up 41 min, 2 users, load average: 0.89, 0.40, 0.24
[root@localhost sinhvien]# ■
```

Câu 5: xem tr? giúp

```
DATE(1)
                                    User Commands
                                                                               DATE(1)
NAME
       date - print or set the system date and time
SYNOPSIS
       date [OPTION]... [+FORMAT]
       date [-u|--utc|--universal] [MMDDhhmm[[CC]YY][.ss]]
DESCRIPTION
       Display the current time in the given FORMAT, or set the system date.
       Mandatory arguments to long options are mandatory for short options
       too.
       -d, --date=STRING
               display time described by STRING, not 'now'
        --debug
               annotate the parsed date, and warn about questionable usage to
               stderr
        -f, --file=DATEFILE
               like --date; once for each line of DATEFILE
        -I[FMT], --iso-8601[=<u>FMT</u>]
               output date/time in ISO 8601 format. FMT='date' for date only
               (the default), 'hours', 'minutes', 'seconds', or 'ns' for date and time to the indicated precision. Example:
               2006-08-14T02:34:56-06:00
        -R, --rfc-email
               output date and time in RFC 5322 format. Example: Mon, 14 Aug
               2006 02:34:56 -0600
        --rfc-3339=FMT
output date/time in RFC 3339 format. FMT='date', 'seconds', or Manual page date(1) line 1 (press h for help or q to quit)
```

Câu 6: ki?m tra thông tin ng??i dùng

Câu 7: ki?m tra h?h ?ang dùng

```
[root@localhost sinhvien]# uname
Linux
```

```
UNAME(1)
                                 User Commands
                                                                      UNAME(1)
NAME
       uname - print system information
SYNOPSIS
       uname [OPTION]...
DESCRIPTION
       Print certain system information. With no OPTION, same as -s.
       -a, --all
              print all information, in the following order, except omit -p
              and -i if unknown:
       -s, --kernel-name
              print the kernel name
       -n, --nodename
              print the network node hostname
       -r, --kernel-release
              print the kernel release
       -v, --kernel-version
              print the kernel version
       -m, --machine
              print the machine hardware name
       -p, --processor
              print the processor type (non-portable)
       -i, --hardware-platform
              print the hardware platform (non-portable)
       -o, --operating-system
Manual page uname(1) line 1/64 54% (press h for help or q to quit)
```

Câu 8:xem 1?ch

```
[root@localhost sinhvien]# cal 2002
                                                      March
                             February
       January
Su Mo Tu We Th Fr Sa
                       Su Mo Tu We Th Fr Sa
                                              Su Mo Tu We Th Fr Sa
      1 2
                                         2
                                               3 4 5
   7
      8 9 10 11 12
                       3 4 5 6
                                      8 9
                                                       6
                                                          7
                                                              8
                                                                 9
6
13 14 15 16 17 18 19
                       10 11 12 13 14 15 16
                                              10 11 12 13 14 15 16
20 21 22 23 24 25 26
                       17 18 19 20 21 22 23
                                              17 18 19 20 21 22 23
                       24 25 26 27 28
                                              24 25 26 27 28 29 30
27 28 29 30 31
                                              31
        April
                                May
                                                      June
Su Mo Tu We Th Fr Sa
                       Su Mo Tu We Th Fr Sa
                                              Su Mo Tu We Th Fr Sa
      2
           4 5 6
                                      3 4
    1
         3
                                 1
                                    2
                                   9 10 11
   8
     9 10 11 12 13
                       5
                             7
                                8
                                                       5
                                                              7
                         6
                                               2
                                                 3
                                                           6
                                                                 8
                                                    4
14 15 16 17 18 19 20
                       12 13 14 15 16 17 18
                                              9 10 11 12 13 14 15
21 22 23 24 25 26 27
                       19 20 21 22 23 24 25
                                              16 17 18 19 20 21 22
                       26 27 28 29 30 31
28 29 30
                                              23 24 25 26 27 28 29
                                              30
        July
                              August
                                                    September
  Mo Tu We Th Fr Sa
                       Su Mo Tu We Th Fr Sa
                                              Su Mo Tu We Th Fr Sa
                                      2 3
      2
         3
           4 5 6
                                    1
                                              1 2
                                                    3 4 5
                                                             6
    8
      9 10 11 12 13
                       4 5
                                7
                                   8
                                     9 10
                                              8 9 10 11 12 13 14
                             6
14 15 16 17 18 19 20
                       11 12 13 14 15 16 17
                                              15 16 17 18 19 20 21
                       18 19 20 21 22 23 24
21 22 23 24 25 26 27
                                              22 23 24 25 26 27 28
28 29 30 31
                       25 26 27 28 29 30 31
                                              29 30
       October 0 0 0 1 1 1 1
                             November
                                                    December
Su Mo Tu We Th Fr Sa
                       Su Mo Tu We Th Fr Sa
                                              Su Mo Tu We Th Fr Sa
         2
           3 4 5
                                       1 2
                                              1 2
                                                     3
                                                       4
                                                          5
                                                             6
       1
         9 10 11 12
    7
                                              8 9 10 11 12 13 14
     8
                       3
                         4
                              5
                                6
                                   7
                                       8
                                         9
                       10 11 12 13 14 15 16
13 14 15 16 17 18 19
                                              15 16 17 18 19 20 21
                       17 18 19 20 21 22 23
20 21 22 23 24 25 26
                                              22 23 24 25 26 27 28
27 28 29 30 31
                       24 25 26 27 28 29 30
                                              29 30 31
```

Câu 9. Truy?n thông ?i?p (chat)

```
[root@localhost sinhvien]# write sinhvien
write: sinhvien is logged in more than once; writing to pts/1
hi! chuc mot ngay vui ve !
[root@localhost sinhvien]# exit
```

Câu 10. T? ch?i/cho phép nh?p thông ?i?p trên màn hình b?i l?nh write

```
[sinhvien@localhost ~]$ mesg n
[sinhvien@localhost ~]$ mesg y
```

Câu 11. G?i/nh?n th? ?i?n t? gi?a các ng??i dùng

G?i:

```
[sinhvien@localhost ~]$ mail sinhvien
Subject: chao ban minh la tai
EOT
```

Sau khi g?i th? v? cho user thì user nh?n s? có thông báo nh? sau

```
You have new mail´in /var/spool/mail/sinhvien
```

Nh?n:

?? ki?m tra th? nh?n ta th?c hi?n nh? sau

```
Heirloom Mail version 12.5 7/5/10. Type ? for help.
"/var/spool/mail/sinhvien": 2 messages 2 new
>N 1 Mail Delivery System Sun Mar 27 23:25 85/3264 "Undelivered Mail Retur"
N 2 sinhvien Sun Mar 27 23:30 18/659 "chao ban minh la tai"
& 2
```

&2 ki?m tra th? th? 2:

```
Message 2:
From sinhvien@localhost.localdomain Sun Mar 27 23:30:33 2022
Return-Path: <sinhvien@localhost.localdomain>
X-Original-To: sinhvien
Delivered-To: sinhvien@localhost.localdomain
Date: Sun, 27 Mar 2022 23:30:33 +0700
To: sinhvien@localhost.localdomain
Subject: chao ban minh la tai
User-Agent: Heirloom mailx 12.5 7/5/10
Content-Type: text/plain; charset=us-ascii
From: sinhvien@localhost.localdomain (sinhvien)
Status: R
```

Ta dùng l?nh &q ?? so?n tin m?i và &d ?? thoát trình ??c mail

```
s q
Held 1 message in /var/spool/mail/sinhvien
```

Câu 12. M?t s? l?nh khác

Xem s? hi?u termail ?ang s? d?ng

```
[sinhvien@localhost ~]$ tty
/dev/pts/2
```

Hi?n th? các thông báo trên màn hình:

```
[sinhvien@localhost ~]$ echo "xin chao"
xin chao
[sinhvien@localhost ~]$ echo "Hom nay la ngay : ";date
Hom nay la ngay :
Mon Mar 28 00:06:32 ICT 2022
```

Xem phiên b?n Linux ?ang s? d?ng

```
[sinhvien@localhost ~]$ uname -a
Linux localhost.localdomain 3.10.0-327.36.3.el7.x86_64 #1 SMP Mon Oct 24 16:09:20
UTC 2016 x86_64 x86_64 x86_64 GNU/Linux
[sinhvien@localhost ~]$ uname -r
3.10.0-327.36.3.el7.x86_64
```

K?t thúc phiên làm vi?c

```
[sinhvien@localhost ~]$ logout

Session stopped
   - Press <return> to exit tab
   - Press R to restart session
   - Press S to save terminal output to file
```

```
[sinhvien@localhost ~]$ exit
logout

Session stopped
- Press <return> to exit tab
- Press R to restart session
- Press S to save terminal output to file
```

Shutdown máy:

[root@LinuxServer ~]# halt [root@LinuxServer ~]# init 0 [root@LinuxServer ~]# shutdown

```
[sinhvien@localhost ktm]$ init 0
==== AUTHENTICATING FOR org.freedesktop.login1.power-off ===
Authentication is required for powering off the system.
Authenticating as: root
Password:
==== AUTHENTICATION COMPLETE ===
[sinhvien@localhost ktm]$
Remote side unexpectedly closed network connection

Session stopped
   - Press < return> to exit tab
    - Press R to restart session
    - Press S to save terminal output to file
```

BÀI TH?C HÀNH S? 2:

Bài 1:

Xem ???ng d?n và xem nôi dung th? m?c sau ?ó thêm file Baitho.txt

```
[sinhvien@localhost ~]$ pwd
/home/sinhvien
[sinhvien@localhost ~]$ ls -la
total 36
drwx----. 15 sinhvien sinhvien 4096 Feb 24 08:07 .
                                    22 Feb 10 07:56
                         root
drwxr-xr-x. 3 root
                                   201 Feb 24 08:04 .bash_history
18 Jul 21 2020 .bash_logout
-rw-----. 1 sinhvien sinhvien
-rw-r--r--. 1 sinhvien sinhvien
                                    141 Jul 21 2020 .bash_profile
-rw-r--r--. 1 sinhvien sinhvien
-rw-r--r-. 1 sinhvien sinhvien 376 Jul 21 2020 .bashrodrwx----. 18 sinhvien sinhvien 4096 Feb 10 08:25 .cache
                                   376 Jul 21 2020 .bashrc
                                    262 Feb 10 08:25 .config
drwx----. 14 sinhvien sinhvien
drwxr-xr-x. 2 sinhvien sinhvien
drwxr-xr-x. 2 sinhvien sinhvien
                                     6 Feb 10 07:58 Desktop
                                     6 Feb 10 07:58 Documents
drwxr-xr-x. 2 sinhvien sinhvien
                                     6 Feb 10 07:58 Downloads
-rw-----. 1 sinhvien sinhvien
                                     16 Feb 10 07:58 .esd_auth
-rw-----. 1 sinhvien sinhvien 3100 Feb 24 08:06 .ICEauthority
drwx----. 3 sinhvien sinhvien
                                   19 Feb 10 07:58 .local
drwxr-xr-x. 6 sinhvien sinhvien
                                    81 Feb 10 08:01 .mozilla
drwxr-xr-x. 2 sinhvien sinhvien 6 Feb 10 07:58 Music
drwxr-xr-x. 2 sinhvien sinhvien
                                     6 Feb 10 07:58 Pictures
drwxrw----. 3 sinhvien sinhvien
                                     19 Feb 10 07:58 .pki
                                   6 Feb 10 07:58 Public
drwxr-xr-x. 2 sinhvien sinhvien
drwxr-xr-x. 2 sinhvien sinhvien
                                    6 Feb 10 07:58 Templates
drwxr-xr-x. 2 sinhvien sinhvien
                                    6 Feb 10 07:58 Videos
-rw-----. 1 sinhvien sinhvien
                                    67 Feb 24 08:07 .Xauthority
[sinhvien@localhost ~]$ cat > baitho
```

Ki?m tra n?i dung bài th?

```
[sinhvien@localhost ~]$ cat baitho.txt
Hom nay troi nang dep![sinhvien@localhost ~]$ ■
```

Sau ?6 T?o hai th? m?c cnpm, ktm trong th? m?c cntt sau ?6 xoá th? m?c cnpm

```
[sinhvien@localhost ~]$ rm -ri cntt/cnpm rm: remove directory 'cntt/cnpm'? y
```

Câu 2: t?o th? m?c

```
[sinhvien@localhost ~]$ mkdir Finance
[sinhvien@localhost ~]$ mkdir Finance/Expense Finance/Income
[sinhvien@localhost ~]$ mkdir Finance/Expense/Electricity Finance/Expense/Postag
e
[sinhvien@localhost ~]$ Maketing
bash: Maketing: command not found...
[sinhvien@localhost ~]$ mkdir Maketing
[sinhvien@localhost ~]$ mkdir Maketing/Sales
[sinhvien@localhost ~]$ mkdir Maketing/Sales/Salesinfo
[sinhvien@localhost ~]$ mkdir Maketing/Purchase
[sinhvien@localhost ~]$ mkdir Maketing/Purchase/Purinfo
[sinhvien@localhost ~]$ mkdir Personnel
[sinhvien@localhost ~]$ mkdir Personnel/Pay/
[sinhvien@localhost ~]$ mkdir Personnel/Pay/Deduction Personnel/Pay/Allowance
[sinhvien@localhost ~]$ mkdir Personnel/Admin/Records
mkdir: cannot create directory 'Personnel/Admin/Records': No such file or direct
ory
[sinhvien@localhost ~]$ mkdir Personnel/Admin
[sinhvien@localhost ~]$ mkdir Personnel/Admin
[sinhvien@localhost ~]$ mkdir Personnel/Admin/Records
```

```
[sinhvien@localhost ~]$ pwd
/home/sinhvien
[sinhvien@localhost ~]$ ls ~/Finance/Expense
Electricity Postage
[sinhvien@localhost ~]$ cd /etc
[sinhvien@localhost etc]$ ls -l *.conf
```

```
-rw-r--r--.
-гw-г--г--.
-гw-г--г--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-rw-r--r--.
-гw-г--г--.
-гw-г--г--.
-rw-r--r--.
- FW-F----.
rw-r--r--.
```

Xem n?i dung c?a file /var/log/dmesg m?t trang t?i m?t th?i ?i?m.

```
sinhvien@localhost ~]$ cat /var/log/dmesg | more
0.000000] Initializing cgroup subsys cpuset
0.000000] Initializing cgroup subsys cpu
       0.000000] Initializing cgroup subsys cpuacct
       0.000000] Linux version 3.10.0-327.36.3.el7.x86_64 (builder@kbuilder.dev.centos.org) (gc
  version 4.8.5 20150623 (Red Hat 4.8.5-4) (GCC) ) #1 SMP Mon Oct 24 16:09:20 UTC 2016 0.000000] Command line: BOOT_IMAGE=/vmlinuz-3.10.0-327.36.3.el7.x86_64 root=UUID=5d44a70
0-3591-4e2b-b91d-445d9cc392b0 ro crashkernel=auto rhgb quiet LANG=en US.ŪTF-8
       0.000000] Disabled fast string operations
0.000000] e820: BIOS-provided physical RAM map:
0.000000] BIOS-e820: [mem 0x000000000000000000000000000009ebff] usable
0.000000] BIOS-e820: [mem 0x00000000000000000000000000009ffff] reserved
       ACPI data
       0.000000] BIOS-e820: [mem 0x00000000bfeff000-0x0000000bfefffff] ACPI NVS
       0.000000] BIOS-e820: [mem 0x00000000bff00000-0x00000000bfffffff] usable 0.000000] BIOS-e820: [mem 0x00000000f0000000-0x00000000f7ffffff] reserved 0.000000] BIOS-e820: [mem 0x00000000fec00000-0x00000000fec0ffff] reserved
                                        [mem 0x00000000fee00000-0x00000000fee00fff] reserved
       0.000000] BIOS-e820:
       0.000000] BIOS-e820: [mem 0x00000000fffe0000-0x00000000fffffffff] reserv
0.000000] BIOS-e820: [mem 0x0000000100000000-0x000000013fffffff] usable
0.000000] NX (Execute Disable) protection: active
                                                                                                           reserved
       0.000000] SMBIOS 2.7 present.
       0.000000] DMI: VMware, Inc. VMware Virtual Platform/440BX Desktop Reference Platform, BI
OS 6.00 07/22/2020
       0.000000] Hypervisor detected: VMware
       0.000000] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved 0.00000] e820: remove [mem 0x0000000-0x000fffff] usable 0.000000] AGP: No AGP bridge found
       0.000000] e820: last_pfn = 0x140000 max_arch_pfn = 0x400000000
       0.000000] MTRR default type: uncachable
0.000000] MTRR fixed ranges enabled:
0.000000] 00000-9FFFF write-back
                          00000-9FFFF write-back
       0.000000]
                          A0000-BFFFF uncachable
                          C0000-CBFFF write-protect
CC000-EFFFF uncachable
       0.000000]
       0.000000]
                          F0000-FFFFF write-protect
       0.000000] MTRR variable ranges enabled:
                          0 base 000000000000 mask 1FE00000000 write-back
1 base 0000C0000000 mask 1FFFC0000000 uncachable
       0.000000]
       0.000000]
--More--
```

Copy t?t c? các file v?i ph?n m? r?ng .sh t? th? m?c ch? c?a b?n ??n th? m?c ~/Finance. Sau ?ó xác minh xem các file ?ã ???c copy ch?a.

```
[sinhvien@localhost ~]$ cat > test.sh
abc[sinhvien@localhost ~]$
[sinhvien@localhost ~]$ cp *.sh ~/Finance
```

Ki?m tra:

```
[sinhvien@localhost ~]$ cd ~/Finance
[sinhvien@localhost Finance]$ ls
Expense Income test.sh
```

Di chuy?n t?t c? các file v?i ph?n m? r?ng *.dat t? th? m?c ch? c?a b?n ??n th? m?c ~/sales/trends

```
[sinhvien@localhost ~]$ cd ~/Maketing/Sales
[sinhvien@localhost Sales]$ mkdir Trends
[sinhvien@localhost Sales]$ ls
Salesinfo Trends
[sinhvien@localhost Sales]$ cd
[sinhvien@localhost ~]$ mv *.dat ~/Maketing/Sales/Trends
```

Xóa t?t c? các file trong th? m?c ~/sales/trends

```
[sinhvien@localhost ~]$ cd ~/Maketing/Sales
[sinhvien@localhost Sales]$ cd Trends
[sinhvien@localhost Trends]$ rmdir *.*
rmdir: failed to remove 'file.dat': Not a directory
[sinhvien@localhost Trends]$ su
Password:
[root@localhost Trends]# rm -ri *.*
rm: remove regular file 'file.dat'? y
```

Câu 3. Quy?n truy xu?t t?p tin th? m?c

```
[root@localhost ~]# cd /etc
[root@localhost etc]# cat > hello
echo"Hello."
echo"How are you?"
[root@localhost etc]# cat > Reply
rm -ri hello
[root@localhost etc]# rm -ri hello
rm: remove regular file 'hello'? y
[root@localhost etc]# rm -ri Reply
rm: remove regular file 'Reply'? y
[root@localhost etc]# cat > Hello
echo "hello."
echo "How are you?"
[root@localhost etc]# cat > Reply
echo "Hi." Echo ,,I"m fine,Thanks.And You?
```

[root@localhost etc]# ls -l hello Reply ls: cannot access hello: No such file or directory

Xem quy?n c?a các file trên: root root 43 Mar 28 09:52 Reply

Ch?y hai ch??ng trình trên:

B1: ??t quy?n th?c thi cho các file trên

B2: Ch?y 2 ch??ng trình trên

B? quy?n th?c thi ??i v?i các file trên c?a các ng??i dùng cùng nhóm (group - g) và nh?ng ng??i dùng khác (other - o)

```
[root@localhost etc]# chmod a+x Hello Reply
[root@localhost etc]# ./Hello
hello.
How are you?
[root@localhost etc]# ./Reply
./Reply: line 1: unexpected EOF while looking for matching `"'
./Reply: line 2: syntax error: unexpected end of file
[root@localhost etc]# chmod go-x Hello Reply
```

Hãy th? dùng l?nh chmod v?i các cách khác (g-rwx, o-rwx, 700,...)?

[root@localhost etc]# chmod g-rwx Hello
[root@localhost etc]# chmod 700
chmod: missing operand after '700'
Try 'chmod --help' for more information.
[root@localhost etc]# chmod 700 Hello

C?p quy?n cho ch? s? h?u(??c vi?t ch?y) và ng??i cùng nhóm (??c ch?y)

```
[root@localhost etc]# chmod 750 Hello Reply
[root@localhost etc]# ls -l Hello Reply
-rwxr-x---. 1 root root 34 Mar 28 09:51 Hello
-rwxr-x---. 1 root root 43 Mar 28 09:52 Reply
[root@localhost etc]# ■
```

```
[root@localhost etc]# chown sinhvien Hello Réply
[root@localhost etc]# chown sinhvien1 Hello Reply
```

Câu 4. Liên k?t t?p tin, th? m?c

?T?o hai file bai1.sh và bai2.sh trong th? m?c cntt ?Sao chép các file ?ó thành?.old:

?Ví d?:

[sinhvien@LinuxServer ~]\$ cp bai1.sh bai1.old?

?T?o các th? m?c source và userbin

[sinhvien@LinuxServer ~]\$ mkdir source userbin?

?Di chuy?n các file bai1.sh và bai2.sh vào th? m?c source, các file bai1.old và bai2.old vào th? m?c userbin

```
[sinhvien@localhost cntt]$ cat > bai1.sh
abc
[sinhvien@localhost cntt]$ cat > bai2.sh
cbd
[sinhvien@localhost cntt]$ cp bai1.sh bai1.old
[sinhvien@localhost cntt]$ mkdir source userbin
[sinhvien@localhost cntt]$ cp bai1.sh ~/source
[sinhvien@localhost cntt]$ cp bai2.sh ~/source
[sinhvien@localhost cntt]$ cp bai2.sh bai2.old
[sinhvien@localhost cntt]$ mv bai1.old bai2.old ~/userbin
mv: target '/home/sinhvien/userbin' is not a directory
[sinhvien@localhost cntt]$ ls
bai1.old bai1.sh bai2.old bai2.sh ktm source userbin
[sinhvien@localhost cntt]$ mv bai1.old ~/userbin [sinhvien@localhost cntt]$ mv bai2.old ~/userbin
[sinhvien@localhost cntt]$ ls
bai1.sh bai2.sh ktm source
[sinhvien@localhost cntt]$ rm -ri bai1.sh bai2.sh rm: remove regular file 'bai1.sh'? y rm: remove regular file 'bai2.sh'? y
[sinhvien@localhost cntt]$ ls
ktm source userbin
[sinhvien@localhost cntt]$ userbin
```

T?o liên k?t là bailk trong th? m?c hi?n hành ti?p nh?n bai1.sh trong th? m?c source.

```
[sinhvien@localhost source]$ ln source/bai1.sh bailk
ln: failed to access 'source/bai1.sh': No such file or directory
=> không th? t?o liên
k?t
```

```
[sinhvien@localhost source]$ ls -li
total 8
103611329 -rw-rw-r--. 1 sinhvien sinhvien 4 Mar 28 11:47 bai1.sh
103611339 -rw-rw-r--. 1 sinhvien sinhvien 6 Mar 28 11:47 bai2.sh
```

Các thông tin li?t kê g?m id – quy?n – user –group- th?i gian – tên file

Tìm bai2.sh

```
[sinhvien@localhost ~]$ find ~ -name bai2.sh /home/sinhvien/cntt/source/bai2.sh
```

Tìm giá tr? i node c?a bai2.sh

BÀI TH?C HÀNH S? 3

Câu 1: 1. Chuy?n sang ch? ?? 1?nh (command mode) và hi?n th? s? dòng trong file

```
1 1
```

2. Xóa dòng 13.

```
1 ban tre
2 chao ban
3 alo alo
4 chao mn
5 hello
6 chao nha
7 xin chiu
8 alo alo
9 test
10 help
11 nice
12 bai
13 siu
14 nhan
```

3. Copy dòng 3 và dán (paste) nó vào cu?i tài li?u.

```
1 ban tre
2 chao ban
3 alo alo
4 chao mn
5 hello
6 chao nha
7 xin chiu
8 alo alo
9 test
10 help
11 nice
12 bai
13 siu
14 nhan
15
16 alo alo
```

4. Undo thao tác dán (paste). Quan sát dòng b? xóa khi th?c hi?n l?nh undo.

```
1 ban tre
2 chao ban
3 alo alo
4 chao mn
5 hello
6 chao nha
7 xin chiu
8 alo alo
9 test
10 help
11 nice
12 bai
13 siu
14 nhan
```

5. Tìm ki?m và thay th?:

:1, s/[old]/[new]/ho?c:s/text1/text2/g

```
1 Dan tre
2 chao ban
3 alo alo
 4 chao mn
5 hello
 6 chao nha
7 xin chiu
8 alo alo
9 test
10 help
11 nice
12 bai
13 siu
14 nhan
15
                                                                                                                                                          1,1
                                                                                                                                                                                             All
```

```
1 ban tre
2 chao ban
3 alo alo
4 chao mn
5 hello
6 chao nha
7 xin chiu
8 alo alo
9 test
9 test
10 help
11 nice
12 bai
13 siu
14 nhan
```

6. L?u file và thoát kh?i vi

```
1 ban tre
2 cha<mark>o</mark> ban
3 a<mark>lo</mark> a<mark>lo</mark>
   4 chao mn
   5 hello
   6 chao nha
   7 xin chiu
8 a<mark>lo</mark> a<mark>lo</mark>
   9 test
  10 help
  11 nice
  12 bai
  13 siu
 14 nhan
  15
:wq!
```

Câu 2Gi? s? trong th? m?c c?a Binh có file Message.txt ch?a các thông tin liên quan ??n

Binh. Th?c hi?n các b??c sau:

- 1. Li?t kê t?t c? các dòng có ch?a ch? Binh trong file
- 2. ??m s? dòng, s? t?, và s? ký t? trong file messages có ch?a ch? Binh trong ?ó.

```
[sinhvien@localhost ~]$ wc -l Message.txt
10 Message.txt
[sinhvien@localhost ~]$ wc -w Message.txt
22 Message.txt
[sinhvien@localhost ~]$ wc -m Message.txt
295 Message.txt
[sinhvien@localhost ~]$ ■
```