

## Câu 1: Cây thư mục và tệp tin:

```
trongdat1108@ubuntu:~$ tree
.
├── home
│   ├── baitap
│   ├── cntt
│   │   ├── file1_char_count.txt
│   │   ├── file1.txt
│   │   └── operatingsystem
│   └── tailieu
│       ├── ebook
│       └── slides
│           ├── ch01.txt
│           └── ch02.txt
└── Music
```

## Câu 2: Di chuyển trong cây thư mục:

```
trongdat1108@ubuntu: ~/home/baitap
trongdat1108@ubuntu:~/home/cntt$ cd ..
trongdat1108@ubuntu:~/home$ cd ..
trongdat1108@ubuntu:~$ cd home
trongdat1108@ubuntu:~/home$ cd tailieu
trongdat1108@ubuntu:~/home/tailieu$ cd slides
trongdat1108@ubuntu:~/home/tailieu/slides$ cd ..
trongdat1108@ubuntu:~/home/tailieu$ cd ebook
trongdat1108@ubuntu:~/home/tailieu/ebook$ cd ../../
trongdat1108@ubuntu:~/home$ cd cntt
trongdat1108@ubuntu:~/home/cntt$ cd ..
trongdat1108@ubuntu:~/home$ cd baitap
trongdat1108@ubuntu:~/home/baitap$
```

### Câu 3: Thông tin về lệnh ls:

```
trongdat1108@ubuntu: ~/home/tailieu
trongdat1108@ubuntu:~$ ls
Desktop  Downloads      examples.desktop  Music    Public  Videos
Documents example-content  home             Pictures Templates
trongdat1108@ubuntu:~$ ls home
baitap  cntt  tailieu
trongdat1108@ubuntu:~$ ls cntt
ls: cannot access 'cntt': No such file or directory
trongdat1108@ubuntu:~$ ls
Desktop  Downloads      examples.desktop  Music    Public  Videos
Documents example-content  home             Pictures Templates
trongdat1108@ubuntu:~$ ls home
baitap  cntt  tailieu
trongdat1108@ubuntu:~$ cd home
trongdat1108@ubuntu:~/home$ ls cntt
file1_char_count.txt  file1.txt  operatingsystem
trongdat1108@ubuntu:~/home$ cd ..
trongdat1108@ubuntu:~$ cd home
trongdat1108@ubuntu:~/home$ ls tailieu
ebook  slides
trongdat1108@ubuntu:~/home$ cd tailieu
trongdat1108@ubuntu:~/home/tailieu$ ls slides
ch01.txt  ch02.txt
trongdat1108@ubuntu:~/home/tailieu$ ls
ebook  slides
```

### Câu 4: Biên tập nội dung tập tin “*file1.txt*”:

a) Sử dụng câu lệnh \$ vi file1.txt

```
trongdat1108@ubuntu: ~/home/cntt
Search your computer ~$ cd home
trongdat1108@ubuntu:~/home$ cd cntt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$
```

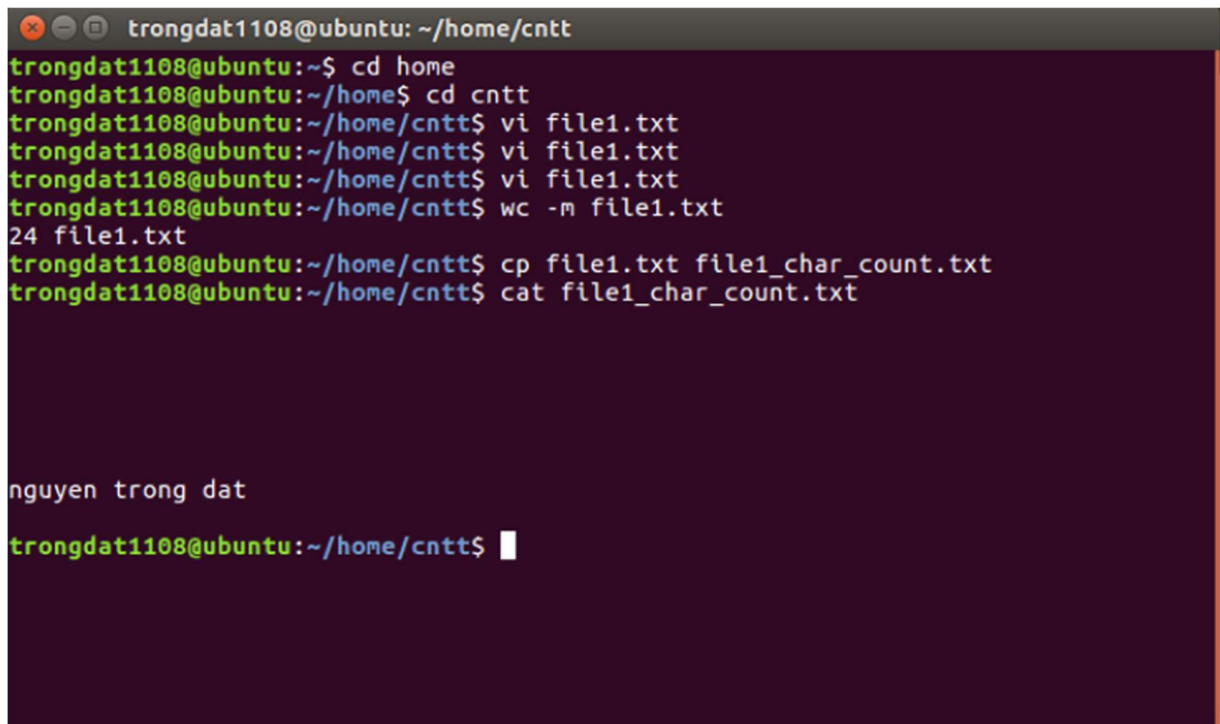
b) Đếm số lượng kí tự trong “*file1.txt*” và trả kết quả vào “*file1\_char\_count.txt*”.

- Đếm số lượng kí tự trong tập tin file1.txt:

```
$ wc -m file1.txt
```

- Ghi kết quả vào tập tin file1\_char\_count.txt:

```
$ cp file1.txt file1_char_count.txt
```



```
trongdat1108@ubuntu: ~/home/cntt
trongdat1108@ubuntu:~$ cd home
trongdat1108@ubuntu:~/home$ cd cntt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ wc -m file1.txt
24 file1.txt
trongdat1108@ubuntu:~/home/cntt$ cp file1.txt file1_char_count.txt
trongdat1108@ubuntu:~/home/cntt$ cat file1_char_count.txt

nguyen trong dat
trongdat1108@ubuntu:~/home/cntt$
```

## Câu 5:

- Sử dụng câu lệnh:

\$ ls -a

```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~$ cd home
trongdat1108@ubuntu:~/home$ cd cntt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ vi file1.txt
trongdat1108@ubuntu:~/home/cntt$ wc -m file1.txt
24 file1.txt
trongdat1108@ubuntu:~/home/cntt$ cp file1.txt file1_char_count.txt
trongdat1108@ubuntu:~/home/cntt$ cat file1_char_count.txt

nguyen trong dat

trongdat1108@ubuntu:~/home/cntt$ cd ..
trongdat1108@ubuntu:~/home$ ls -a
. .. baitap cntt tailieu
trongdat1108@ubuntu:~/home$
```

## Câu 6:

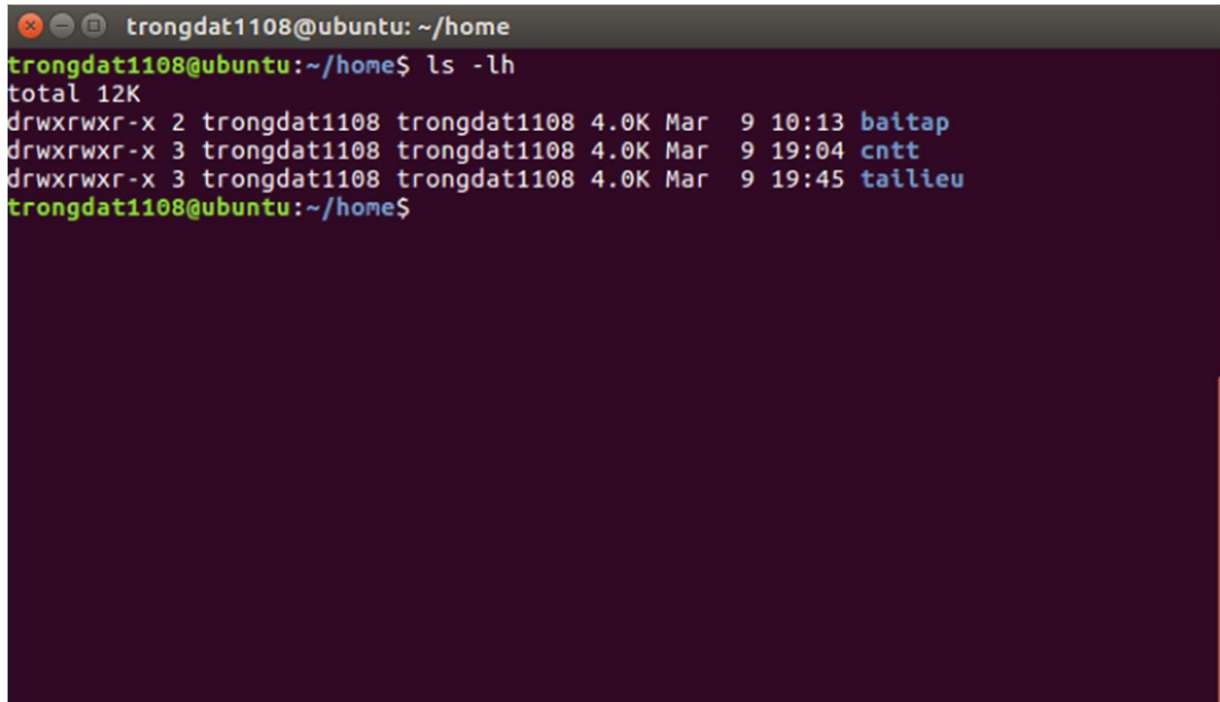
- Di chuyển tập tin "ch01.txt" sang thư mục "ebook".

\$ mv

## Câu 7:

- Hiển thị nội dung của thư mục / home theo kích thước tập tin:

\$ ls -lh



```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ ls -lh
total 12K
drwxrwxr-x 2 trongdat1108 trongdat1108 4.0K Mar  9 10:13 baitap
drwxrwxr-x 3 trongdat1108 trongdat1108 4.0K Mar  9 19:04 cntt
drwxrwxr-x 3 trongdat1108 trongdat1108 4.0K Mar  9 19:45 tailieu
trongdat1108@ubuntu:~/home$
```

## Câu 8:

- Tải tệp tin từ web vào tệp:

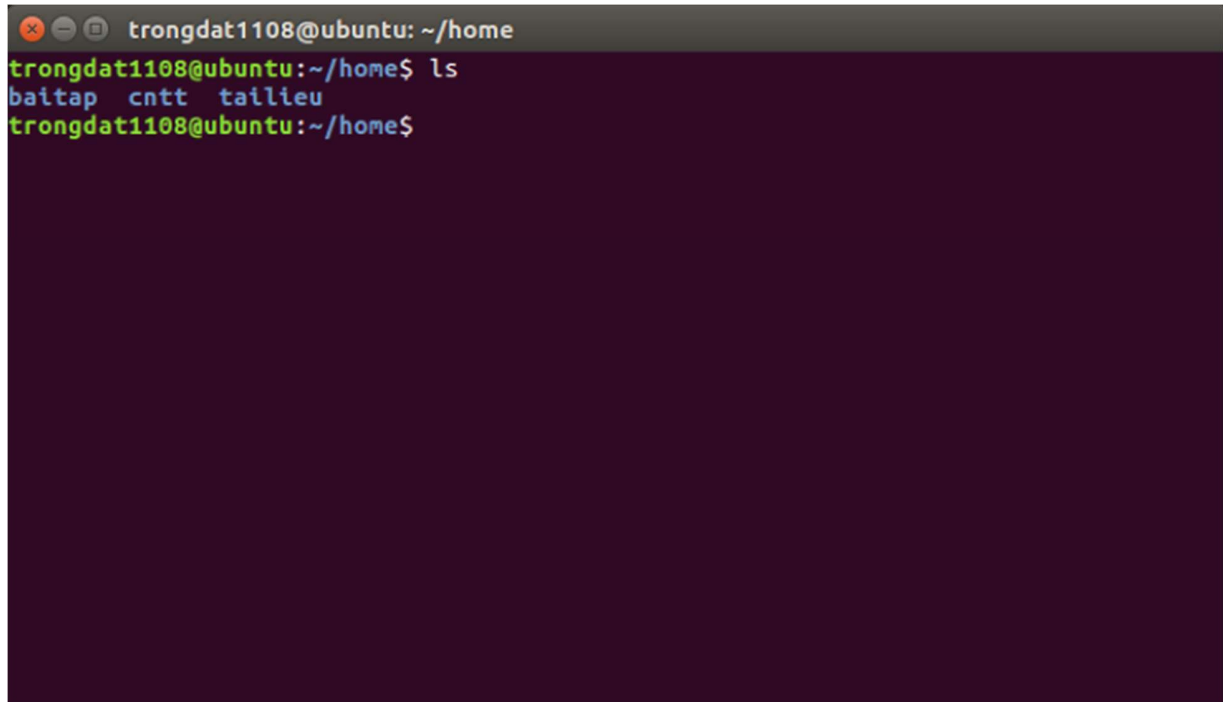
\$ wget <http://www.google.com/doodles/celebrating-hoi-an>

```
trongdat1108@ubuntu: ~  
trongdat1108@ubuntu:~/home$ ls -lh  
total 12K  
drwxrwxr-x 2 trongdat1108 trongdat1108 4.0K Mar  9 10:13 baitap  
drwxrwxr-x 3 trongdat1108 trongdat1108 4.0K Mar  9 19:04 cntt  
drwxrwxr-x 3 trongdat1108 trongdat1108 4.0K Mar  9 19:45 tailieu  
trongdat1108@ubuntu:~/home$ cd ..  
trongdat1108@ubuntu:~$ wget http://www.google.com/doodles/celebrating-hoi-an  
--2022-03-09 19:49:10-- http://www.google.com/doodles/celebrating-hoi-an  
Resolving www.google.com (www.google.com)... 172.217.194.147, 172.217.194.99, 172.217.194.106, ...  
Connecting to www.google.com (www.google.com)|172.217.194.147|:80... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 2410258 (2.3M) [text/html]  
Saving to: 'celebrating-hoi-an'  
  
celebrating-hoi-an 100%[=====>] 2.30M 1.46MB/s in 1.6s  
2022-03-09 19:49:12 (1.46 MB/s) - 'celebrating-hoi-an' saved [2410258/2410258]  
  
trongdat1108@ubuntu:~$
```

## Câu 9:

- Nội dung thư mục hiện tại:

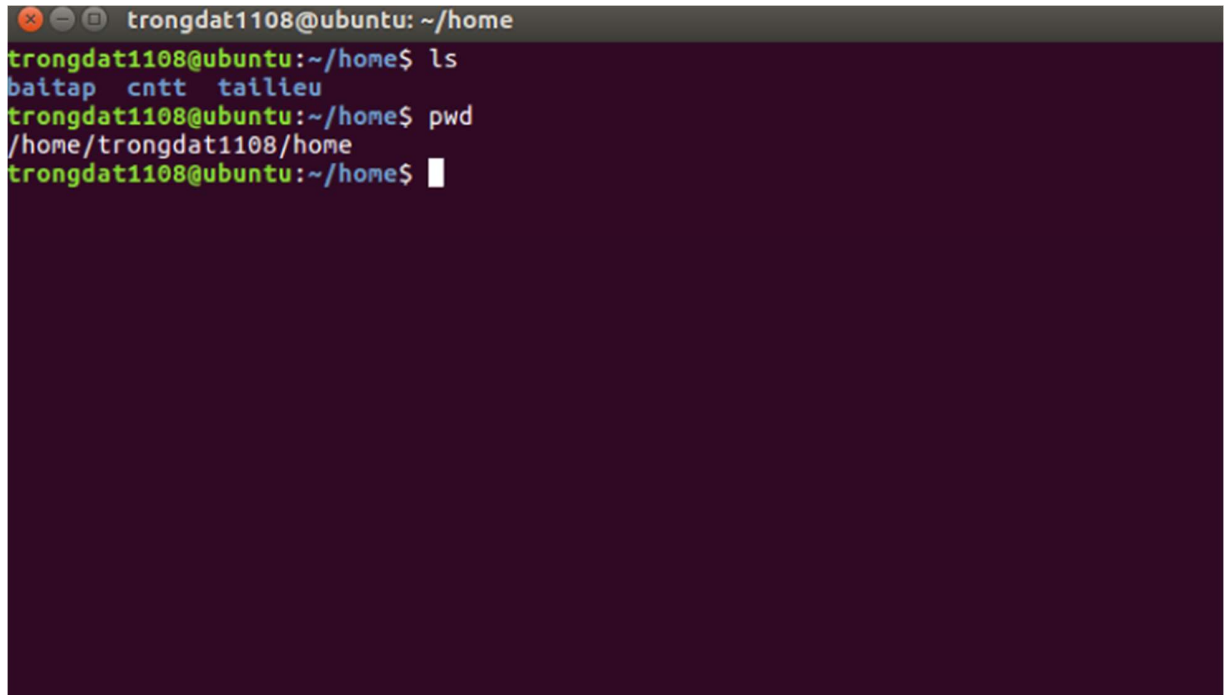
\$ ls

A screenshot of a Linux terminal window. The title bar at the top shows a red close button, a yellow minimize button, and a green maximize button, followed by the text 'trongdat1108@ubuntu: ~/home'. The terminal has a dark purple background. The prompt 'trongdat1108@ubuntu:~/home\$' is shown in green. The command 'ls' is entered in blue. The output 'baitap cntt taillieu' is displayed in blue. The prompt 'trongdat1108@ubuntu:~/home\$' is shown again in green.

```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ ls
baitap cntt taillieu
trongdat1108@ubuntu:~/home$
```

- Vị trí của nó trong hệ thống tệp tin:

\$ pwd

A terminal window with a dark purple background. The title bar shows window control icons and the text 'trongdat1108@ubuntu: ~/home'. The terminal content shows the user running 'ls' which outputs 'baitap cntt taillieu'. Then the user runs 'pwd' which outputs '/home/trongdat1108/home'. The prompt is now waiting for the next command.

```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ ls
baitap cntt taillieu
trongdat1108@ubuntu:~/home$ pwd
/home/trongdat1108/home
trongdat1108@ubuntu:~/home$
```

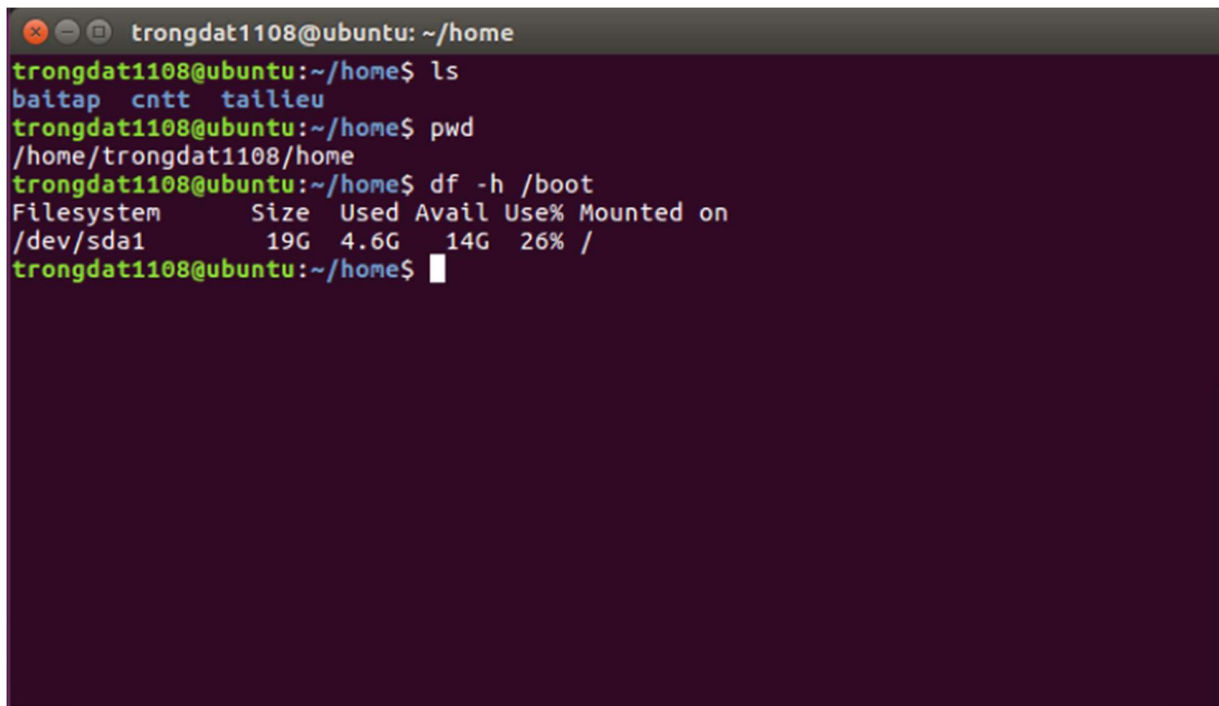


## Câu 10:

- Liệt kê các tập tin chứa trong thư mục / boot bao gồm cả thông tin về kích thước tập tin tính bằng MB hay KB:

- Kích thước bằng GB:

\$ df -h /boot



```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ ls
baitap  cntt  tailieu
trongdat1108@ubuntu:~/home$ pwd
/home/trongdat1108/home
trongdat1108@ubuntu:~/home$ df -h /boot
Filesystem      Size  Used Avail Use% Mounted on
/dev/sda1        19G   4.6G   14G   26% /
trongdat1108@ubuntu:~/home$
```

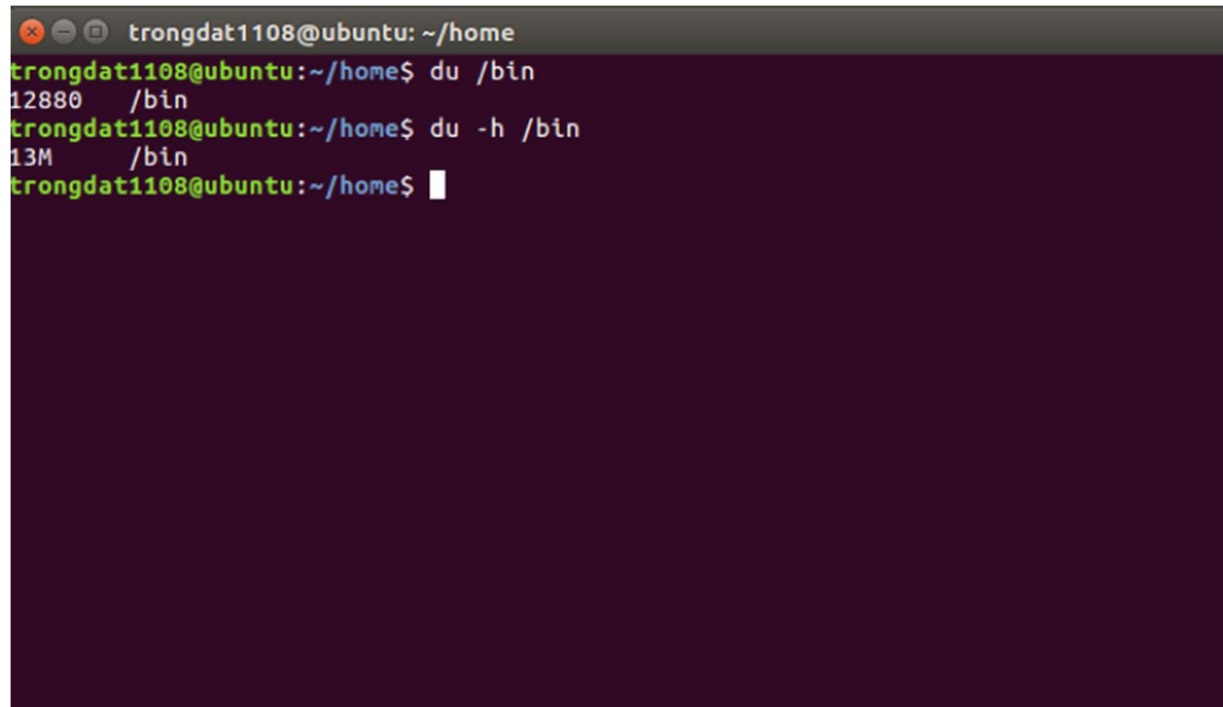
- Kích thước bằng MB:

\$ df -m /boot

```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ df -m /boot
Filesystem      1M-blocks  Used Available Use% Mounted on
/dev/sda1         19068   4641    13437  26% /
trongdat1108@ubuntu:~/home$
```

## Câu 11:

- Tổng dung lượng mà thư mục / bin đã tiêu thụ trên đĩa cứng:  
\$ du /bin



```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ du /bin
12880    /bin
trongdat1108@ubuntu:~/home$ du -h /bin
13M     /bin
trongdat1108@ubuntu:~/home$
```

## Câu 12:

- Cho biết đĩa cứng đang còn trong bao nhiêu MB hay KB:  
\$ free

```
trongdat1108@ubuntu: ~/home
trongdat1108@ubuntu:~/home$ free
              total        used          free      shared  buff/cache   available
Mem:           2059444        471044        1137716          8872        450684        1345716
Swap:           998396           0           998396
trongdat1108@ubuntu:~/home$
```