Homework1

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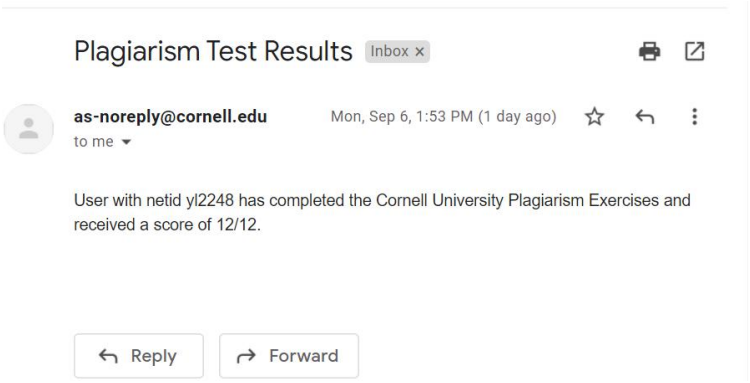
Q1：



Q3：

- What is permission 777 ?

Permission 777 mean the file owner,group members and everyone else all have access to read write and execute this file.

- why might this be dangerous.

Since everyone have access to read,write and execute this file,it can be changed randomly.

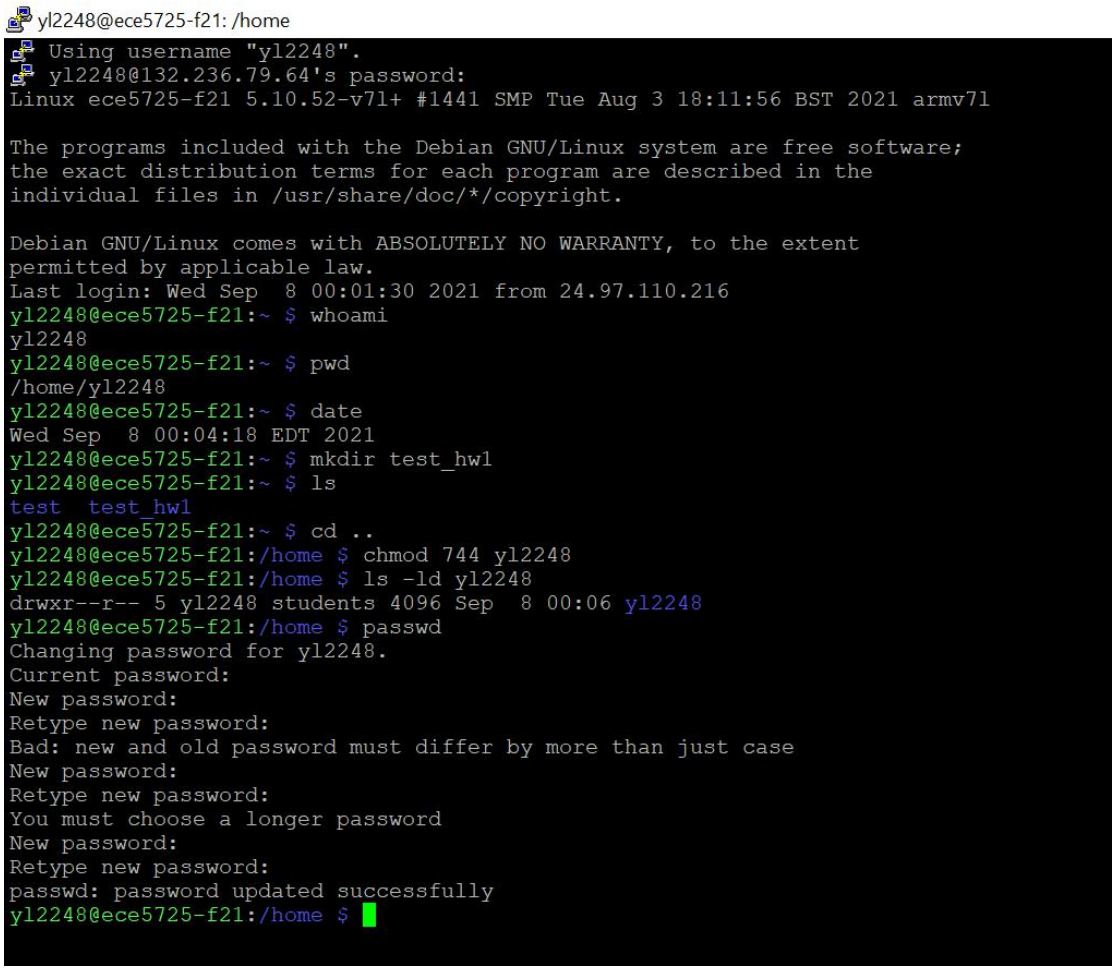
- What is permission 644 and what would it allow users to do with your file?

Permission 644 means **file owner** can read and write this file,but can't execute this file.
Groups and **others** can only read this file,they can't write and execute this file.

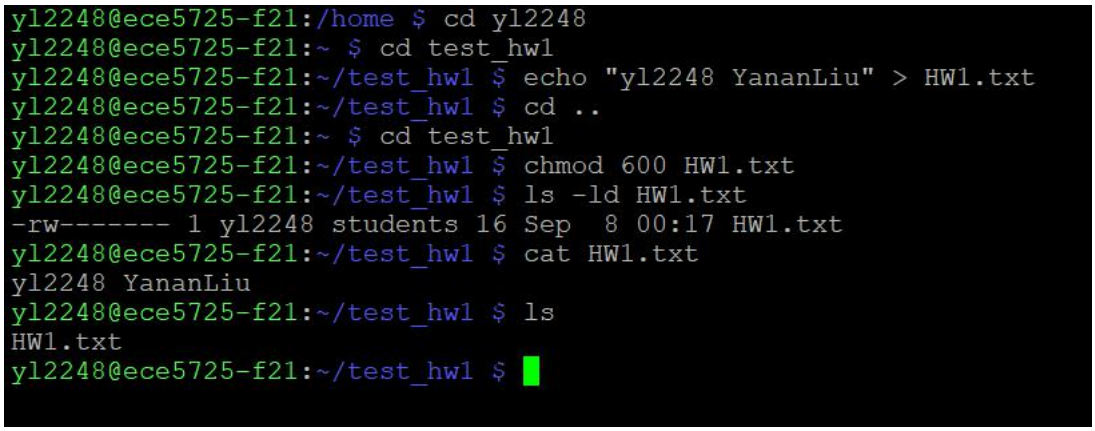
- What is permission 700 and what does this allow users to do with your file?

Permission 700 means **file owner** can read, write and execute this file.
Groups and **others** can't read**,** write and execute this file.

Q4:

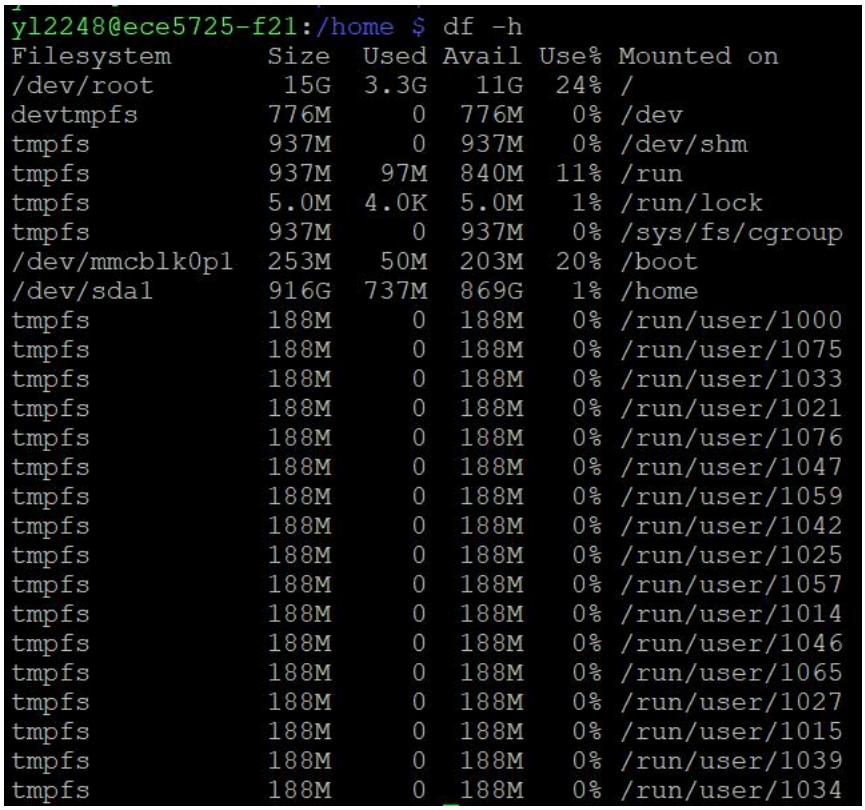

yl2248@ece5725-f21: /home
Using username "yl2248".
yl2248@132.236.79.64's password:
Linux ece5725-f21 5.10.52-v7l+ #1441 SMP Tue Aug 3 18:11:56 BST 2021 armv7l
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Wed Sep 8 00:01:30 2021 from 24.97.110.216
yl2248@ece5725-f21:~ $ whoami
yl2248
yl2248@ece5725-f21:~ $ pwd
/home/yl2248
yl2248@ece5725-f21:~ $ date
Wed Sep 8 00:04:18 EDT 2021
yl2248@ece5725-f21:~ $ mkdir test_hw1
yl2248@ece5725-f21:~ $ ls
test test_hw1
yl2248@ece5725-f21:~ $ cd ..
yl2248@ece5725-f21:/home $ chmod 744 yl2248
yl2248@ece5725-f21:/home $ ls -ld yl2248
drwxr--r-- 5 yl2248 students 4096 Sep 8 00:06 yl2248
yl2248@ece5725-f21:/home $ passwd
Changing password for yl2248.
Current password:
New password:
Retype new password:
Bad: new and old password must differ by more than just case
New password:
Retype new password:
You must choose a longer password
New password:
Retype new password:
passwd: password updated successfully
yl2248@ece5725-f21:/home $

Q5:

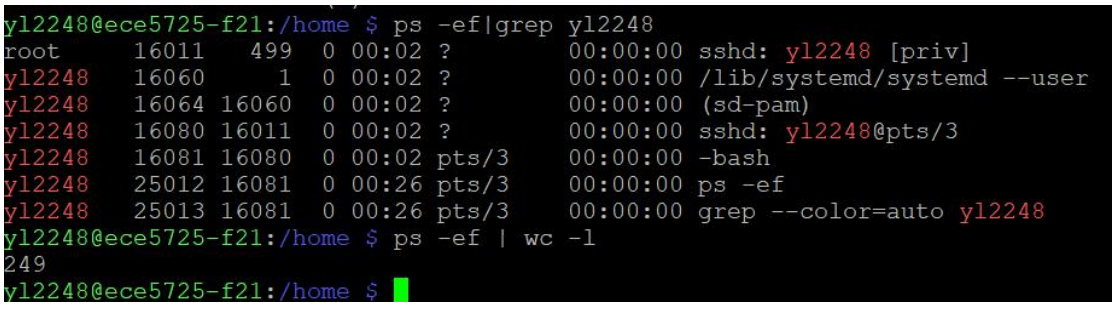

yl2248@ece5725-f21:/home $ cd yl2248
yl2248@ece5725-f21:~ $ cd test_hw1
yl2248@ece5725-f21:~/test_hw1 $ echo "yl2248 YananLiu" > HW1.txt
yl2248@ece5725-f21:~/test_hw1 $ cd ..
yl2248@ece5725-f21:~ $ cd test_hw1
yl2248@ece5725-f21:~/test_hw1 $ chmod 600 HW1.txt
yl2248@ece5725-f21:~/test_hw1 $ ls -ld HW1.txt
-rw------- 1 yl2248 students 16 Sep 8 00:17 HW1.txt
yl2248@ece5725-f21:~/test_hw1 $ cat HW1.txt
yl2248 YananLiu
yl2248@ece5725-f21:~/test_hw1 $ ls
HW1.txt
yl2248@ece5725-f21:~/test_hw1 $

Q7:

- **Df command description**:"df "means disk free,which refers to the usage of file system disk on linux.
- **"size settings for the /home entry":** the/home directory is a "place" to store all students directories and its files.Therefore the storage size should be big enough.As see in the picture above,the size of home/ entry is around 910G which is the biggest among others.

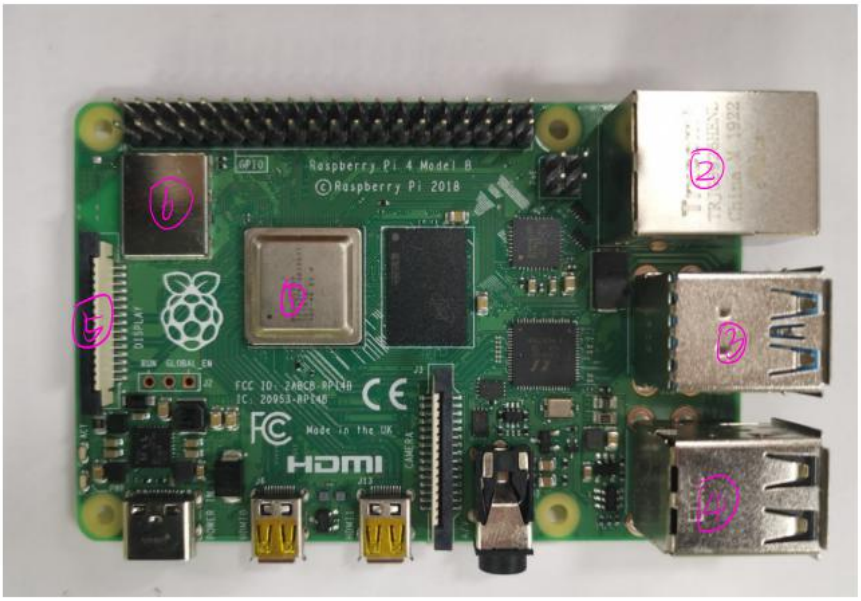


Q8:



Q9:

Image source:https://www.bilibili.com/read/cv3910347/



① an quad-core processor which is similar to laptop's CPU

② ethernet

③/④ USB

⑤ is the place to insert SD card similar to laptop's disk

⑥ Wifi & Blue Tooth part.

Advantages : Raspberry Pi is small in size and low in energy consumption.It is more portable(just like a card) and cheaper than computer. Raspberry Pi have GPIO which can connect to external devices.

Disadvantages : The OS of Raspberry Pi is linux,which is not so common.

Raspberry Pi don't have battery,it need to plug in to power all the time.

Raspberry Pi is fragile.

Q10:

top	htop
• Single color • Use PID to kill process	• colorful • There are bars on the top, which can display each core's memory usage. • Faster launching than top • Can scroll down and up to see process list and command lines as well • Can process by mouse click

Htop is preferable, since it is more powerful (with many functions integrated) and easy to manipulate.