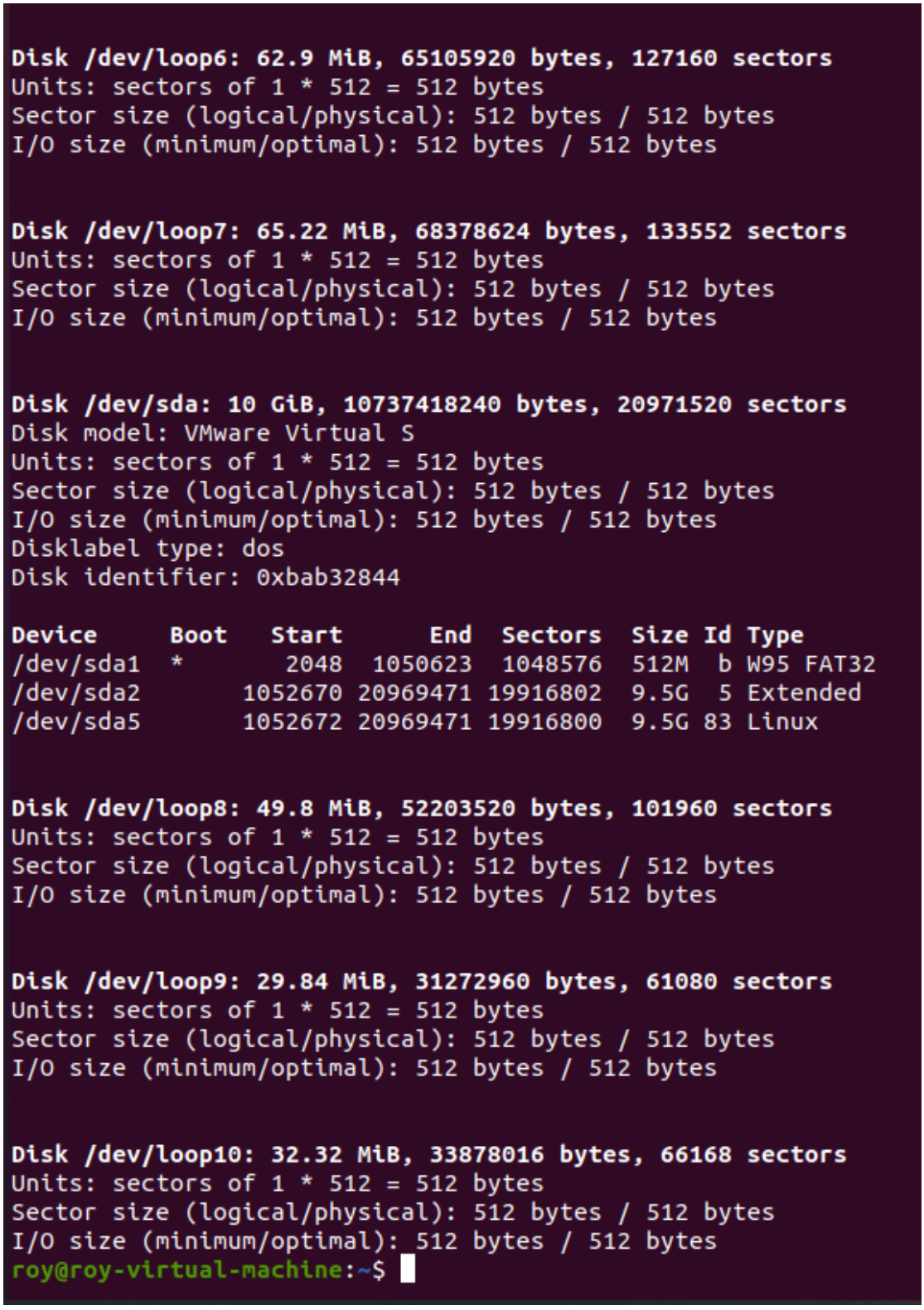
Bonus

1)

```
roy@roy-virtual-machine:~$ sudo fdisk -l
[sudo] password for roy:
Disk /dev/loop0: 4 KiB, 4096 bytes, 8 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes


Disk /dev/loop1: 54.97 MiB, 57618432 bytes, 112536 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes


Disk /dev/loop2: 55.45 MiB, 58130432 bytes, 113536 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes


Disk /dev/loop3: 255.58 MiB, 267980800 bytes, 523400 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes


Disk /dev/loop4: 50.98 MiB, 53432320 bytes, 104360 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes


Disk /dev/loop5: 219 MiB, 229638144 bytes, 448512 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
```



There are 13 storage devices in my computer. Name: loop1, loop2, loop3, loop4, loop5, loop6, loop7, loop8, loop9, loop10, sda1, sda2 and sda5. As for partition, there are 3 partitions. Name: sda1, sda2, sda5 which sda1 and sda2 are extended partitions and sda5 is logical partition.

2)

```
roy@roy-virtual-machine:~$ ps
    PID TTY          TIME CMD
   2377 pts/0    00:00:00 bash
   6160 pts/0    00:00:00 ps
```

Command: “ps”

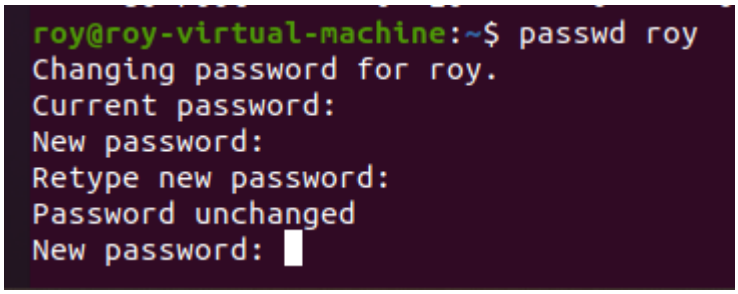
```
roy@roy-virtual-machine:~$ top
```

```
top - 23:47:47 up 31 min,  1 user,  load average: 0.00, 0.03, 0.01
Tasks: 292 total,   1 running, 291 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.3 us,  1.2 sy,  0.0 ni, 98.5 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   1952.9 total,    264.2 free,   1099.6 used,    589.0 buff/cache
MiB Swap:    448.5 total,    428.2 free,     20.3 used.    695.7 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
   1511 roy       20   0  269320  55700  28432 S   1.7   2.8   0:04.15 Xorg
   1667 roy       20   0 4098872 238512  87088 S   1.3  11.9   0:11.04 gnome-shell
   2367 roy       20   0  966396  50720  37680 S   1.0   2.5   0:01.52 gnome-terminal-
   1891 roy       20   0  298144  39592  25324 S   0.3   2.0   0:02.82 vmtoolsd
   6010 root      20   0       0      0      0 I   0.3   0.0   0:00.79 kworker/1:2-events
   6173 roy       20   0   15216   4360   3444 R   0.3   0.2   0:00.11 top
      1 root      20   0  167712  11008   7836 S   0.0   0.6   0:02.32 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.01 kthreadd
      3 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_gp
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 rcu_par_gp
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/0:0H-events_highpri
      9 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 mm_percpu_wq
     10 root      20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_tasks_rude_
     11 root      20   0       0      0      0 S   0.0   0.0   0:00.00 rcu_tasks_trace
     12 root      20   0       0      0      0 S   0.0   0.0   0:00.15 ksoftirqd/0
     13 root      20   0       0      0      0 I   0.0   0.0   0:00.38 rcu_sched
     14 root      rt   0       0      0      0 S   0.0   0.0   0:00.01 migration/0
     15 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/0
     16 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/0
     17 root      20   0       0      0      0 S   0.0   0.0   0:00.00 cpuhp/1
     18 root     -51   0       0      0      0 S   0.0   0.0   0:00.00 idle_inject/1
     19 root      rt   0       0      0      0 S   0.0   0.0   0:00.24 migration/1
     20 root      20   0       0      0      0 S   0.0   0.0   0:00.13 ksoftirqd/1
     22 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker/1:0H-events_highpri
     23 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kdevtmpfs
     24 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 netns
     25 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 inet_frag_wq
     26 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kauditd
     28 root      20   0       0      0      0 S   0.0   0.0   0:00.00 khungtaskd
     29 root      20   0       0      0      0 S   0.0   0.0   0:00.00 oom_reaper
     30 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 writeback
     31 root      20   0       0      0      0 S   0.0   0.0   0:00.18 kcompactd0
     32 root      25   5       0      0      0 S   0.0   0.0   0:00.00 ksmd
     33 root      39  19       0      0      0 S   0.0   0.0   0:00.00 khugepaged
     80 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kintegrityd
     81 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kblockd
     82 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 blkcg_punt_bio
     83 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 tpm_dev_wq
     84 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 ata_sff
     85 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 md
     86 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 edac-poller
```

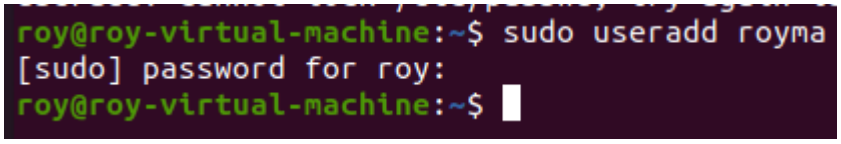
Command: “top”

3)

The Linux management command “sudo” permits a user to executes some or all “root” commands by the system controller. “Root” user is the only one super user in the system. It have all the authorities to execute any command.

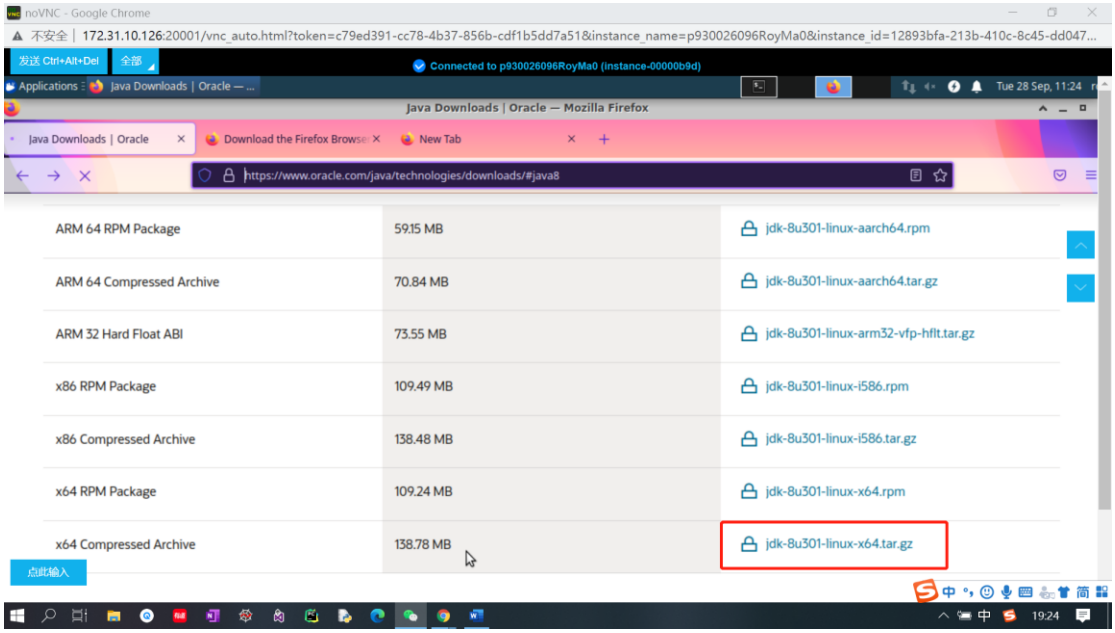


The command “passwd [account name]” can change password. (The screenshot doesn’t change the passwd.)

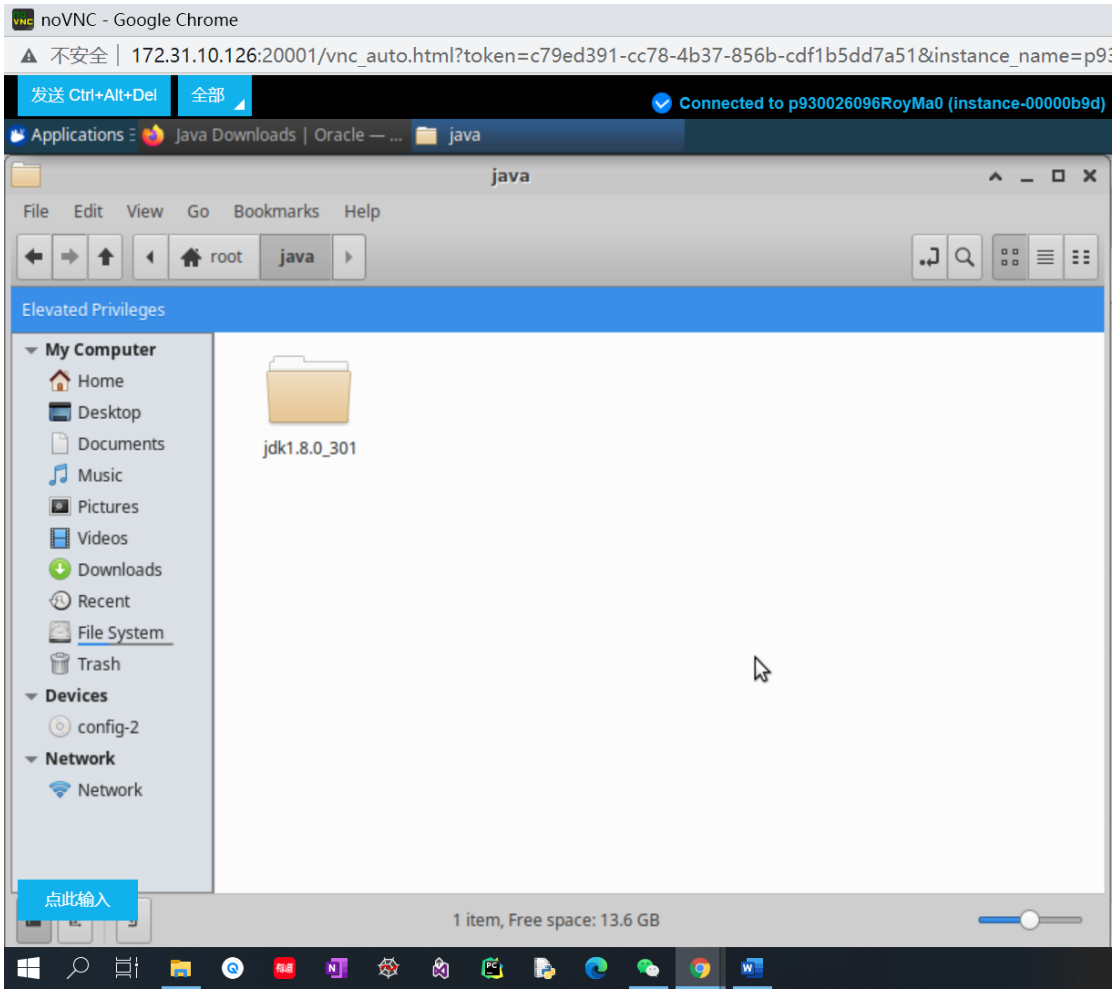


The command “sudo useradd [new account name]” can create a new account.

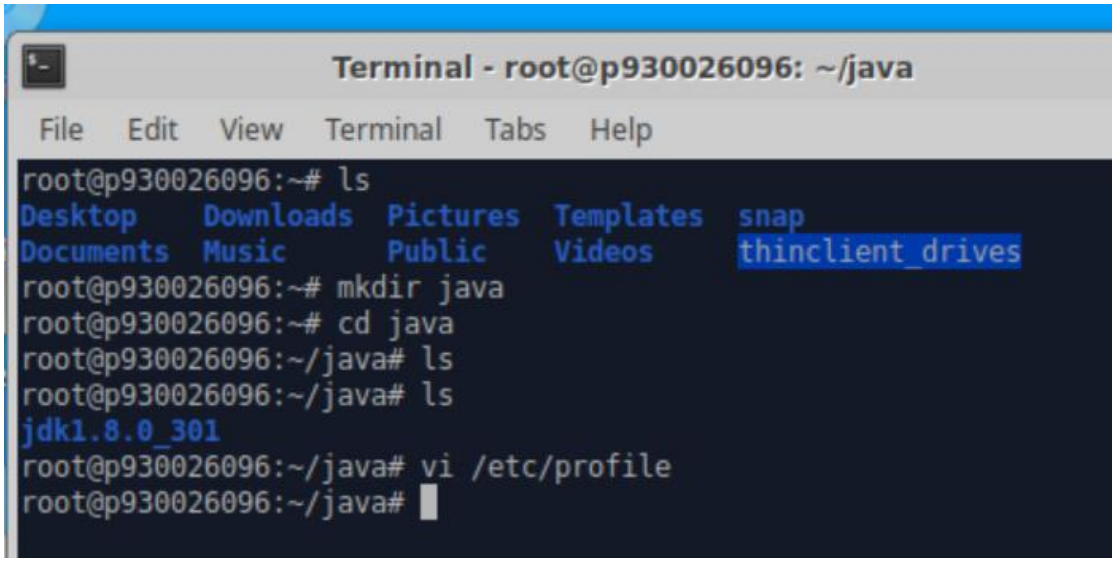
4)



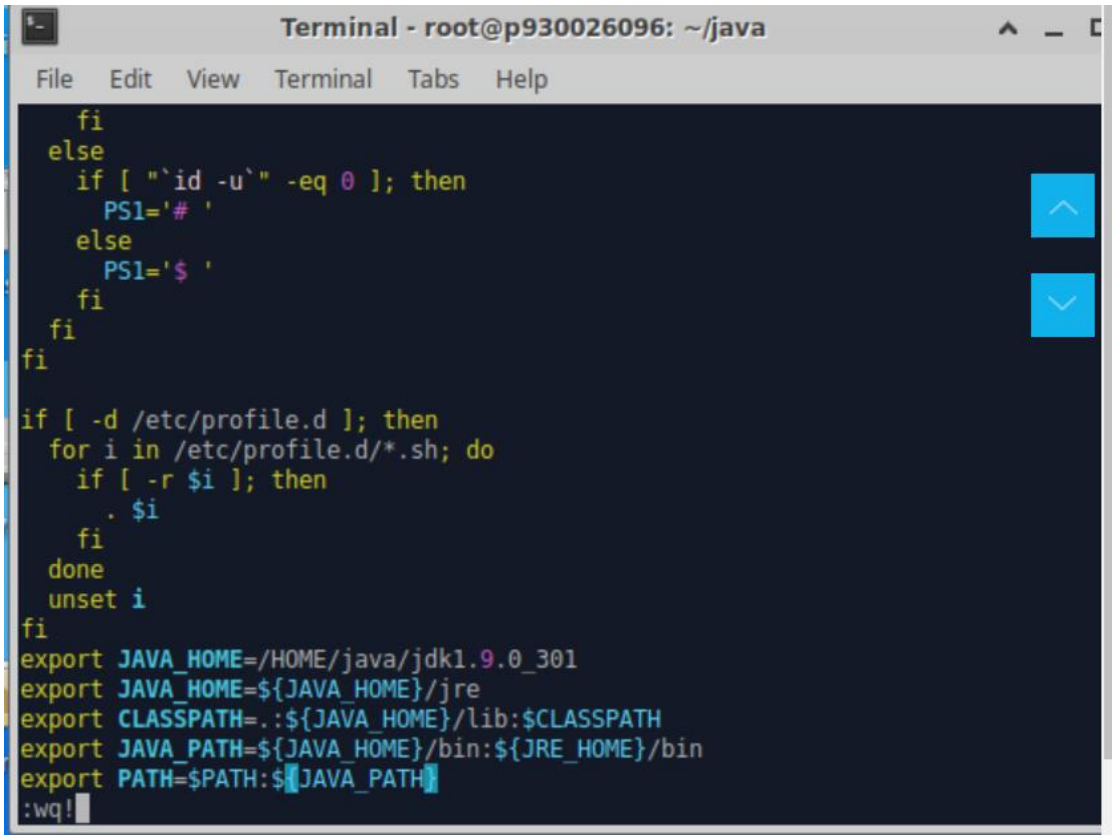
Go to Oracle and download the compressed archive with the postfix “.tar.gz”



Extract the archive to a directory called “java”.



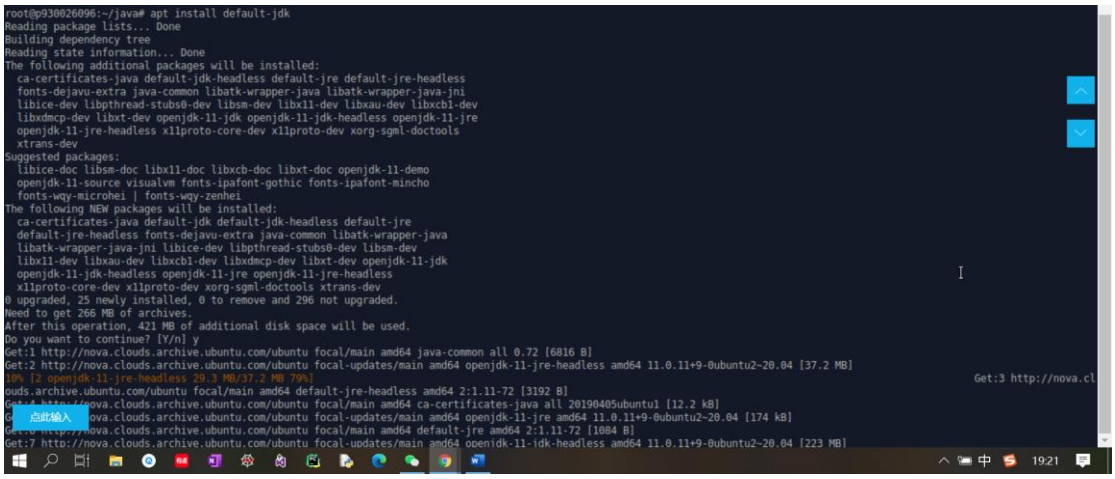
Create a directory “java” and the extracted file is under such directory.
Add the environment variables by editing the file “/etc/profile”.

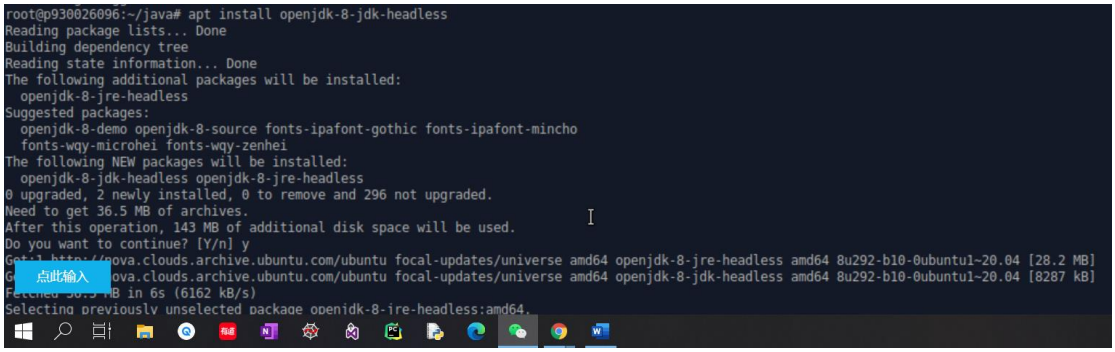


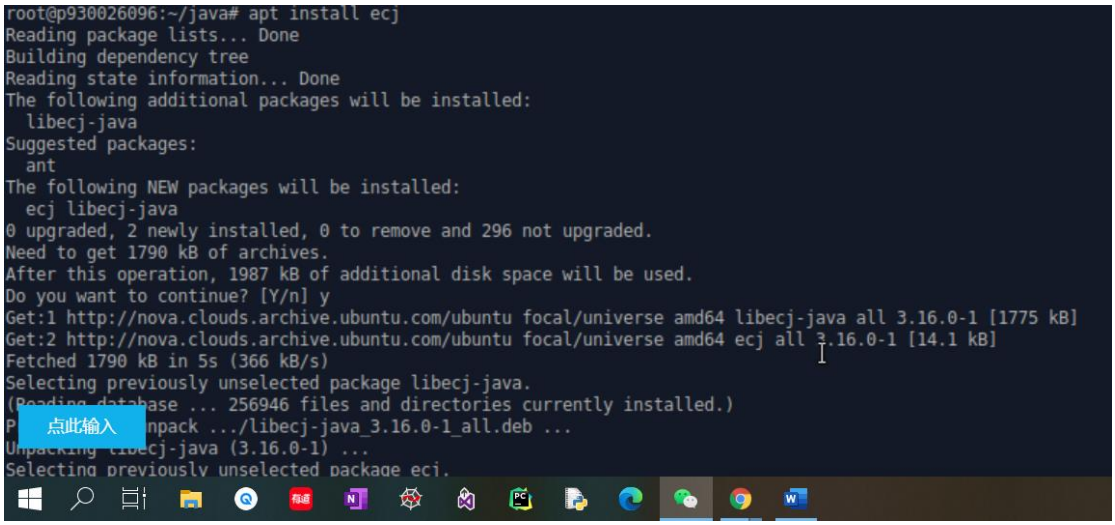
Add five lines of “export” command at the end of the file. (“i”: insert mode, “Esc”: read mode, “x”: delete one word under read mode, “:wq”: save and exit the file under read mode).

```
root@p930026096:~/java# source /etc/profile
root@p930026096:~/java# javac

Command 'javac' not found, but can be installed with:

apt install default-jdk              # version 2:1.11-72, or
apt install openjdk-11-jdk-headless  # version 11.0.11+9-0ubuntu2~20.04
apt install ecj                      # version 3.16.0-1
apt install openjdk-16-jdk-headless  # version 16.0.1+9-1~20.04
apt install openjdk-8-jdk-headless   # version 8u292-b10-0ubuntu1~20.04
apt install openjdk-13-jdk-headless  # version 13.0.7+5-0ubuntu1~20.04
```

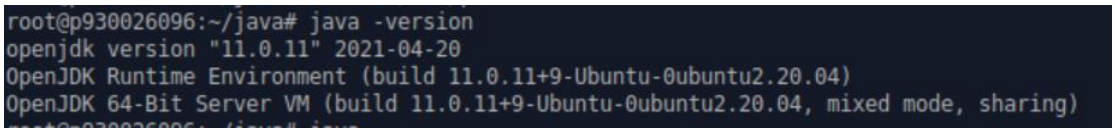
The first line command is to make the changes in “/etc/profile” valid and check whether the changes has been taken. But, it first need to install some packages.



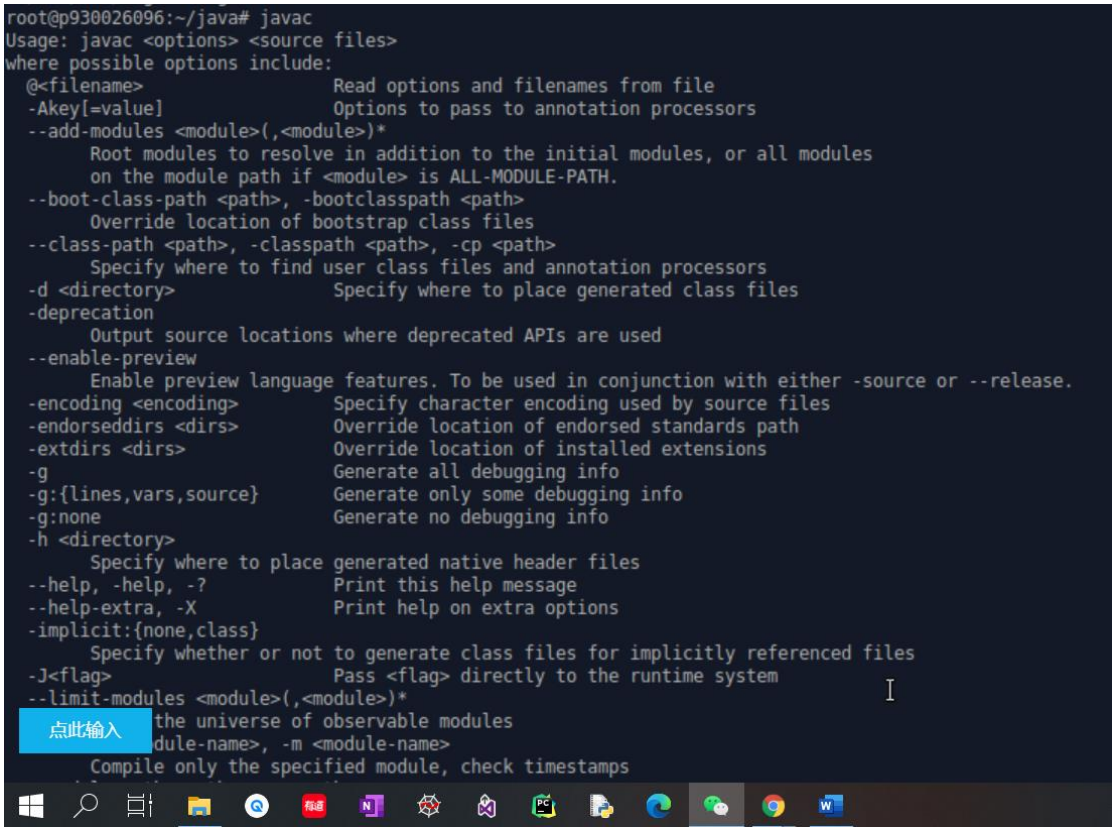




Install all the needed packages.

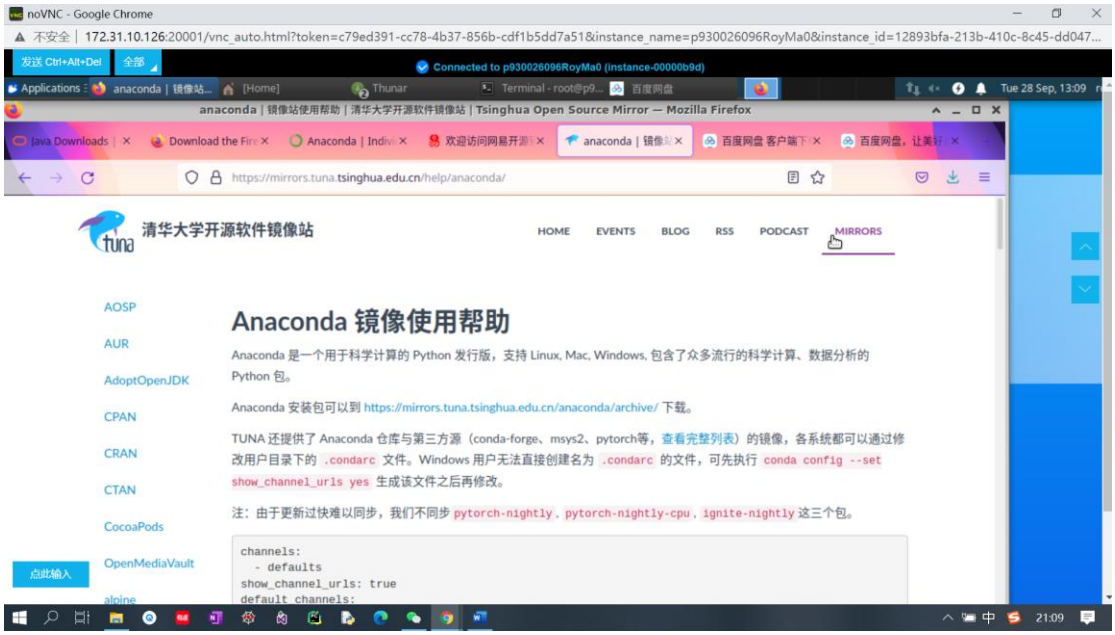


Check whether environment variable works

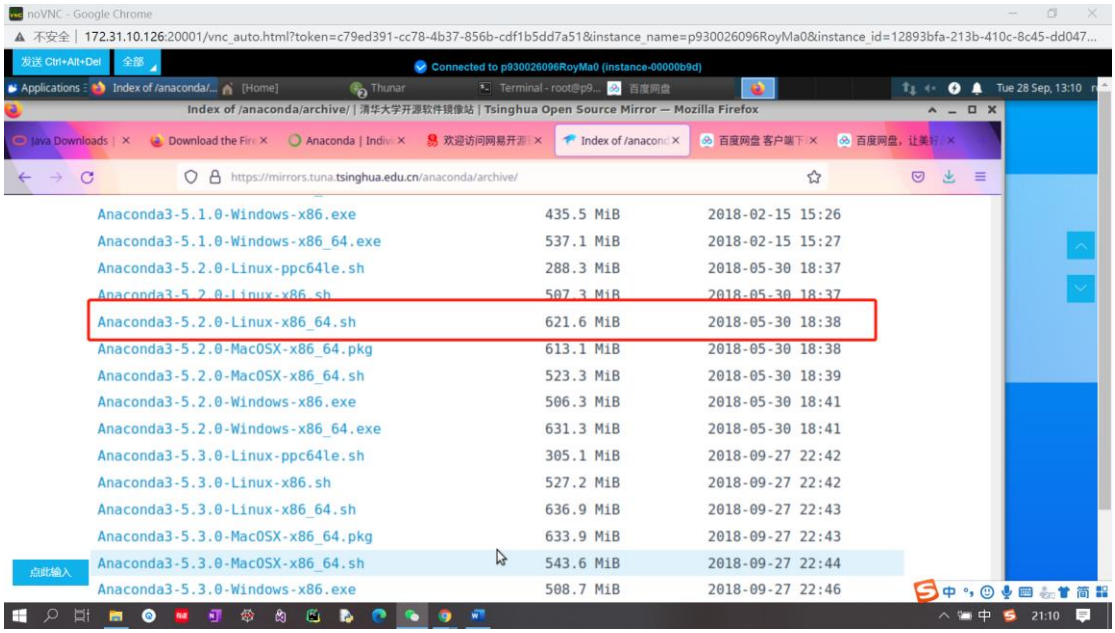


Java is installed and configured successfully.

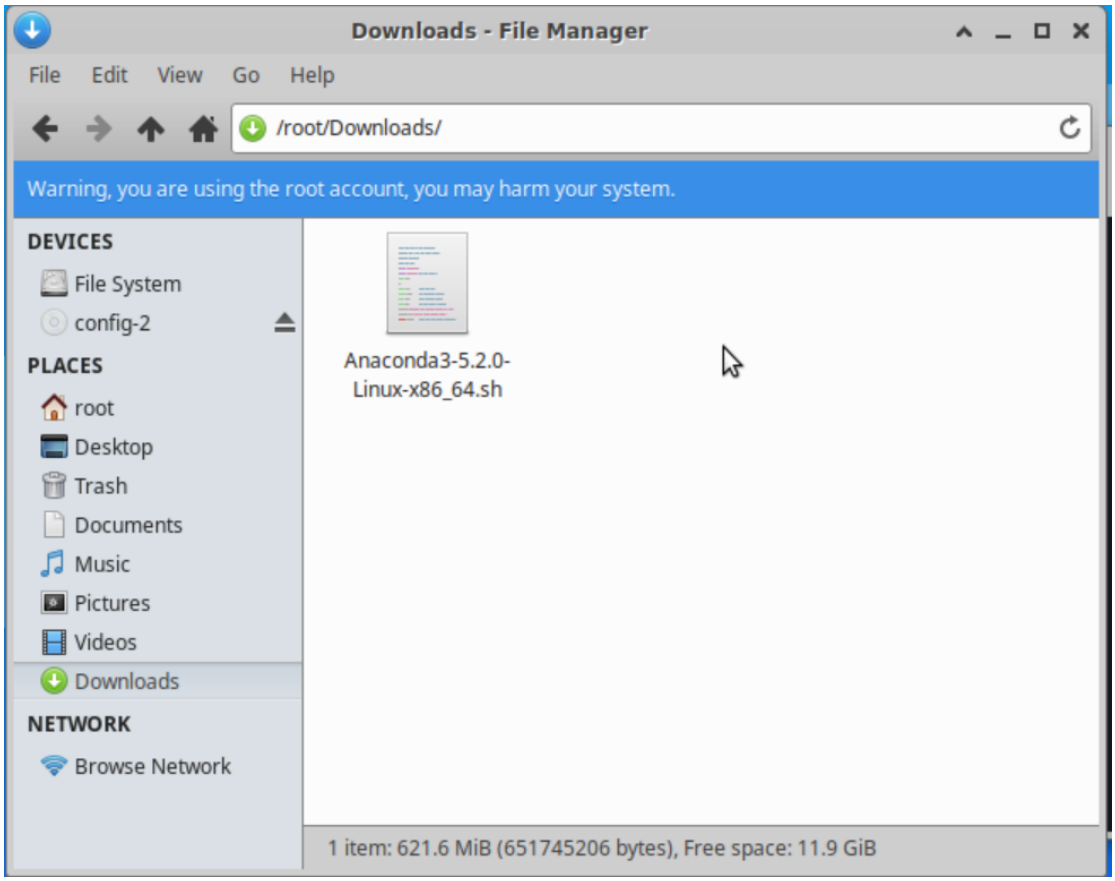
5)



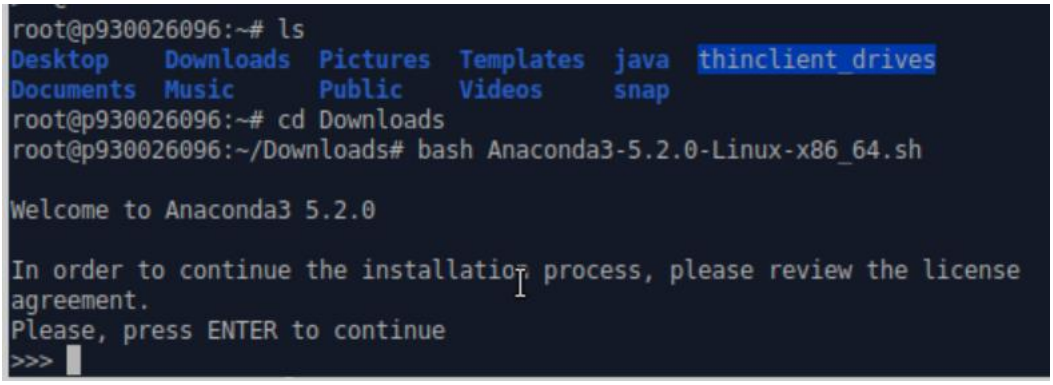
Find the image file of anaconda in a local source website.



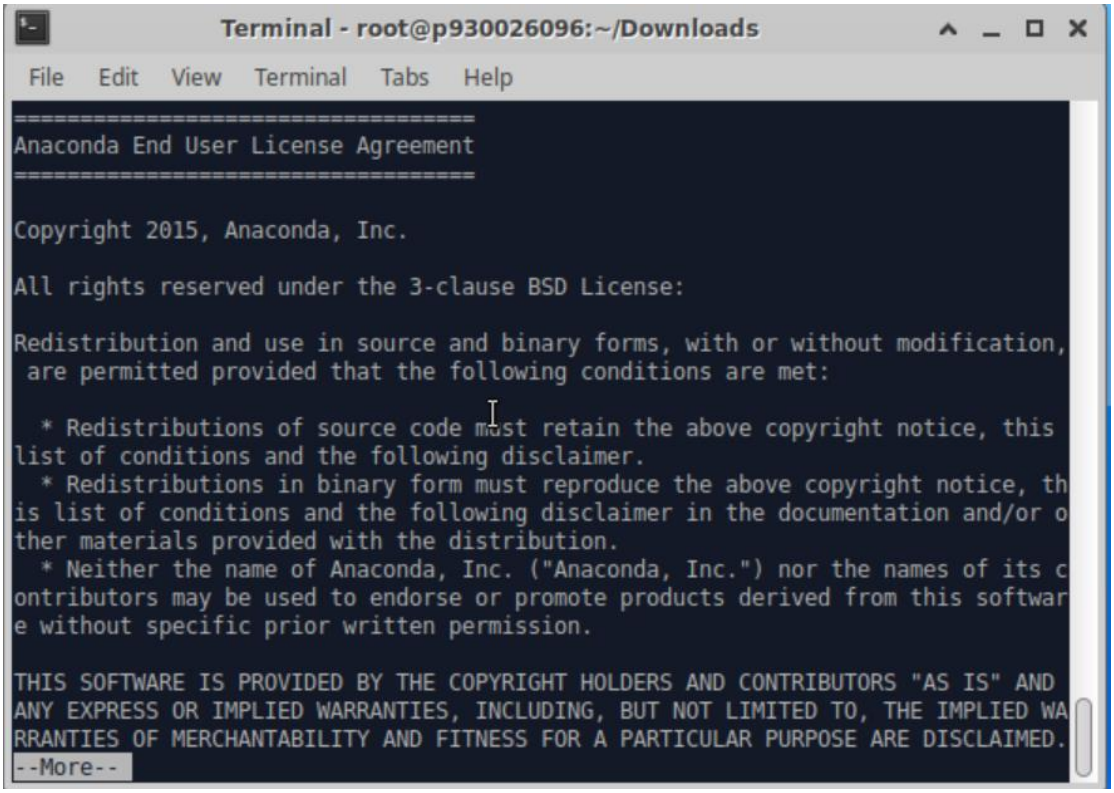
Download for Linux

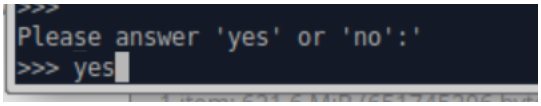


Check the .sh file in the downloads directory, if not, move it from /tmp to /root/Downloads

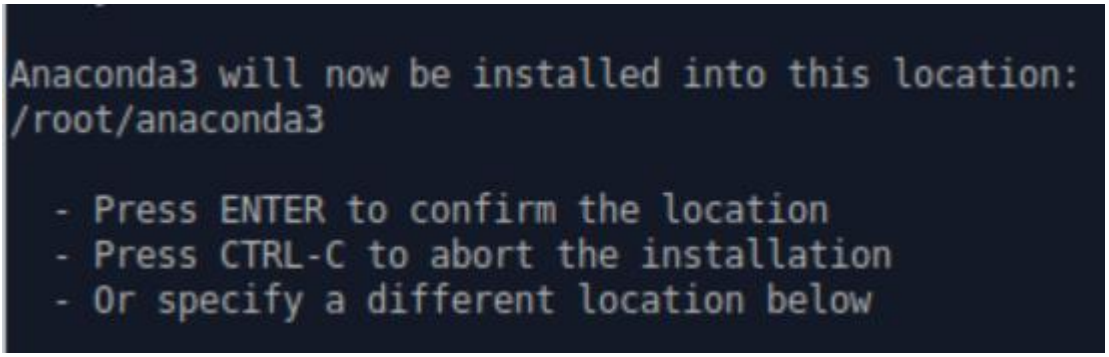


Enter the Downloads directory and bash the .sh file. Click enter.

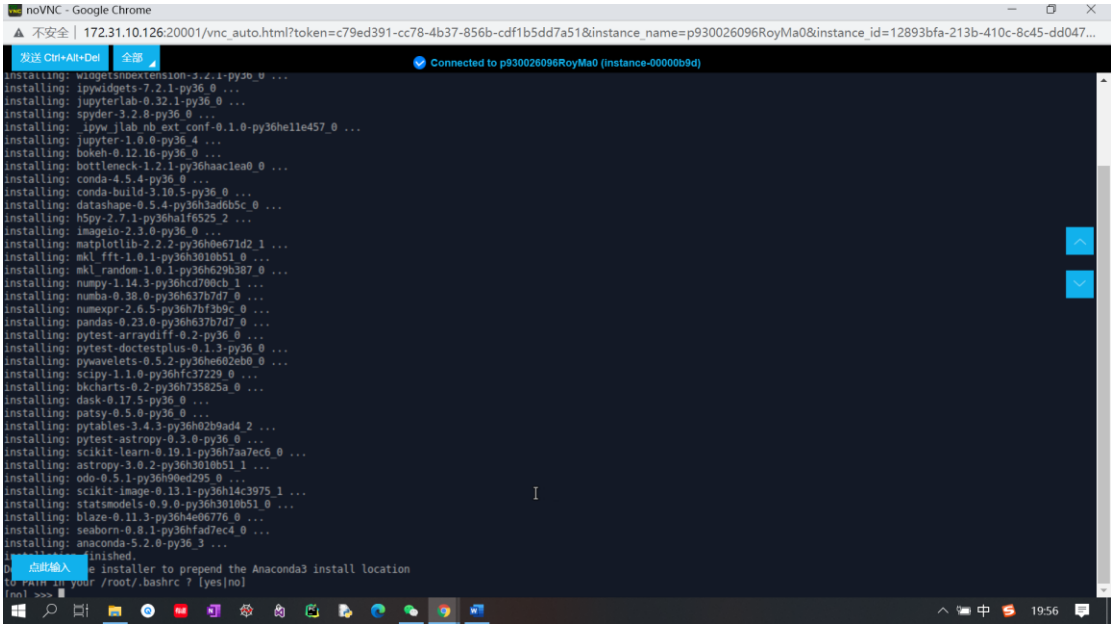




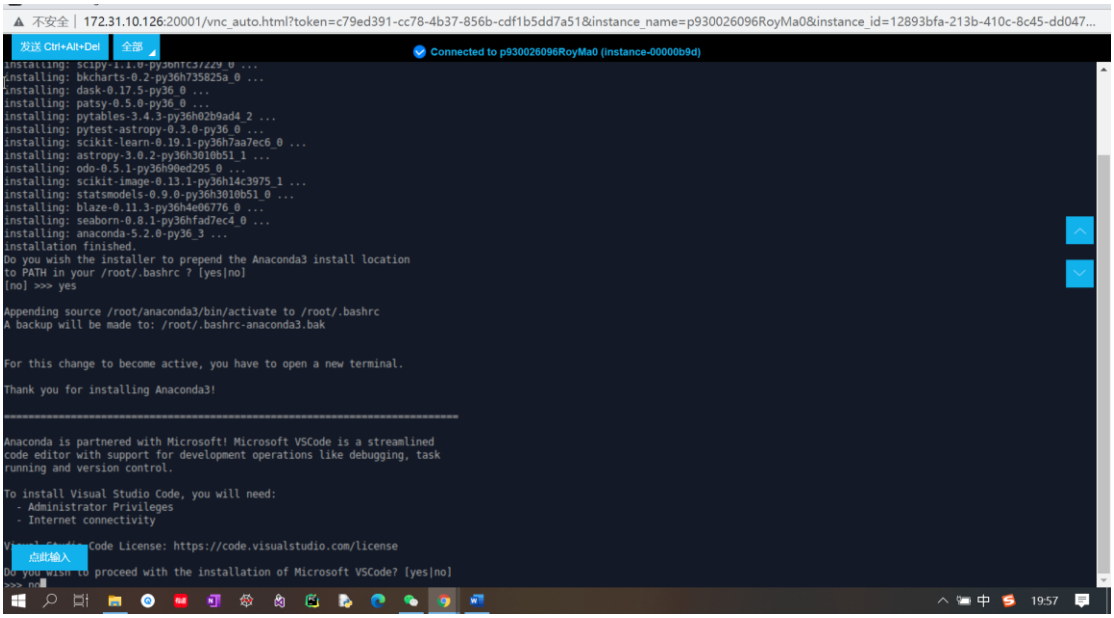
Type “yes”. All above is the basic information of anaconda.



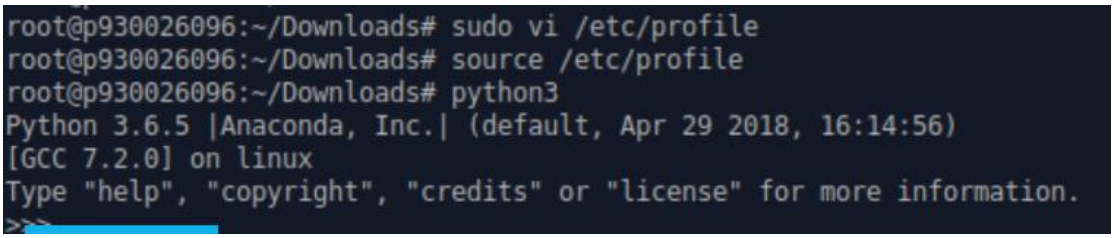
Click “Enter”.



Type “yes”.

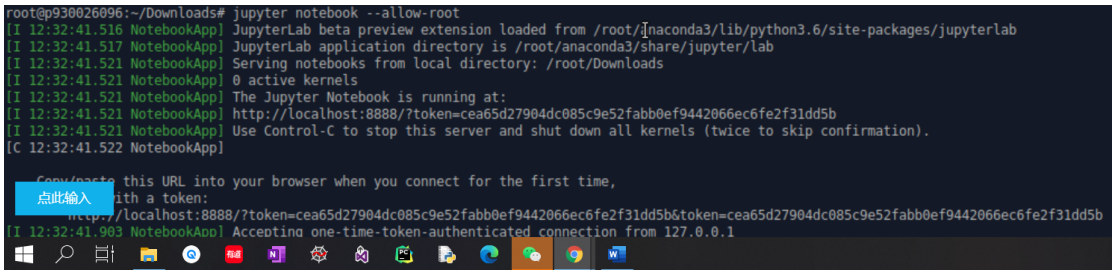


Type “No”

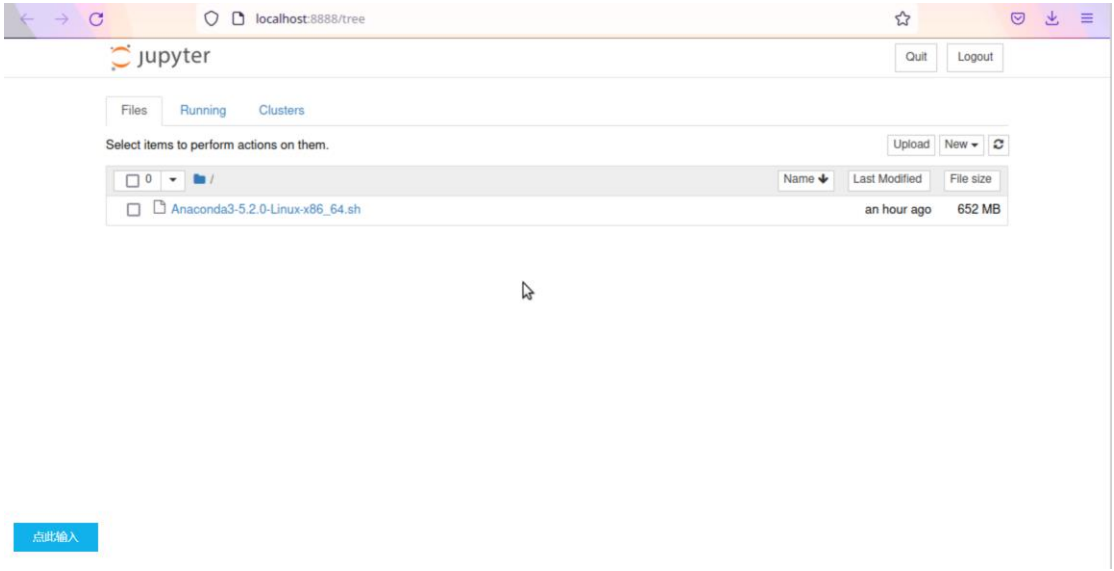


Configure environmental variable by editing “/etc/profile”. And check the environmental variable by command “Python3”.

Add last line to the file. Then save and quit.

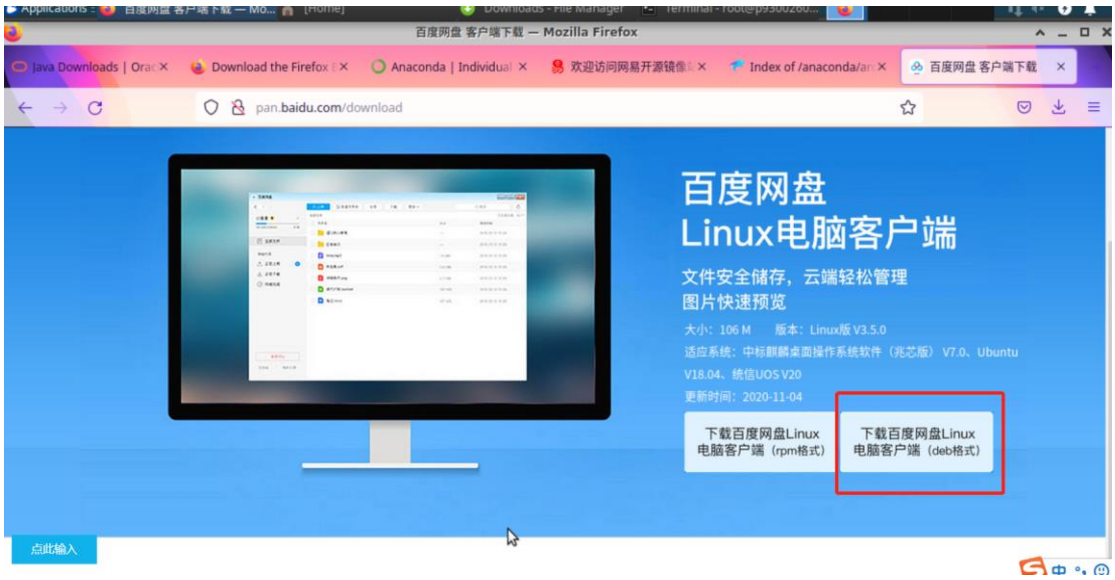


Open jupyter notebook.

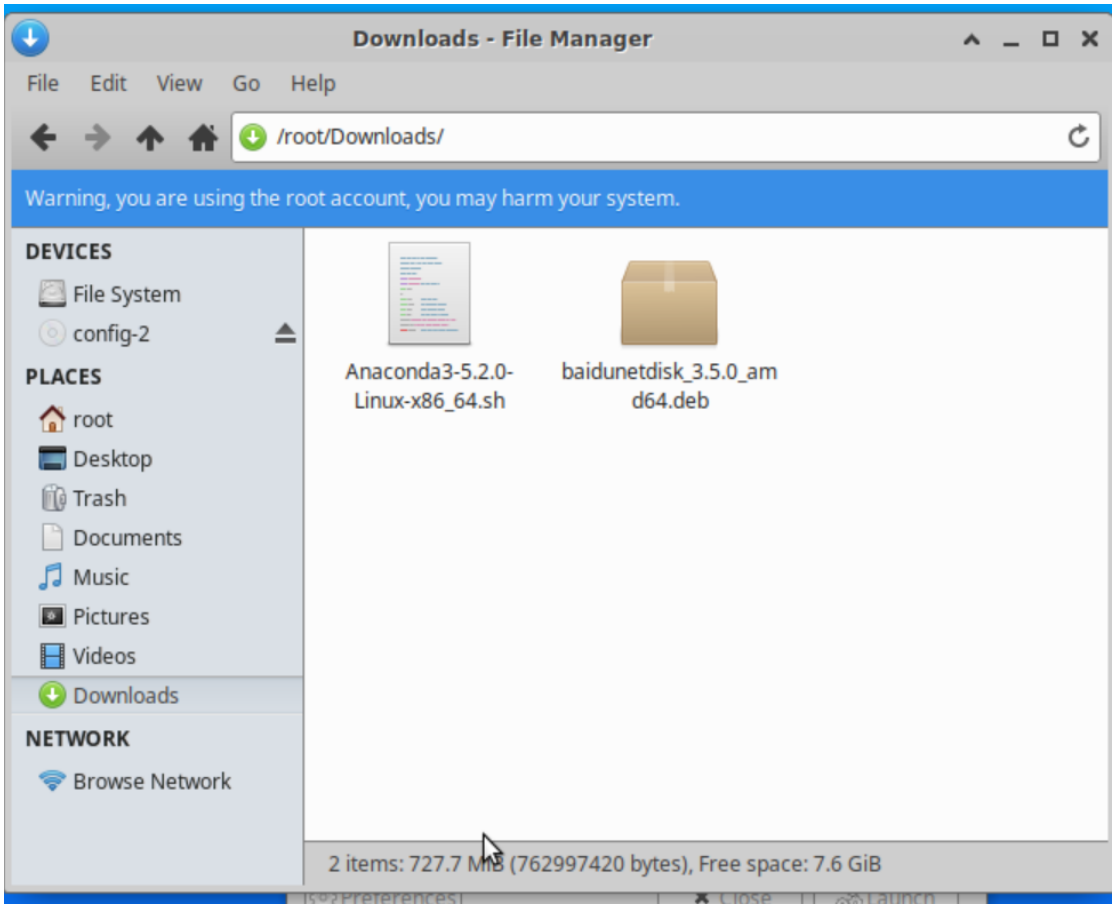


Successfully open the jupyter notebook.

6)



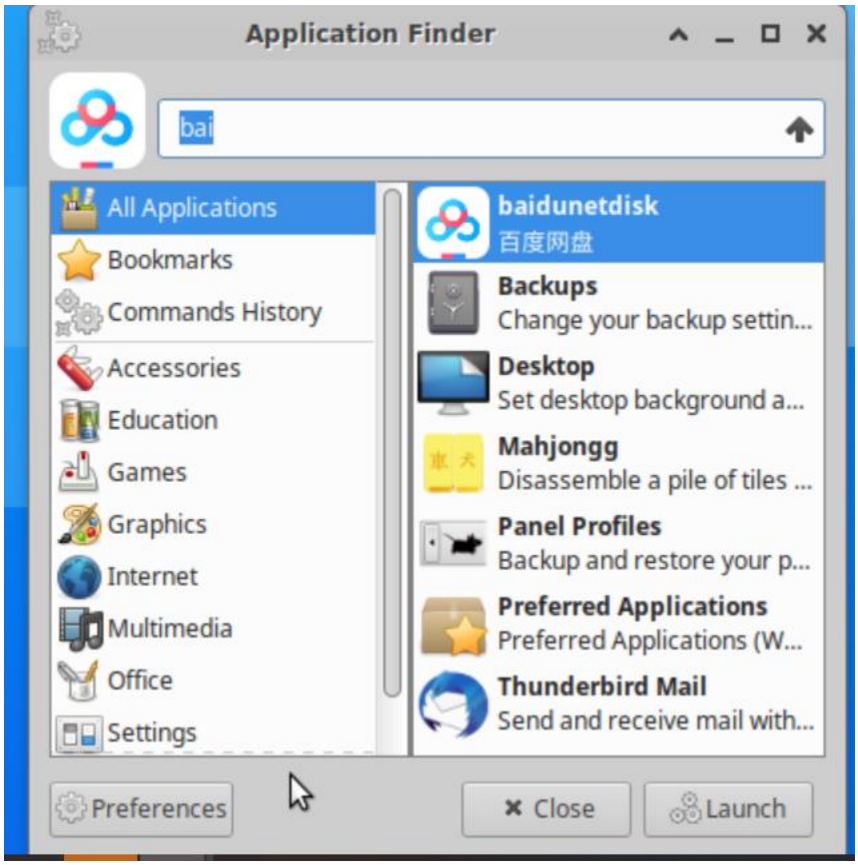
Go to the official platform of baidunetdisk and download the .deb file for Linux.



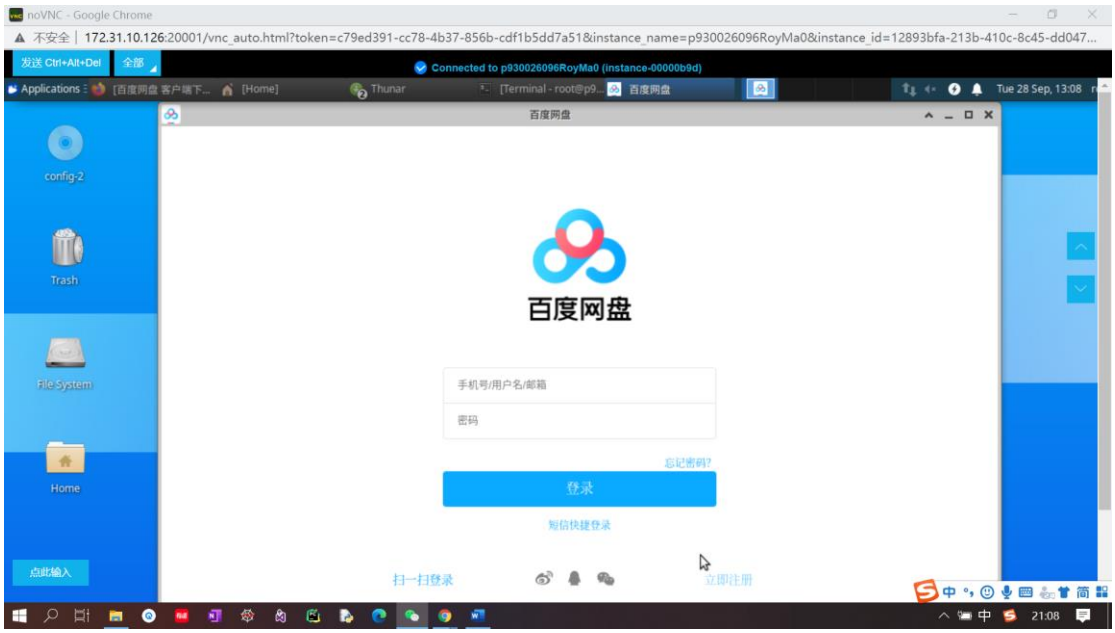
Move the downloaded file to Downloads directory.

```
root@p930026096:~/Downloads# sudo dpkg -i 'baidunetdisk_3.5.0_amd64.deb'
(Reading database ... 264173 files and directories currently installed.)
Preparing to unpack baidunetdisk_3.5.0_amd64.deb ...
Unpacking baidunetdisk (3.5.0) over (3.5.0) ...
Setting up baidunetdisk (3.5.0) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for mime-support (3.64ubuntu1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
```

Unpacking the .deb file.



Find the baidunetdisk in application finder.



Successfully download baidunetdisk.