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
```

```
Disk /dev/loop6: 62.9 MiB, 65105920 bytes, 127160 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/loop7: 65.22 MiB, 68378624 bytes, 133552 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/sda: 10 GiB, 10737418240 bytes, 20971520 sectors
Disk model: VMware Virtual S
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0xbab32844
Device
           Boot Start
                             End Sectors Size Id Type
/dev/sda1 *
                   2048 1050623 1048576 512M b W95 FAT32
               1052670 20969471 19916802 9.5G 5 Extended
/dev/sda2
/dev/sda5
               1052672 20969471 19916800 9.5G 83 Linux
Disk /dev/loop8: 49.8 MiB, 52203520 bytes, 101960 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/loop9: 29.84 MiB, 31272960 bytes, 61080 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/loop10: 32.32 MiB, 33878016 bytes, 66168 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
roy@roy-virtual-machine:~$
```

There are 13 storage devices in my computer. Name: loop1, loop2, loop3, loop4, loop5, loop6, loop7, loop9, 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.

```
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
MiB Mem : 1952.9 total, 264.2 free, 1099.6 used, 589.0 buff/cache
top - 23:47:47 up 31 min,
                                                                                                       0.0 st
MiB Swap:
                  448.5 total,
                                         428.2 free,
                                                                20.3 used.
                                                                                     695.7 avail Mem
                                                                       %CPU %MEM
                                                                                 2.8
                                     269320
                                                           28432 S
                                                                                          0:04.15 Xorg
    1667 roy
                         20
                                   4098872 238512
                                                           87088 S
                                                                                          0:11.04 gnome-shell
                                                                                          0:01.52 gnome-terminal-
0:02.82 vmtoolsd
    2367 гоу
                         20
                                     966396
                                                50720
                                                           37680 S
    1891 roy
                         20
                                     298144
                                                39592
                                                           25324 S
    6010 root
                         20
                                                                0
                                                                         0.3
                                                                                 0.0
                                                                                          0:00.79 kworker/1:2-events
                                      15216
                                                 4360
    6173 гоу
                         20
                                0
                                                            3444 R
                                                                         0.3
                                                                                 0.2
                                                                                          0:00.11 top
                                                                                          0:02.32 systemd
0:00.01 kthreadd
        1 root
                         20
                                0
                                     167712
                                                11008
                                                            7836 S
                                                                         0.0
                                                                                 0.6
                         20
                                0
        2 root
                                            0
                                                                0 S
                                                                         0.0
                                                                                 0.0
                                                                                         0:00.00 rcu_gp

0:00.00 rcu_par_gp

0:00.00 kworker/0:0H-events_highpri

0:00.00 mm_percpu_wq

0:00.00 rcu_tasks_rude_

0:00.00 rcu_tasks_trace
                              - 20
        3 root
                          0
                                            0
                                                      0
                                                                0 I
                                                                         0.0
                                                                                 0.0
                           0
                              - 20
        4 root
                                            0
                                                      0
                                                                         0.0
                                                                                 0.0
                                                                0 I
                               - 20
                                            0
                                                                                 0.0
        6 root
                           0
                                                                         0.0
                                                                0 I
                              - 20
                                                                                 0.0
        9 root
                          0
                                            0
                                                                         0.0
       10 root
                         20
                                            0
                                                                         0.0
                                                                                 0.0
                         20
       11 root
                                                      0
                                                                         0.0
       12 root
                         20
                                                                                          0:00.15 ksoftirqd/0
                                                                         0.0
                                                                         0.0
       13 root
                         20
                                                                0 I
                                                                                          0:00.38 rcu_sched
                        rt
-51
       14 root
                                                                                          0:00.01 migration/0
                                                                                          0:00.00 idle_inject/0
0:00.00 cpuhp/0
0:00.00 cpuhp/1
0:00.00 idle_inject/1
       15 root
                                            0
                                                                0 S
                                                                         0.0
       16 root
                         20
                                            0
                                                                0 S
                                                                                 0.0
                                            0
       17 root
                         20
                                                                0 S
                                                                         0.0
                                                                                 0.0
                        -51
       18 root
                                            0
                                                                0 S
                                                                         0.0
                                                                                 0.0
                                                                                          0:00.24 migration/1
0:00.13 ksoftirqd/1
       19 root
                                0
                                            0
                                                      0
                                                                0 S
                                                                         0.0
                                                                                 0.0
       20 root
                                            0
                                                      0
                         20
                                                                0 S
                                                                         0.0
                                                                                 0.0
                                                                                          0:00.00 kworker/1:0H-events_highpri
0:00.00 kdevtmpfs
       22 root
                                            0
                          0
                              - 20
                                                      0
                                                                0 I
                                                                         0.0
                                                                                 0.0
       23 root
                                0
                                            0
                         20
                                                      0
                                                                0 S
                                                                         0.0
                                                                                 0.0
                                            0
                                                      0
                          0
                               - 20
                                                                                          0:00.00 netns
       24 root
                                                                0 I
                                                                         0.0
                                                                                 0.0
       25 root
                                            0
                                                                                          0:00.00 inet_frag_wq
                              - 20
                                                                         0.0
                                                                                 0.0
       26 root
                         20
                                0
                                            0
                                                                         0.0
                                                                                 0.0
                                                                                          0:00.00 kauditd
       28 root
                         20
                                                                         0.0
                                                                                 0.0
                                                                                          0:00.00 khungtaskd
       29 root
                         20
                                                                                          0:00.00 oom_reaper
                                                                         0.0
       30 root
                          0
                              -20
                                                                0 I
                                                                                          0:00.00 writeback
       31 root
                         20
                                            0
                                                                                          0:00.18 kcompactd0
                                                                                          0:00.18 kcompactd0

0:00.00 ksmd

0:00.00 khugepaged

0:00.00 kintegrityd

0:00.00 kblockd

0:00.00 blkcg_punt_bio

0:00.00 tpm_dev_wq

0:00.00 ata_sff

0:00.00 mdac_poller
       32 root
                         25
                                            0
                                                                0 S
                                                                         0.0
       33 root
                         39
                               19
                                            0
                                                                0 S
                                                                         0.0
                                                                                 0.0
                                            0
       80 root
                          0
                              -20
                                                                0 I
                                                                         0.0
                                                                                 0.0
       81 root
                           0
                              -20
                                            0
                                                                0 T
                                                                         0.0
                                                                                 0.0
                                            0
       82 root
                           0
                              -20
                                                      0
                                                                0 T
                                                                         0.0
                                                                                 0.0
                           0 -20
                                            0
                                                      0
       83 root
                                                                0 I
                                                                         0.0
                                                                                 0.0
                           0 -20
                                            0
                                                      0
       84 root
                                                                0 I
                                                                         0.0
                                                                                 0.0
       85 root
                           0 -20
                                                                                 0.0
                                                                         0.0
                                                                                          0:00.00 edac-poller
                           0 -20
                                                                                 0.0
       86 root
                                                                         0.0
```

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.

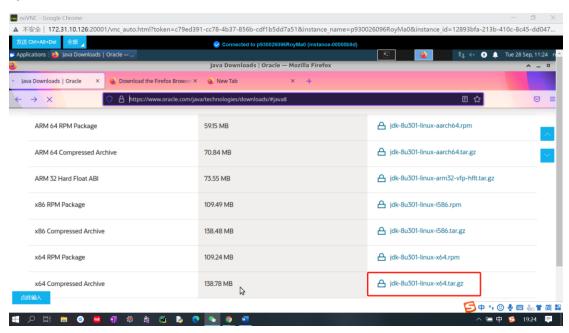
```
roy@roy-virtual-machine:~$ passwd roy
Changing password for roy.
Current password:
New password:
Retype new password:
Password unchanged
New password:
```

The command "passwd [account name]" can change password. (The screenshot doesn't change the passwd.)

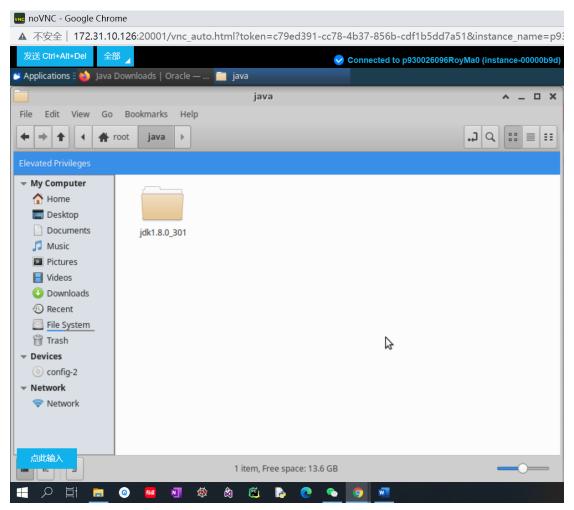
```
roy@roy-virtual-machine:~$ sudo useradd royma
[sudo] password for roy:
roy@roy-virtual-machine:~$
```

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".

```
Terminal - root@p930026096: ~/java
File
      Edit View
                  Terminal
                            Tabs
                                   Help
root@p930026096:~# ls
Desktop
                      Pictures
                                 Templates
                                            thinclient drives
                      Public
root@p930026096:~# mkdir java
root@p930026096:~# cd java
root@p930026096:~/java# ls
root@p930026096:~/java# ls
jdk1.8.0 301
root@p930026096:~/java# vi /etc/profile
root@p930026096:~/java#
```

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

```
Terminal - root@p930026096: ~/java
     Edit View Terminal Tabs Help
    fi
  else
    if [ "'id -u'" -eq 0 ]; then
      PS1='# '
    else
      PS1='$ '
    fi
  fi
fi
if [ -d /etc/profile.d ]; then
  for i in /etc/profile.d/*.sh; do
    if [ -r $i ]; then
    fi
  done
  unset i
fi
export JAVA_HOME=/HOME/java/jdk1.9.0 301
export JAVA HOME=${JAVA HOME}/jre
export CLASSPATH=.:${JAVA HOME}/lib:$CLASSPATH
export JAVA_PATH=${JAVA_HOME}/bin:${JRE_HOME}/bin
export PATH=$PATH:$ JAVA PATH
:wq!
```

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.

```
2 opén dé-11-jre-headless 29.3 MB/37.2 NB 799]
archive.ubuntu.com/ubuntu focal/main andéd default-jre-headless andé4 2:1.11-72 [3192 B]
black (pova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 4:a-certificates-java all 20190405ubuntu1 [12.2 kB]
black (pova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 5 open dét.11-jre andé4 11.0.11+9-0buntu2-20.04 [174 kB]
http://nova.clouds.archive.ubuntu.com/ubuntu focal/main andéd default-jre andé4 2:1.11-72 [1004 B]
http://nova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 4 default-jre andé4 2:1.11-72 [1004 B]
http://nova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 4 default-jre andé4 2:1.11-72 [1004 B]
http://nova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 4 default-jre andé4 2:1.11-72 [1004 B]
http://nova.clouds.archive.ubuntu.com/ubuntu focal/main andéd 5 open déc1 11-idk-headless andé4 11.0.11+9-0ubuntu2-20.04 [223 MB]
                                                                                                                                                                                                                                                                    △ 9 中 🧐 19:21 📮
  ボ タ 曽 🔚 🔞 🅶 🗉 🕸 🕲 🖺 🧶 🗞 🌖 💆
 root@p930026096:~/java# apt install ecj
Reading package lists... Done
 Building dependency tree
Reading state information... Done
The following additional packages will be installed:
     libecj-java
  Suggested packages:
The following NEW packages will be installed:
    ecj libecj-java

0 upgraded, 2 newly installed, 0 to remove and 296 not upgraded.

Need to get 1790 kB of archives.

After this operation, 1987 kB of additional disk space will be used.

Do you want to continue? [Y/n] y

Get:1 http://nova.clouds.archive.ubuntu.com/ubuntu focal/universe amd64 libecj-java all 3.16.0-1 [1775 kB]

Get:2 http://nova.clouds.archive.ubuntu.com/ubuntu focal/universe amd64 ecj all 3.16.0-1 [14.1 kB]

Fetched 1790 kB in 5s (366 kB/s)

Selecting previously unselected package libecj-java.

(Roading database ... 256946 files and directories currently installed.)

P Guida  pack .../libecj-java_3.16.0-1_all.deb ...

Unpacking truecj-java (3.16.0-1) ...

Selecting previously unselected backage eci.
  The following NEW packages will be installed:
```

Install all the needed packages.

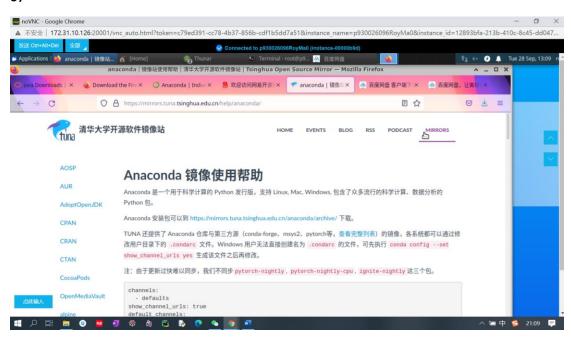
```
root@p930026096:~/java# java -version
openjdk version "11.0.11" 2021-04-20
OpenJDK Runtime Environment (build 11.0.11+9-Ubuntu-Oubuntu2.20.04)
OpenJDK 64-Bit Server VM (build 11.0.11+9-Ubuntu-Oubuntu2.20.04, mixed mode, sharing)
```

Check whether environment variable works

```
root@p930026096:~/java# javac
Usage: javac <options> <source files>
where possible options include:
 @<filename>
                                   Read options and filenames from file
                                   Options to pass to annotation processors
  --add-modules <module>(,<module>)*
        Root modules to resolve in addition to the initial modules, or all modules on the module path if <module> is ALL-MODULE-PATH.
 --class-path <path>, -classpath <path>, -cp <path>
Specify where to find user class files and annotation processors
                                   Specify where to place generated class files
  -deprecation
        Output source locations where deprecated APIs are used
  --enable-preview
        Enable preview language features. To be used in conjunction with either -source or --release.
ding <encoding> Specify character encoding used by source files
  -encoding <encoding>
  -endorseddirs <dirs>
                                   Override location of endorsed standards path
  -extdirs <dirs>
                                   Override location of installed extensions
                                   Generate all debugging info
                                   Generate only some debugging info
Generate no debugging info
  -g:{lines,vars,source}
        Specify where to place generated native header files
   -help, -help, -?
                                   Print this help message
  --help-extra, -X
                                   Print help on extra options
  -implicit:{none,class}
        Specify whether or not to generate class files for implicitly referenced files
                                  Pass <flag> directly to the runtime system
   -limit-modules <module>(,<module>)*
        the universe of observable modules
dule-name>, -m <module-name>
Compile only the specified module, check timestamps
     タ 詳 👼 💿 🇧 💵 🛇 🕸 🖺 🧶 🤏 🧿
```

Java is installed and configured successfully.

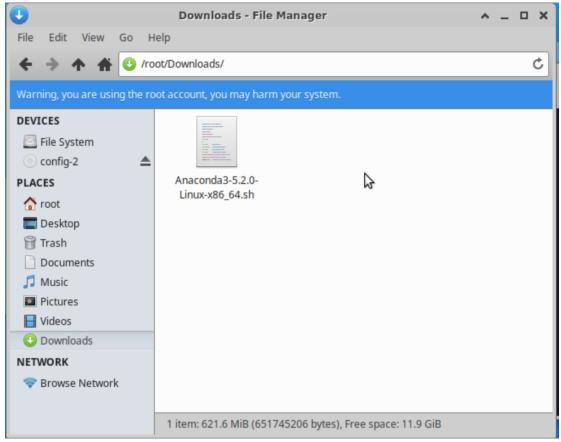
5)



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

```
root@p930026096:~# ls

Desktop Downloads Pictures Templates java thinclient drives

Documents Music Public Videos snap

root@p930026096:~# cd Downloads

root@p930026096:~/Downloads# bash Anaconda3-5.2.0-Linux-x86_64.sh

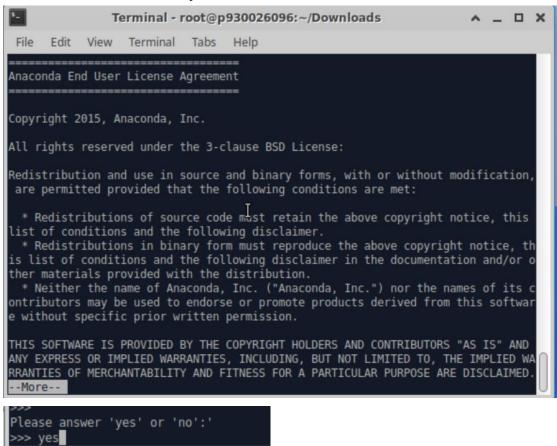
Welcome to Anaconda3 5.2.0

In order to continue the installation process, please review the license agreement.

Please, press ENTER to continue

>>> ■
```

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

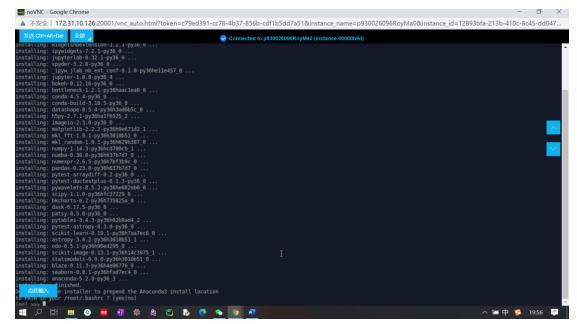


Type "yes". All above is the basic information of anaconda.

Anaconda3 will now be installed into this location:
/root/anaconda3

- Press ENTER to confirm the location
- Press CTRL-C to abort the installation
- Or specify a different location below

Click "Enter".



## Type "yes".



## Type "No"

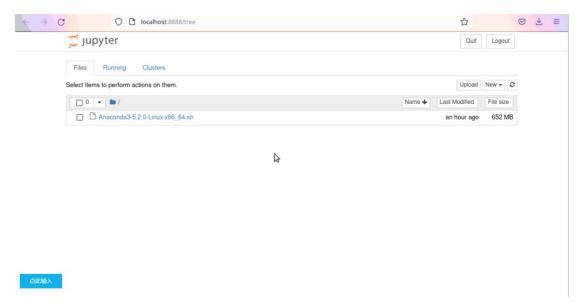
```
root@p930026096:~/Downloads# sudo vi /etc/profile
root@p930026096:~/Downloads# source /etc/profile
root@p930026096:~/Downloads# python3
Python 3.6.5 |Anaconda, Inc.| (default, Apr 29 2018, 16:14:56)
[GCC 7.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
```

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

```
发送 Ctrl+Alt+Del
      THE TITE DASHIDASHIC ACTEMBLY SELS THE DETAULT FOR
    # PS1='\h:\w\$ '
    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
  else
    if [ "'_id -u'" -eq 0 ]; then
      PS1= I#
    else
      PS1='$ '
    fi
  fi
fi
if [ -d /etc/profile.d ]; then
  for i in /etc/profile.d/*.sh; do
    if [ -r $i ]; then
    fi
  done
  unset i
fi
export JAVA HOME=/HOME/java/jdk1.9.0 301
export JAVA_HOME=${JAVA_HOME}/jre
export CLASSPATH=.:${JAVA_HOME}/lib:$CLASSPATH
export JAVA PATH=${JAVA HOME}/bin:${JRE HOME}/bin
export PATH=$PATH:${JAVA PATH}
export PATH=$PATH: home/anaconda3/bin
```

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

Open jupyter notebook.

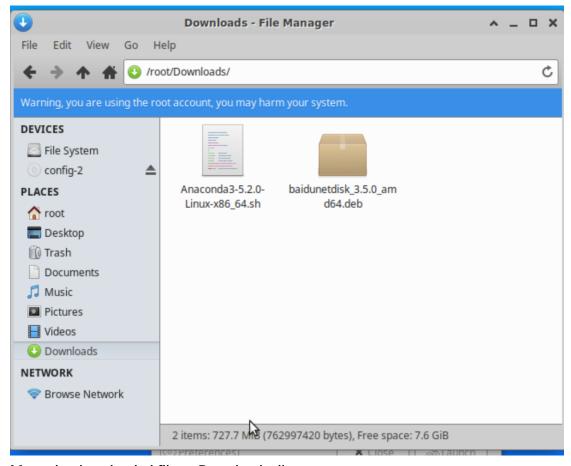


Successfully open the jupyter notebook.

6)



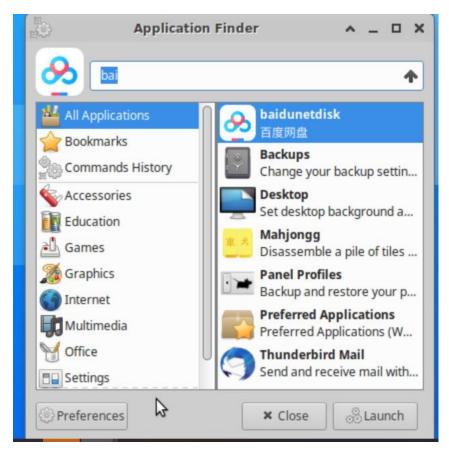
Go to the official platform of baidunetdisk and download the .deb file for Linux.



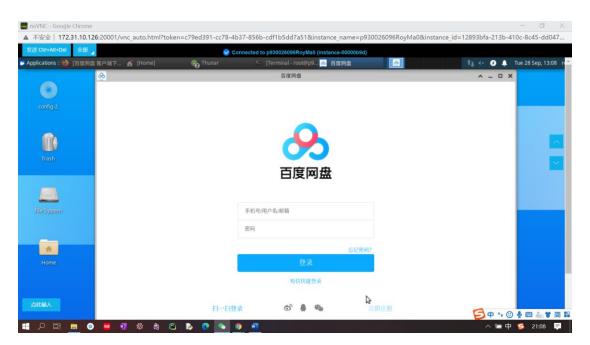
Move the downloaded file to Downloads directory.

```
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-lubuntul) ...
Processing triggers for desktop-file-utils (0.24-lubuntu3) ...
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.