تثبيت روز نويتيك على نظام تشغيل اوبنتو
installing ROS Noetic on Ubuntu 20.04 OS

1. نقوم بفتح الترمينال:Ctrl+Alt+T

After installing Ubuntu 20.04 on Virtualbox and having access to Linux virtual interface, open the terminal by >> Ctrl+Alt+T, or by just clicking on it from programs menu. It can also be added to the side bar that contains your favorite apps, for fast and easy access.

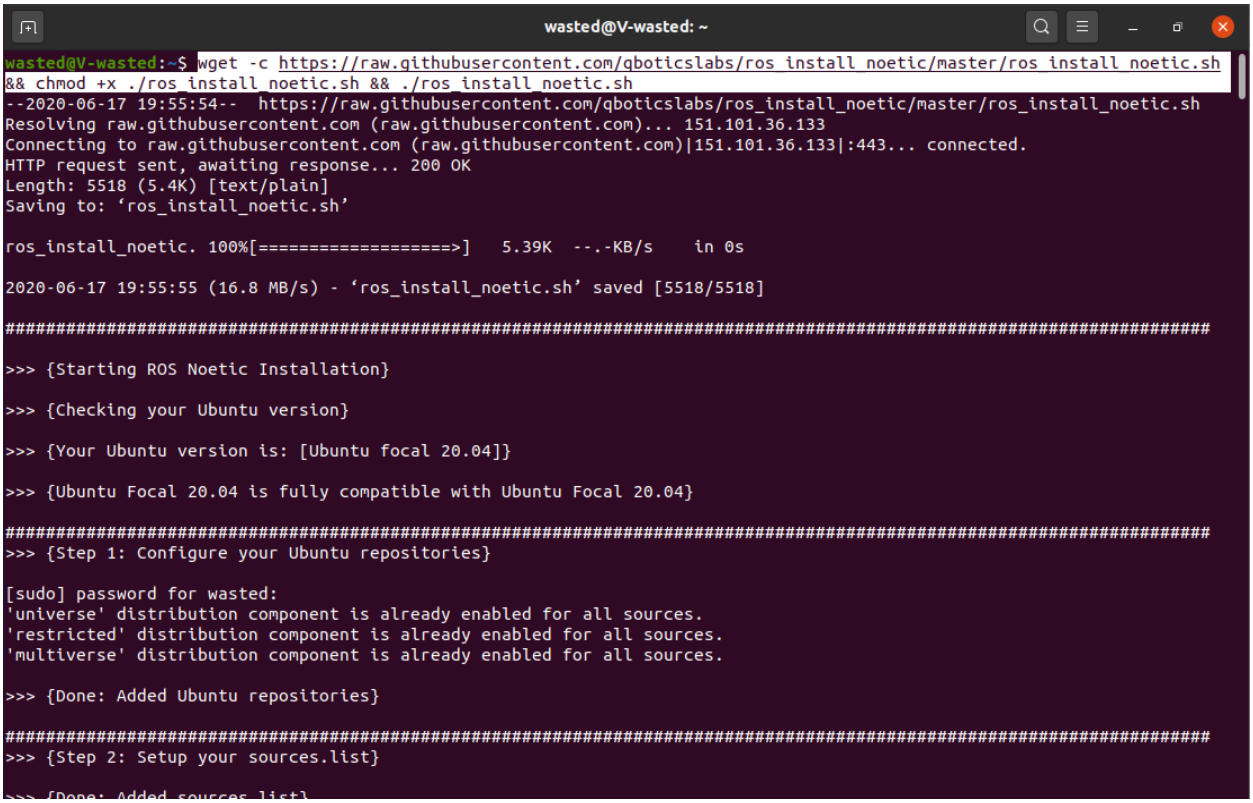
2. ننسخ الكود التالي ونلصقه فيه ونضغط Enter, سيطلب منا كلمة مرور الحساب ندخلها ونضغط Enter

We copy a single line code:

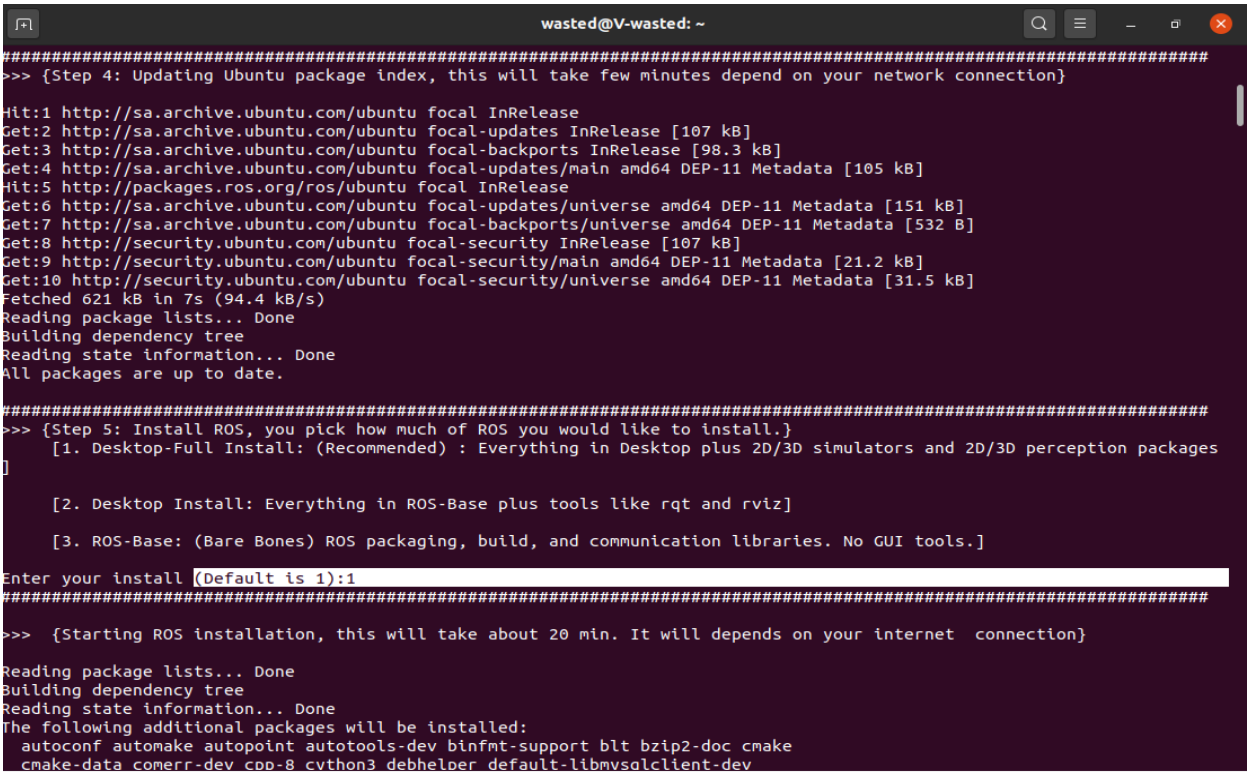
```
wget -c https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh && chmod +x ./ros_install_noetic.sh && ./ros_install_noetic.sh
```

You can paste easily into the terminal window by >> Ctrl+Shift+V, or by the right mouse click, then choose “paste”. We paste it in the terminal and press Enter, then we enter the password and press Enter.

P.S: (During the next few graphs, zoom in to see them clearly)



3. ننتظر بعض الوقت حتى يصل لهذه المرحلة :

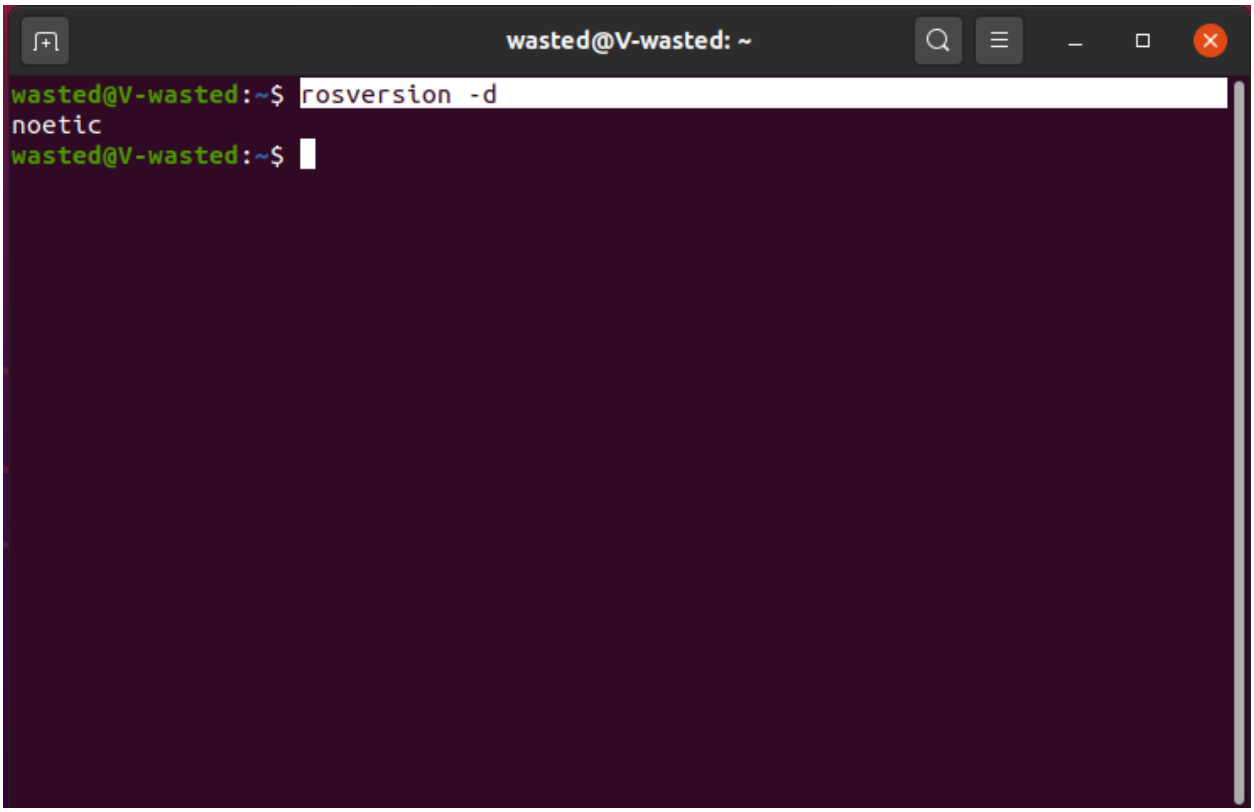


نكتب 1 ونضغط Enter وننتظر حتى ينتهي التثبيت.

We wait until we get to the point where we are asked to “Enter your Install (Default is 1): ”and we enter 1 then Enter, and we wait for the ROS Noetic install to complete (It could take several minutes).

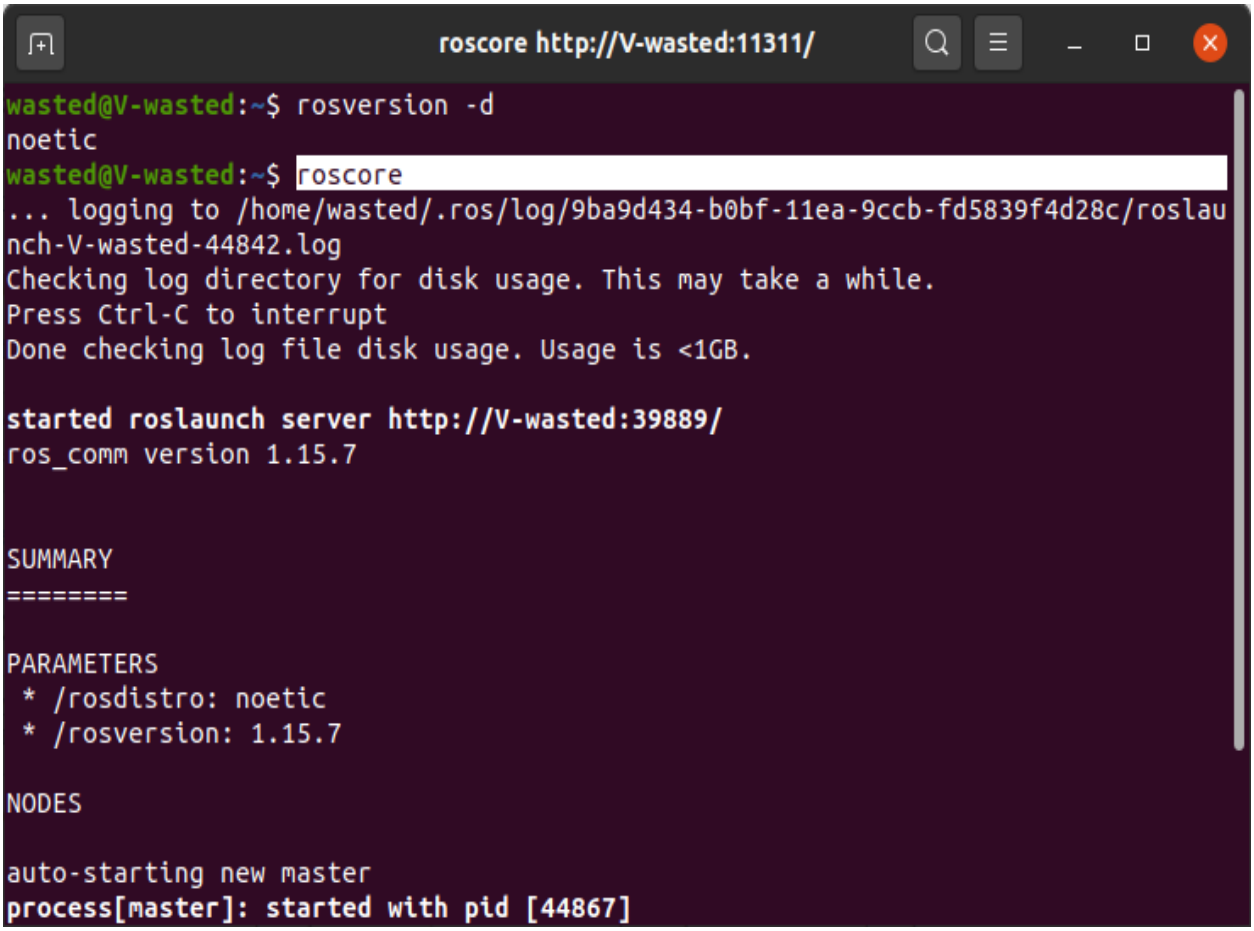
4. بعد انتهاء التثبيت نقوم بالتأكد من أن التثبيت تم بنجاح عن طريق كتابه الكود " rosversion -d" لنقوم باستعراض نسخة ROS

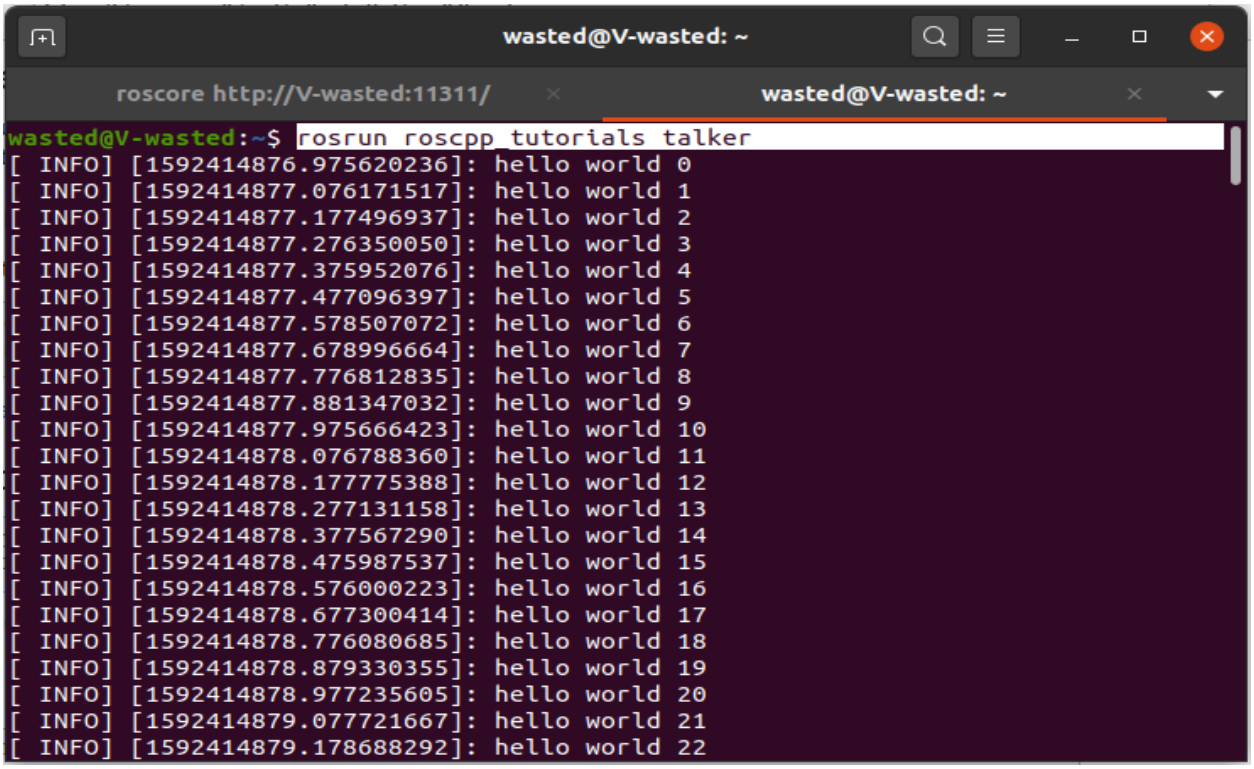
After the installation is finished and the terminal is ready to receive the next command, we enter the code: rosversion -d to check the installed version of ROS:

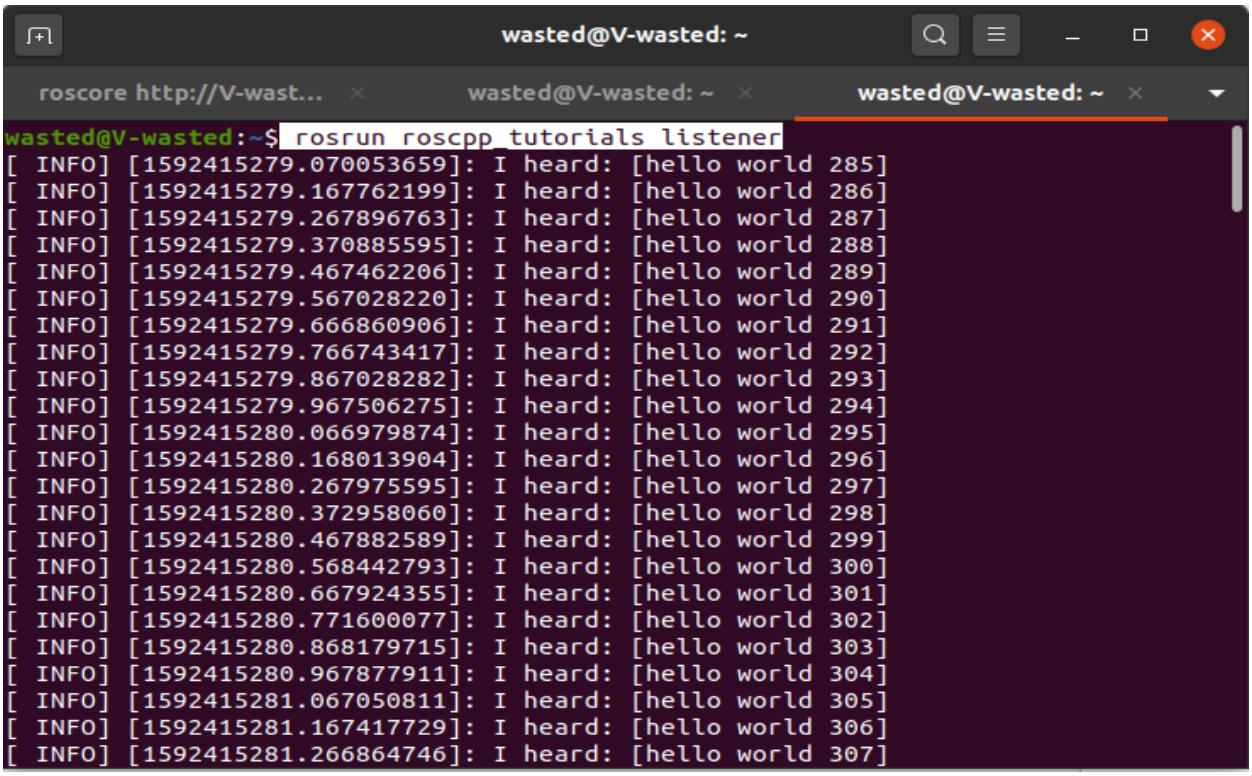


5. **Optional:**

A few more tests to ensure that our installation went well: enter the following codes into the terminal window, each in a new window by pressing the “+” button at the top left of the terminal window:







By now, you should have successfully installed ROS Noetic on your Ubuntu OS