

Installed ROS into Linux operating system

تحميل روز على نظام لينكس

There are more than one kind of Linux OS:

هناك انواع مختلفة لأنظمة التشغيل التابعة للينكس:

- Linux Mint.
- Ubuntu.
- Manjaro Linux.
- Kali Linux.
- Parrot OS.
- Arch Linux.

It is better to install ROS in Ubuntu Linux system

يفضل تحميل روز على نظام اوبنتو لينكس

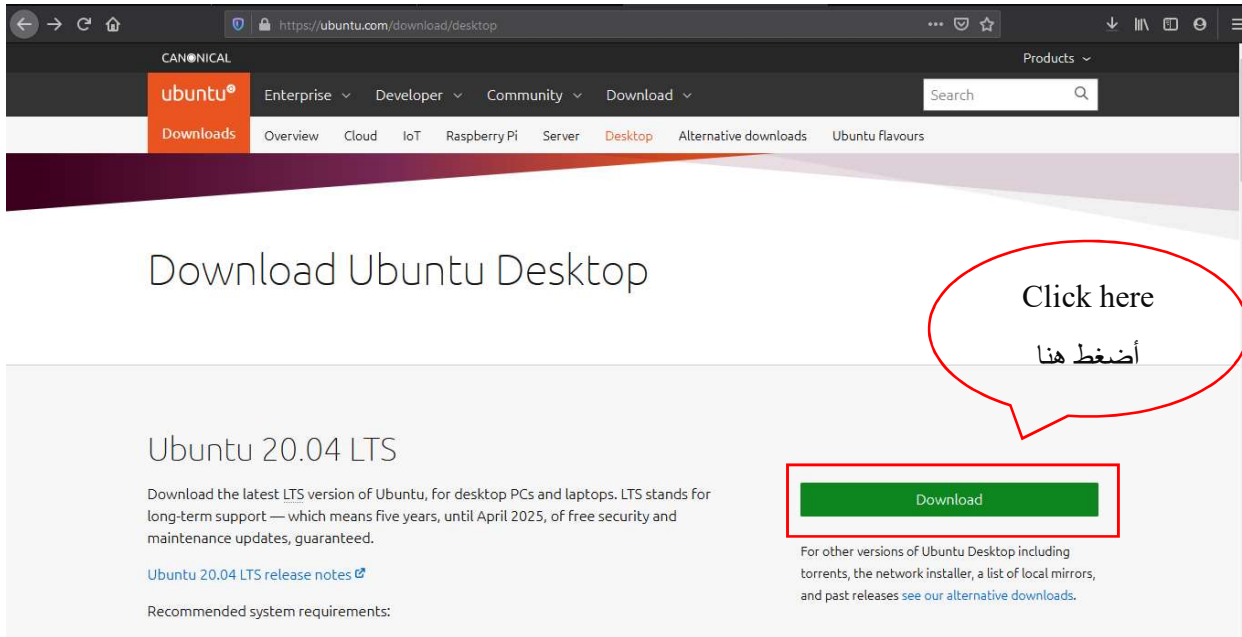
After you install the virtual machine → you can check and install it through this linked

بعد تحميل الجهاز الافتراضي – يمكنك التأكد وتحميله عن طريق هذا الرابط

<https://github.com/nabaajafar/How-to-download-virtual-machine-on-windows->

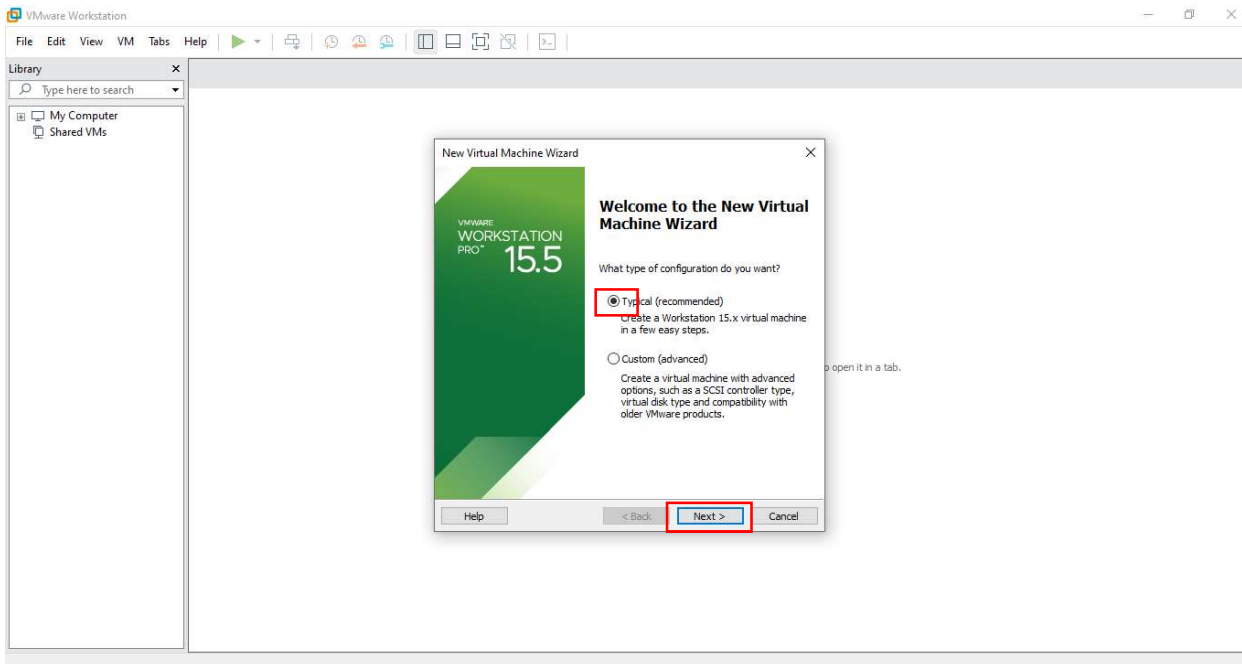
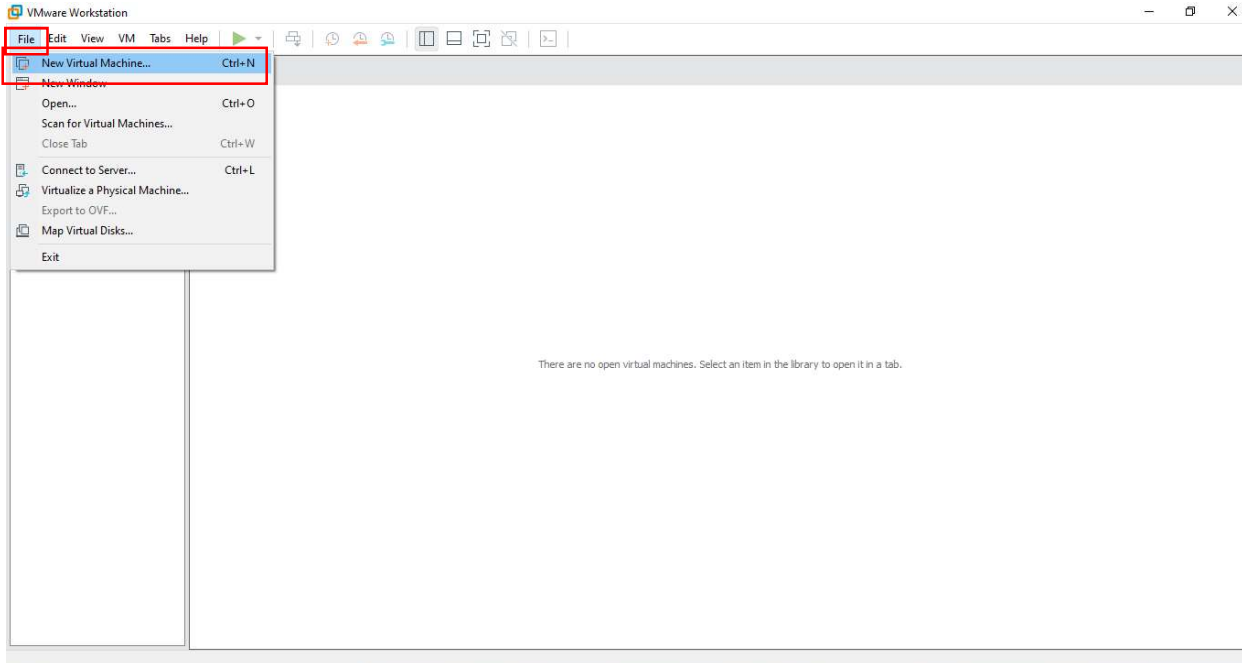
لنقم بتحميل نظام اوبيننتو Linux

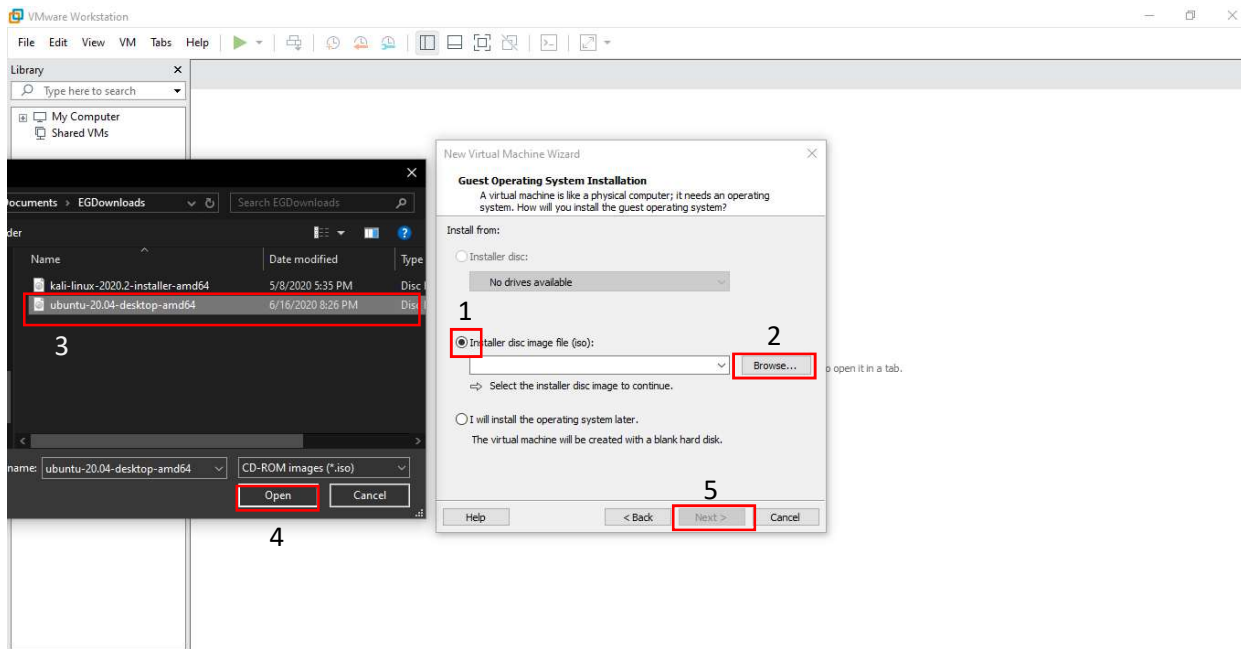
<https://ubuntu.com/download/desktop>



Open the virtual machine then add the operating system into the virtual machine as you can see
File → New Virtual Machine...

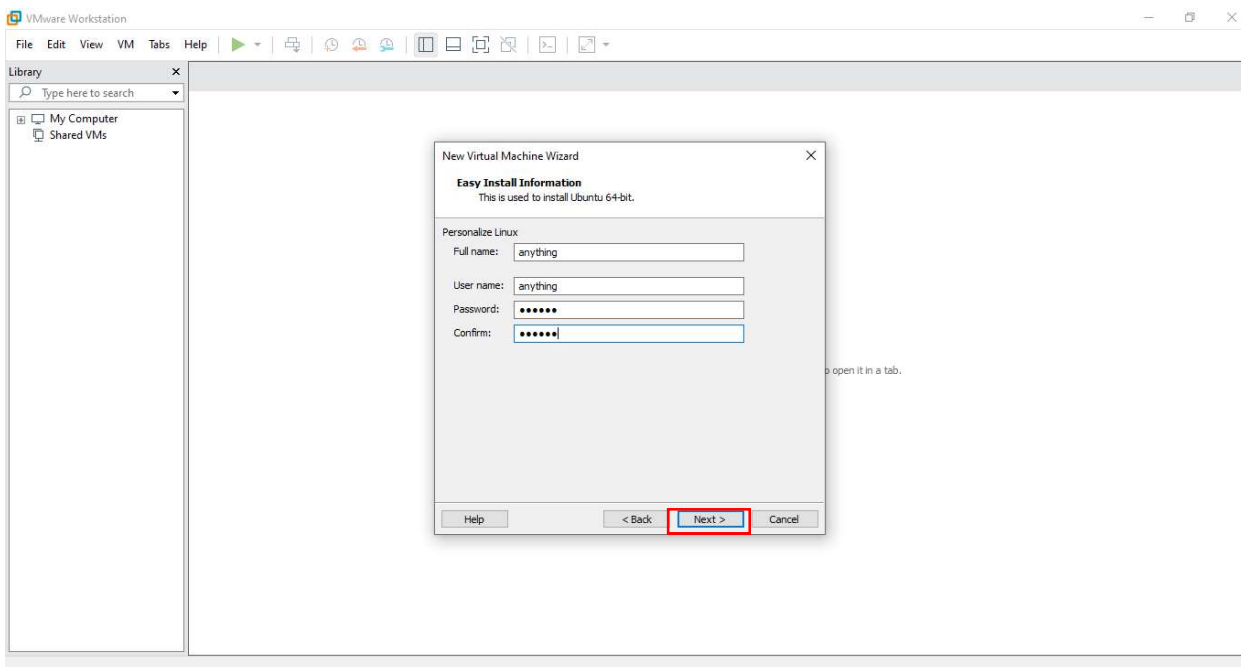
... اصف نظام لينكس الذي قمت بتحميله بالجهاز الافتراضي كما بالصورة ملف -- آلة افتراضية جديدة

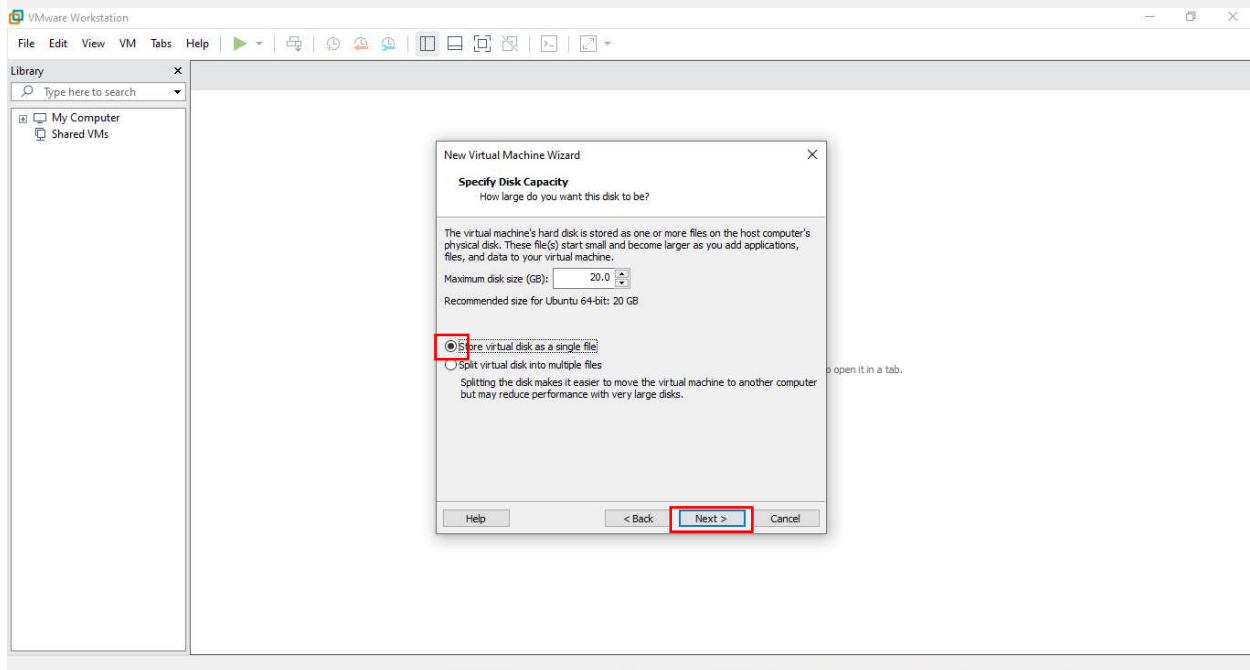
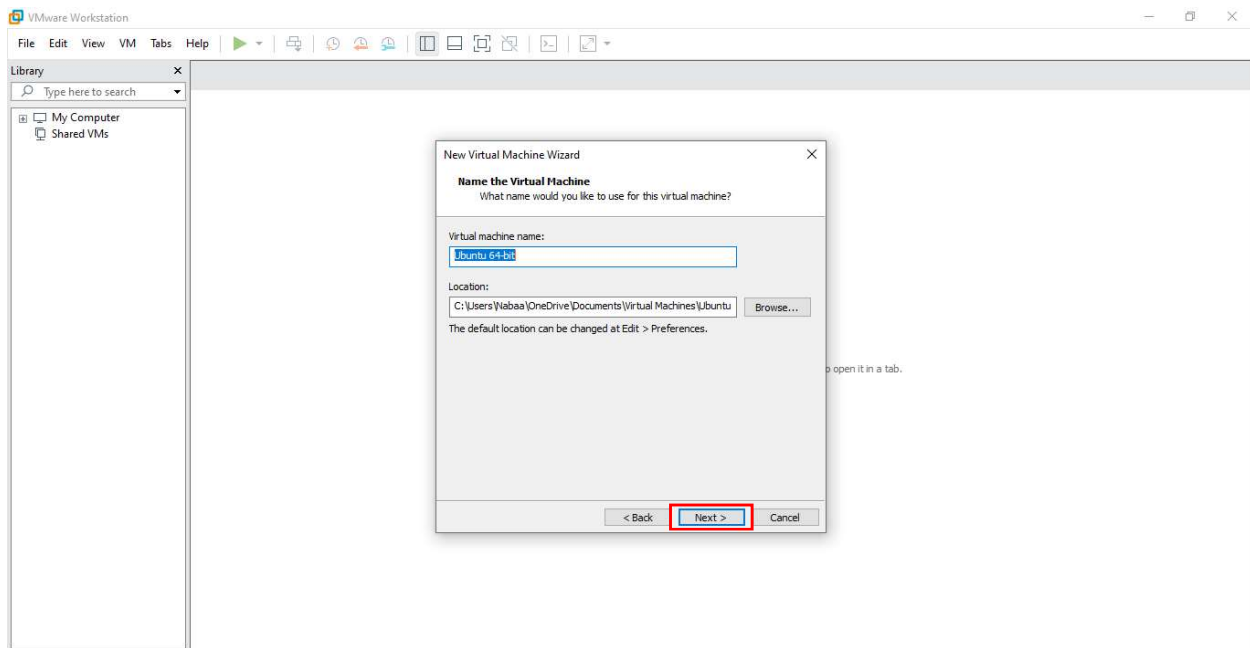


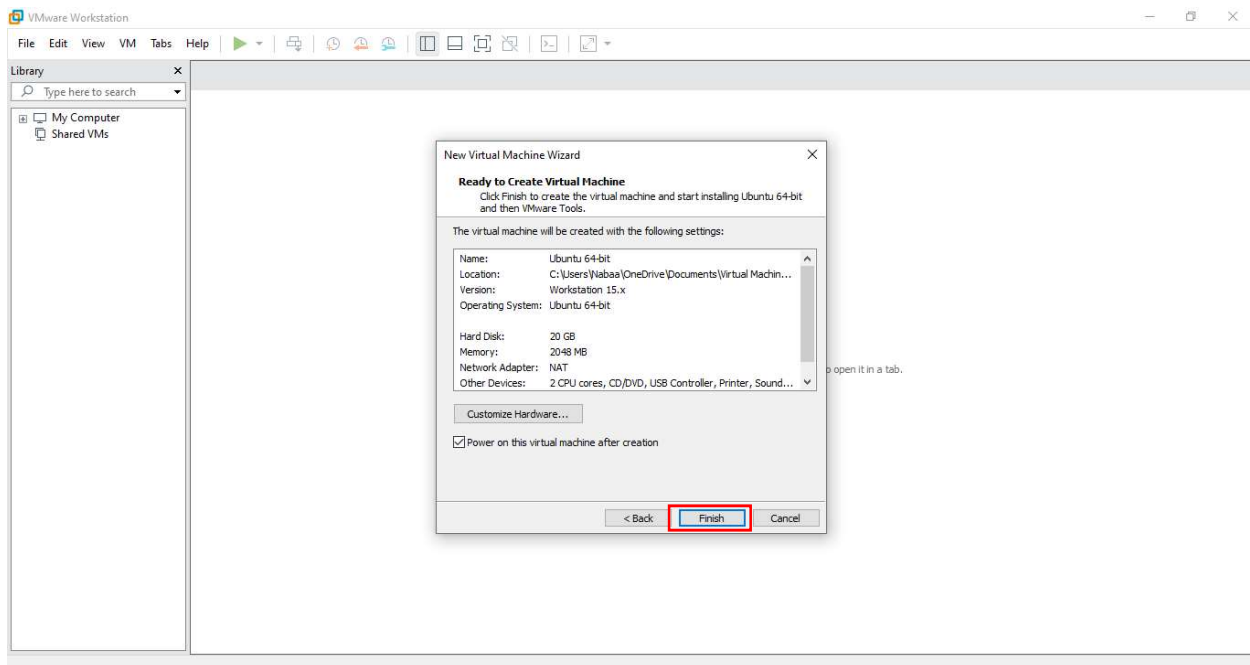


Fill in the blanks

املئ الفراغات



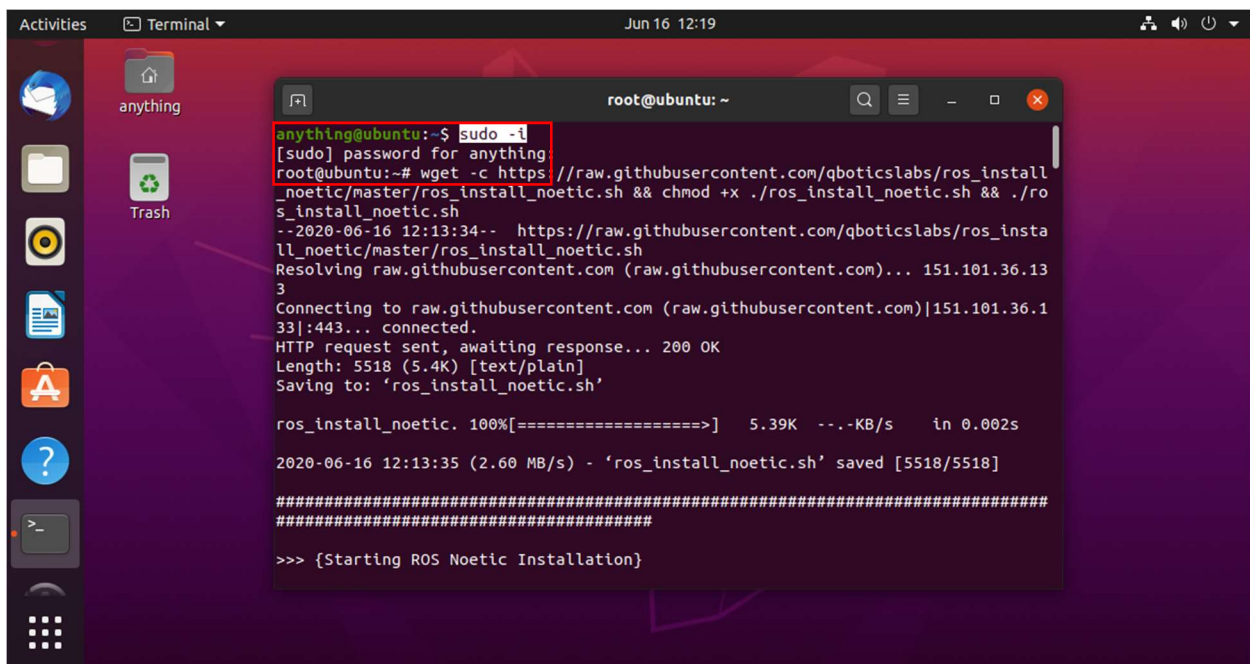




To install the ROS open the terminal and write this commend →to be the root

لتحميل روز قم بفتح لوحة الاوامر واكتب هذا الأمر لتصبح الروت

sudo -i

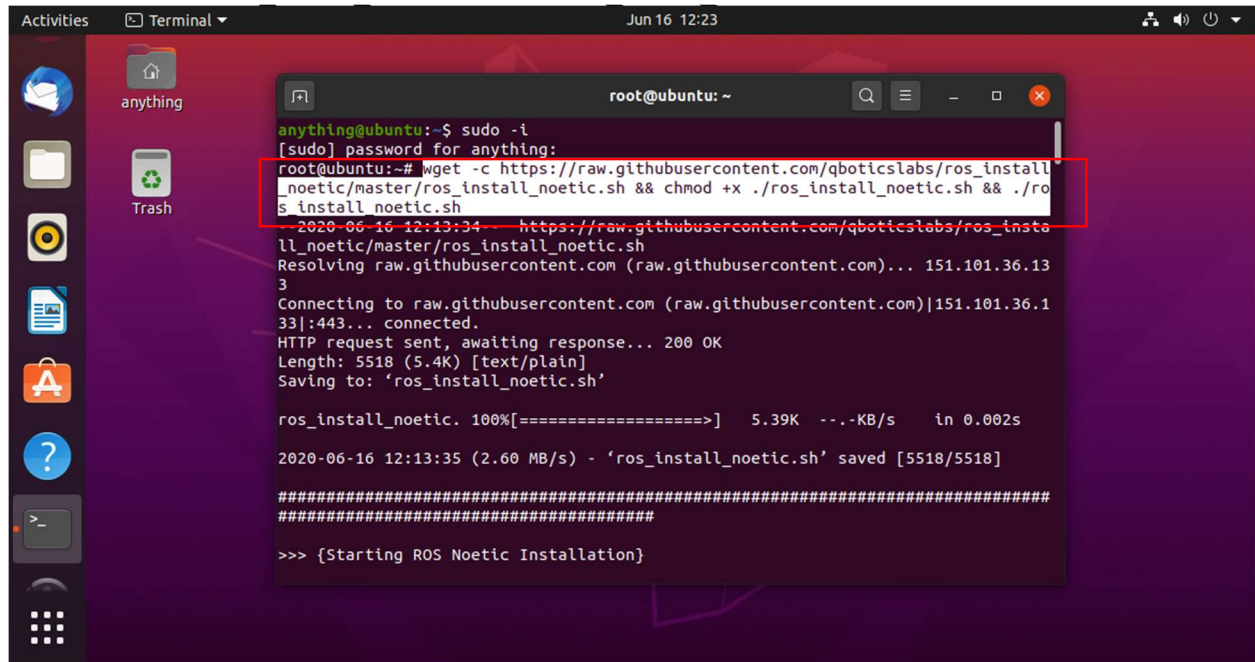


Then write this command

ثم قم بكتابة هذا الامر

wget -c

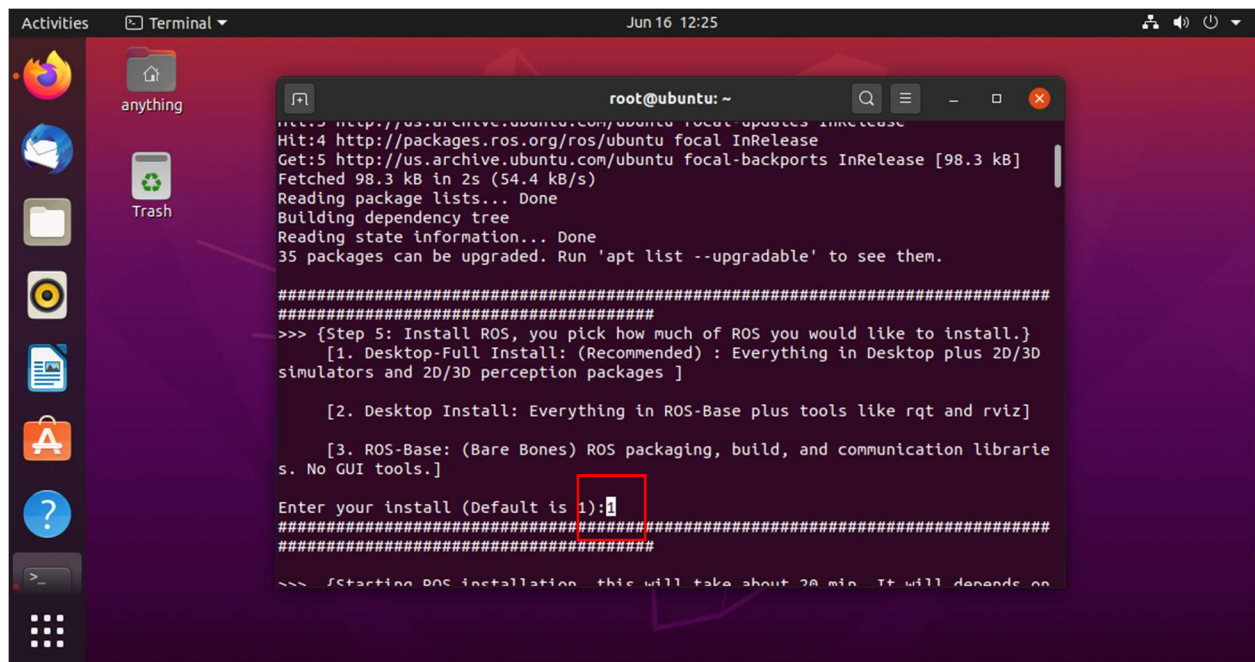
https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh
&& chmod +x ./ros_install_noetic.sh && ./ros_install_noetic.sh



```
root@ubuntu: ~  
anything@ubuntu:~$ sudo -i  
[sudo] password for anything:  
root@ubuntu:~# 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  
2020-06-16 12:13:34 - https://raw.githubusercontent.com/qboticslabs/ros_install_noetic/master/ros_install_noetic.sh  
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 151.101.36.133  
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|151.101.36.133|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 5518 (5.4K) [text/plain]  
Saving to: 'ros_install_noetic.sh'  
  
ros_install_noetic. 100%[=====] 5.39K --.-KB/s in 0.002s  
2020-06-16 12:13:35 (2.60 MB/s) - 'ros_install_noetic.sh' saved [5518/5518]  
  
#####  
>>> {Starting ROS Noetic Installation}
```

Chose the default → 1

الأختار الافتراضي - 1



```
root@ubuntu: ~  
Hit:4 http://packages.ros.org/ros/ubuntu focal InRelease  
Get:5 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease [98.3 kB]  
Fetched 98.3 kB in 2s (54.4 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
35 packages can be upgraded. Run 'apt list --upgradable' to see them.  
  
#####  
>>> {Step 5: Install ROS, you pick how much of ROS you would like to install.}  
[1. Desktop-Full Install: (Recommended) : Everything in Desktop plus 2D/3D  
simulators and 2D/3D perception packages ]  
  
[2. Desktop Install: Everything in ROS-Base plus tools like rqt and rviz]  
  
[3. ROS-Base: (Bare Bones) ROS packaging, build, and communication libraries. No GUI tools.]  
  
Enter your install (Default is 1): 1  
#####  
>>> {Starting ROS installation, this will take about 20 min. It will depend on
```

Wait until it's finished its processes → أنتظر حتى ينتهي من العمليات

Finally, write this command → و أخيرا اكتب هذا الأمر

```
echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc source ~/.bashrc
```

then write to check if your installation is correct → ثم اكتب هذا للتحقق من ان عملية التثبيت صحيحة

```
rosversion -d
```

The output
المخرج

```
root@ubuntu: ~  
anything@ubuntu:~$ sudo -i  
Command 'sudi' not found, did you mean:  
  command 'sudo' from deb sudo (1.8.31-1ubuntu1)  
  command 'sudo' from deb sudo-ldap (1.8.31-1ubuntu1)  
Try: sudo apt install <deb name>  
anything@ubuntu:~$ sudo -i  
[sudo] password for anything:  
root@ubuntu:~# echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc  
root@ubuntu:~# source ~/.bashrc  
root@ubuntu:~# rosversion -d  
noetic  
root@ubuntu:~#
```