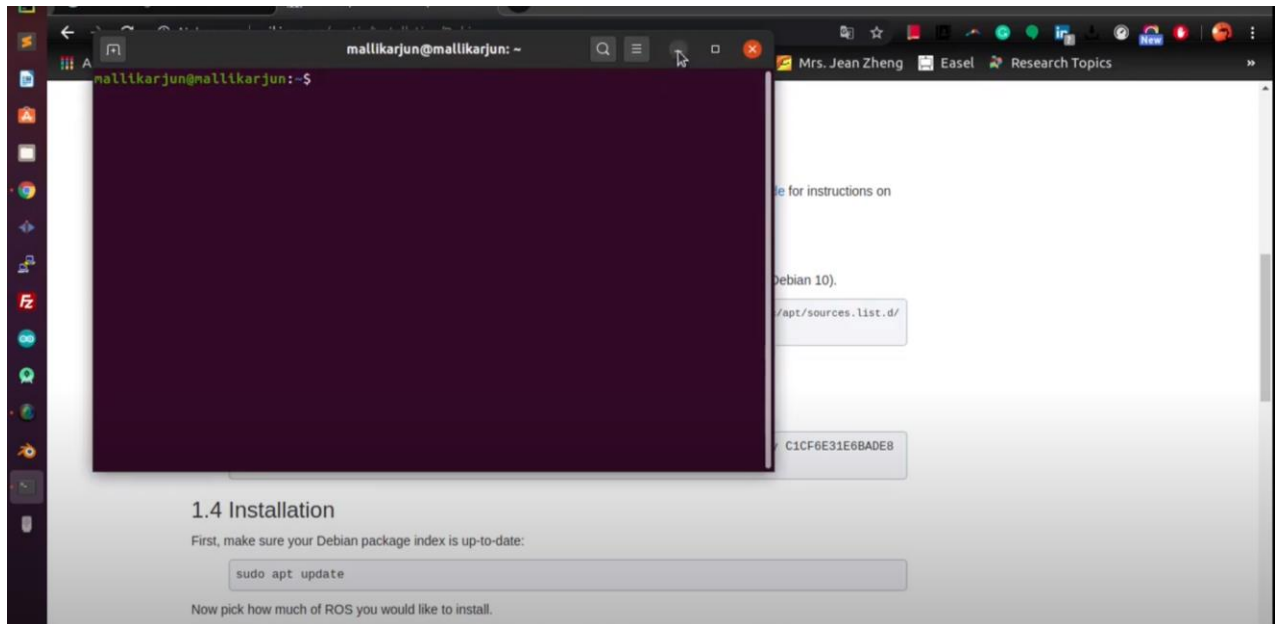


# Install ROS Noetic Ninjemys on Ubuntu OS 20.04 LTS

شرح الخطوات بالعربي \*

“ctrl+alt+t” اولاً افتح لوحة الأوامر في نظام اوبنتو بالضغط على



الان قم بزيارة الرابط في الأسفل واتبع الخطوات الموضحة في الصور ادناه  
<http://wiki.ros.org/noetic/Installation/Debian>

انسخ النصوص المحدد عليها في الصور الى لوحة الاوامر بالترتيب واضغط  
“enter”

-1

إذا كنت تعتمد على هذه الحزم، يرجى دعم OSRF. هذه الحزم مبنية وتحتفظ ببنية تحتية محفوظة وتدعمها مؤسسة Open Source Robotics Foundation، وهي منظمة غير ربحية. إذا تم تنزيل الحزمة من قبل OSRF، فسيحصل كل مستخدم على مبلغ واحد من سنت واحد. نحن نغطي تكاليفنا السنوية لإدارة، تحديث، وإضافة كل شيء من خدماتنا عبر الإنترنت. يرجى التفكير في التبرع لـ OSRF اليوم.

محتويات

- 1. Ubuntu install of ROS Noetic
  - 1. Installation
    - 1. Configure your Debian repositories
    - 2. Setup your sources list
    - 3. Set up your keys
    - 4. Installation
    - 5. Environment setup
  - 2. Tutorials

## 1. Installation

### 1.1 Configure your Debian repositories

Configure your Debian repositories to allow "contrib" and "non-free". You can [follow the Debian guide](#) for instructions on doing this.

### 1.2 Setup your sources.list

Setup your computer to accept software from packages.ros.org. ROS Noetic **ONLY** supports Buster (Debian 10).

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
```

**Warning:** Source Debs are also available

### 1.3 Set up your keys

```
sudo apt-key adv --keyserver hkp://ha.pool.sks-keyservers.net:80 --recv-key C1CF6E31E6BADE8869B172B4F42ED6FBAB17C654
```

### 1.4 Installation

First, make sure your Debian package index is up-to-date:

```
sudo apt update
```

Now pick how much of ROS you would like to install.

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**Desktop-Full Install: (Recommended):** Everything in **Desktop** plus 2D/3D simulators and 2D/3D perception packages

```
sudo apt install ros-noetic-desktop-full
```

or [click here](#)

**Desktop Install:** Everything in **ROS-Base** plus tools like `rqt` and `rviz`

```
sudo apt install ros-noetic-desktop
```

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## -4.1

wiki.ros.org/noetic/installation/Debian | عربي

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sudo apt install ros-noetic-desktop
```

[or click here](#)

**ROS-Base: (Bare Bones)** ROS packaging, build, and communication libraries. No GUI tools.

```
sudo apt install ros-noetic-ros-base
```

[or click here](#)

There are even more packages available in ROS. You can always install a specific package directly.

```
sudo apt install ros-noetic-PACKAGE
```

e.g.

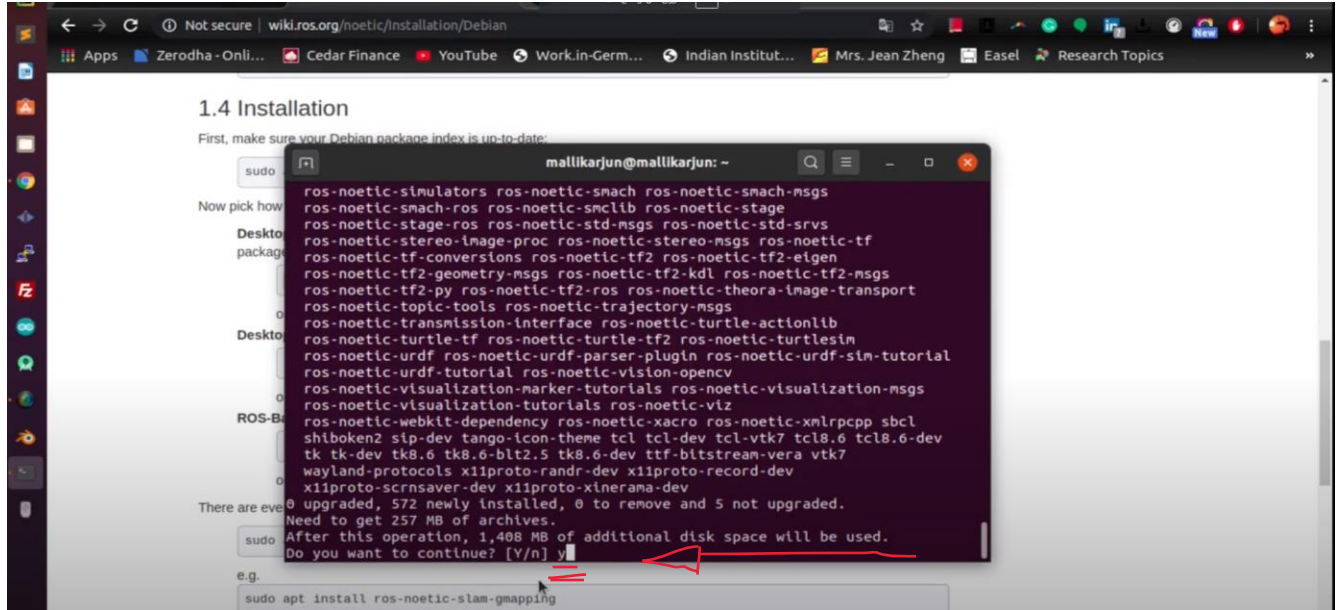
```
sudo apt install ros-noetic-rtab-mapping
```

## 4.2

بيطلب منك الاستمرار اكتب الحرف

"y"

ثم "enter"



5-

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```
sudo apt install ros-noetic-PACKAGE
```

e.g.

```
sudo apt install ros-noetic-slam-mapping
```

To find available packages, see [ROS Index](#) or use:

```
apt search ros-noetic
```


### 1.5 Environment setup

You must source this script in every **bash** terminal you use ROS in.

```
source /opt/ros/noetic/setup.bash
```

It can be convenient to automatically source this script every time a new shell is launched. These commands will do that for you

**Bash**

 If you have more than one ROS distribution installed, `~/bashrc` must only source the `setup.bash` for the version you are currently using

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

**zsh**

```
echo "source /opt/ros/noetic/setup.zsh" >> ~/.zshrc
source ~/.zshrc
```

6.1-

```
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or click [here](#)

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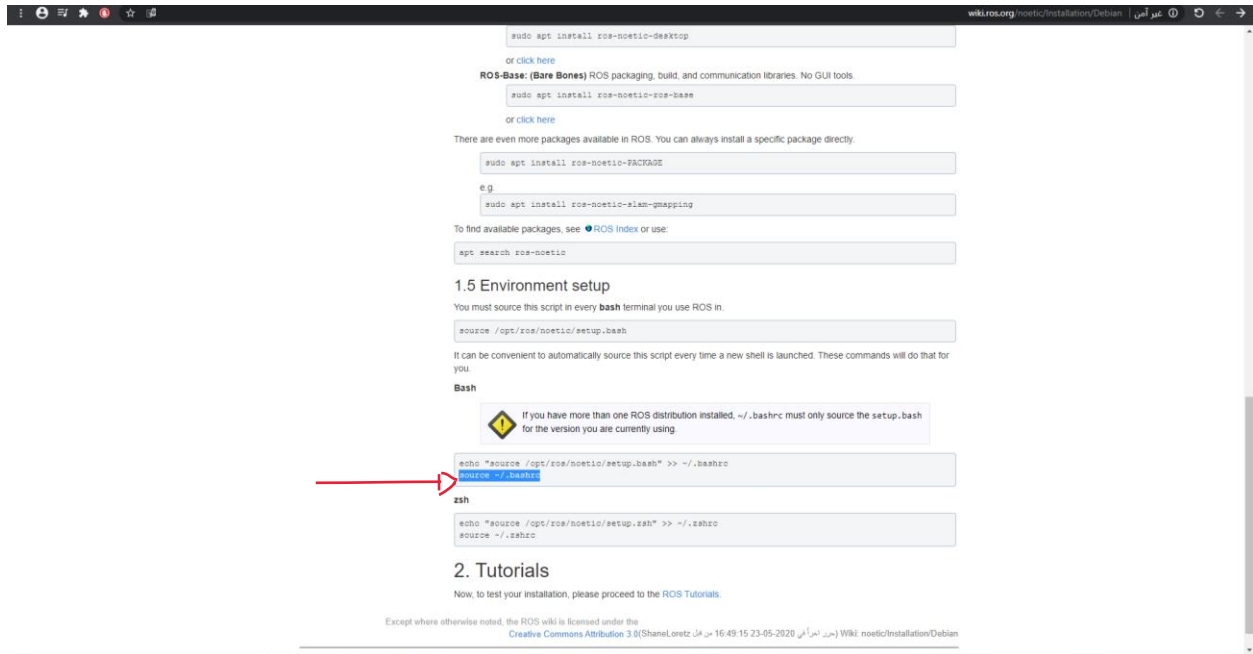
```
echo "source /opt/ros/noetic/setup.zsh" >> ~/.zshrc
source ~/.zshrc
```

## 2. Tutorials

Now, to test your installation, please proceed to the [ROS Tutorials](#).

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## 6.2-



`sudo apt install ros-noetic-desktop`

or [click here](#)

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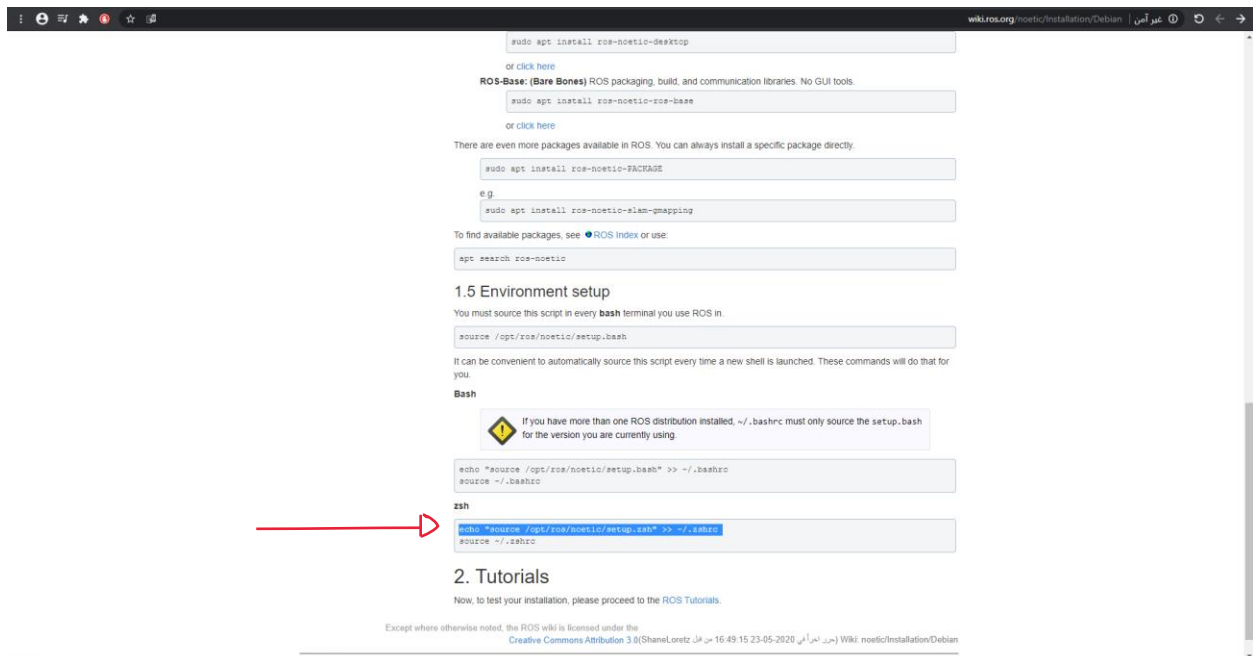
`echo "source /opt/ros/noetic/setup.zsh" >> ~/.zshrc`  
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## 7.1-



`sudo apt install ros-noetic-desktop`

or [click here](#)

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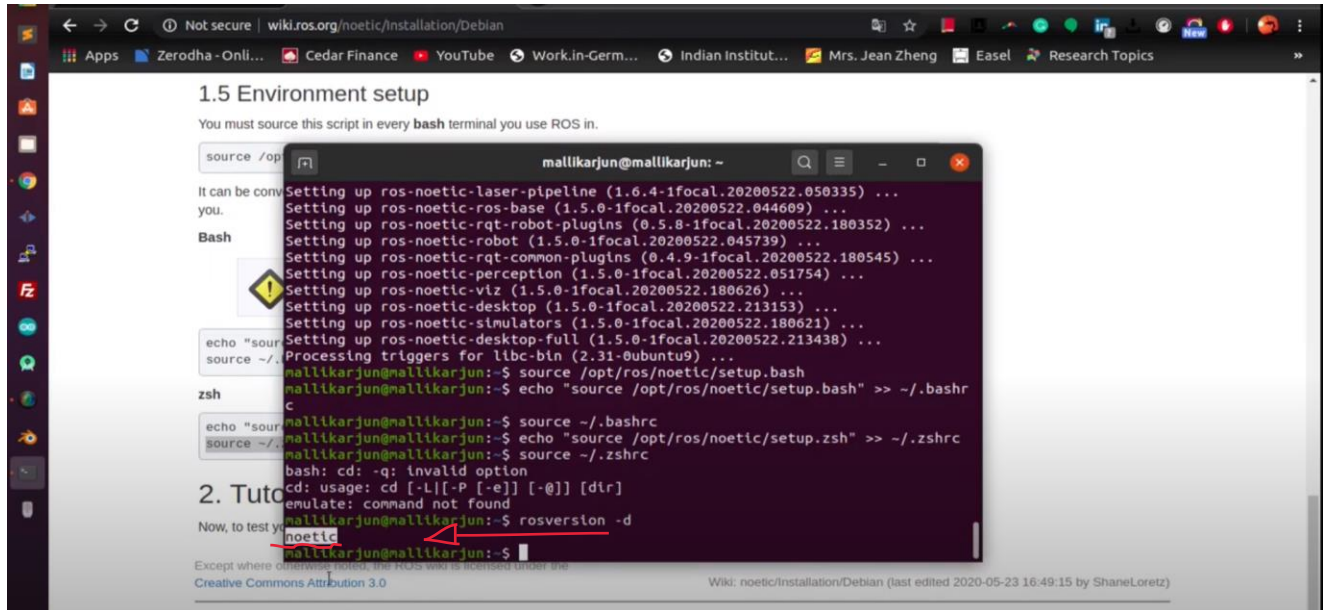
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الان تم التنصيب وللتأكد اكتب الامر التالي

rosversion -d

\*الكلمة المحددة في الصورة ادناه هي اسم نسخة اصدار البرنامج\*



```
Setting up ros-noetic-laser-pipeline (1.6.4-1focal.20200522.050335) ...
Setting up ros-noetic-ros-base (1.5.0-1focal.20200522.044609) ...
Setting up ros-noetic-rqt-robot-plugins (0.5.8-1focal.20200522.180352) ...
Setting up ros-noetic-robot (1.5.0-1focal.20200522.045739) ...
Setting up ros-noetic-rqt-common-plugins (0.4.9-1focal.20200522.180545) ...
Setting up ros-noetic-perception (1.5.0-1focal.20200522.051754) ...
Setting up ros-noetic-vtz (1.5.0-1focal.20200522.180626) ...
Setting up ros-noetic-desktop (1.5.0-1focal.20200522.213153) ...
Setting up ros-noetic-simulators (1.5.0-1focal.20200522.180621) ...
Setting up ros-noetic-desktop-full (1.5.0-1focal.20200522.213438) ...
Processing triggers for libc-bin (2.31-0ubuntu9) ...
mallikarjun@mallikarjun:~$ source /opt/ros/noetic/setup.bash
mallikarjun@mallikarjun:~$ echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc
mallikarjun@mallikarjun:~$ source ~/.bashrc
mallikarjun@mallikarjun:~$ echo "source /opt/ros/noetic/setup.zsh" >> ~/.zshrc
mallikarjun@mallikarjun:~$ source ~/.zshrc
bash: cd: -q: invalid option
cd: usage: cd [-L|[-P [-e]] [-@]] [dir]
emulate: command not found
mallikarjun@mallikarjun:~$ rosversion -d
noetic
mallikarjun@mallikarjun:~$
```

\*انتهى\*