

Install ROS Noetic Ninjemys on Ubuntu OS 20.04 LTS

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ROS

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noetic \ Installation

ROS Noetic installation instructions

These instructions will install **ROS Noetic Ninjemys**, which is available for Ubuntu Focal (20.04), Debian Buster (10), and [other platform options](#).

To install our previous long-term support release, **ROS Melodic Morenia**, please see the [ROS Melodic installation instructions](#).

Select Your Platform

Supported:

- Ubuntu Focal amd64 armhf arm64
- Debian Buster amd64 arm64**

Source installation

Experimental:

- Windows 10 amd64
- Arch Linux Any amd64 i686 arm armv6h armv7h aarch64

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Now open the terminal “ctrl+alt+t”

Terminal window showing the command prompt:

```
mallikarjun@mallikarjun: ~$
```

Background window showing the ROS Noetic installation instructions page, specifically the "1.4 Installation" section:

1.4 Installation

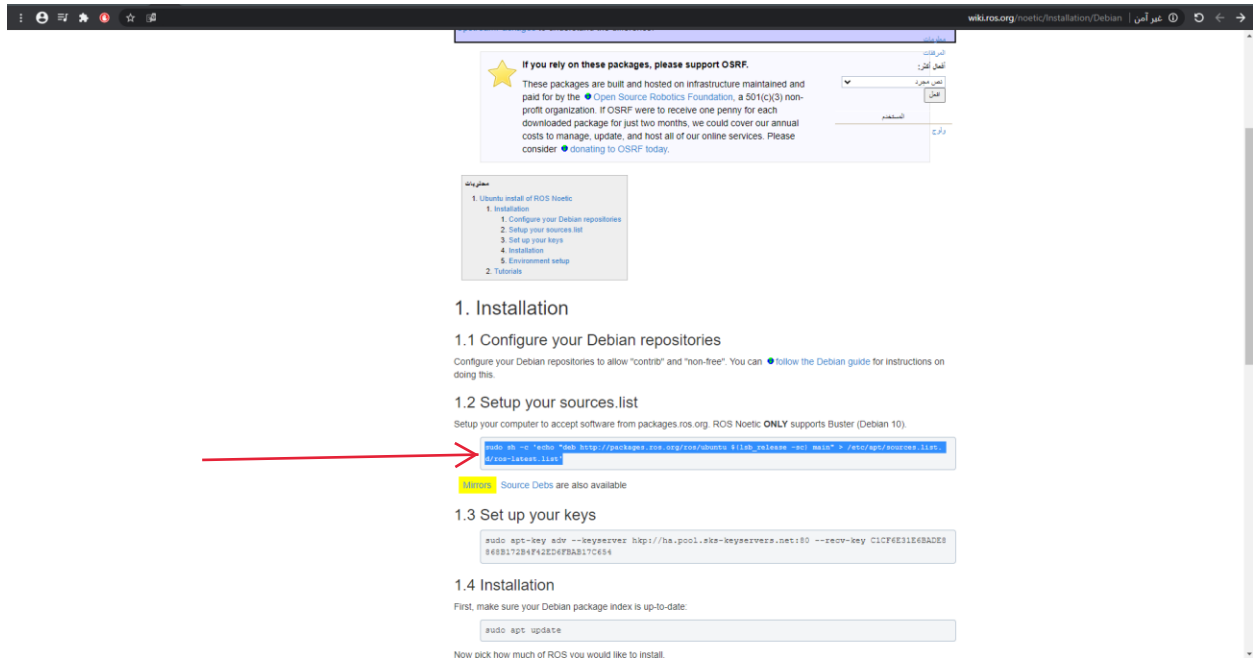
First, make sure your Debian package index is up-to-date:

```
sudo apt update
```

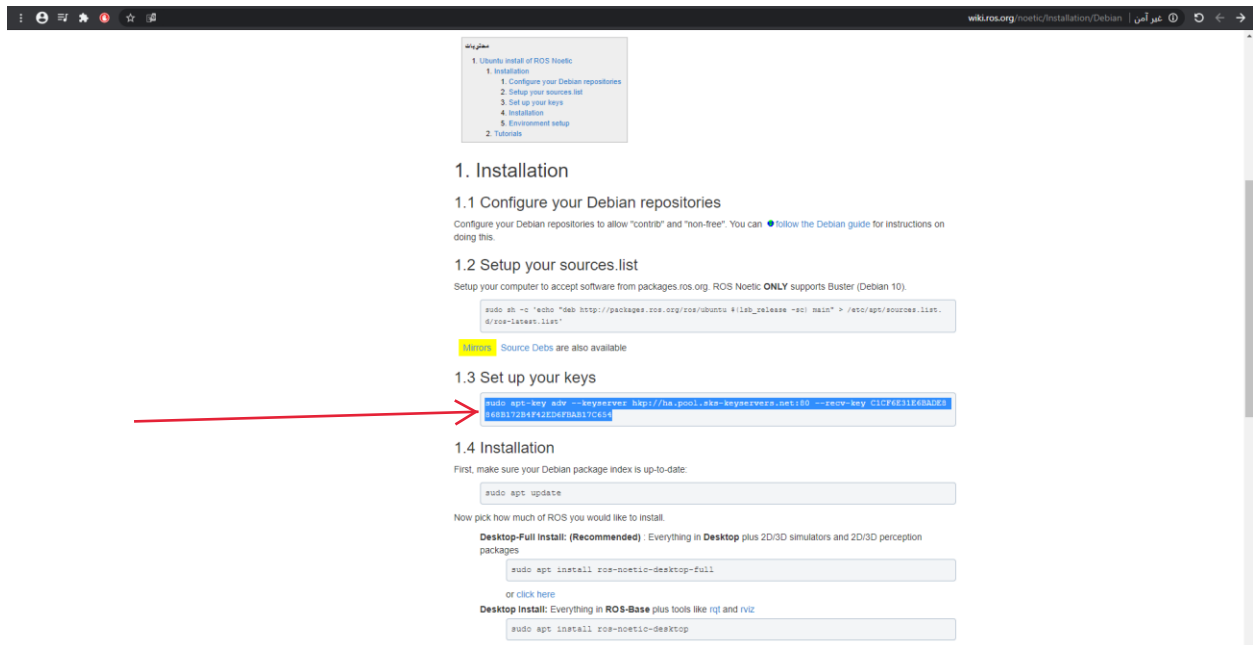
Now pick how much of ROS you would like to install.

Then copy the selected texts on the terminal in order “as the pictures below”

-1



-2



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 C1CF6E31E6BADE8869B172B4F42ED0FBAB17C654
```

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.

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
```

or [click here](#)

محتويات

1. Ubuntu install of ROS Noetic
 1. Installation
 1. Configure your Debian repositories
 2. Setup your sources.list
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 4. Installation
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1.4 Installation

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```
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```

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

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
```

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.

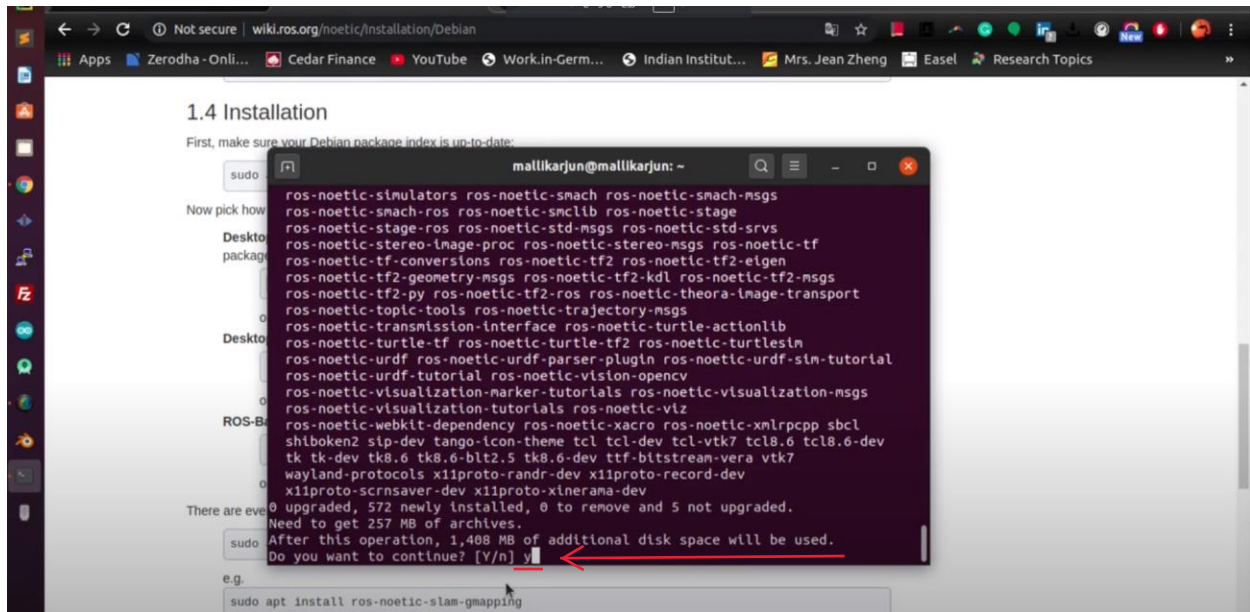
```
sudo apt install ros-noetic-PACKAGE
```

e.g.

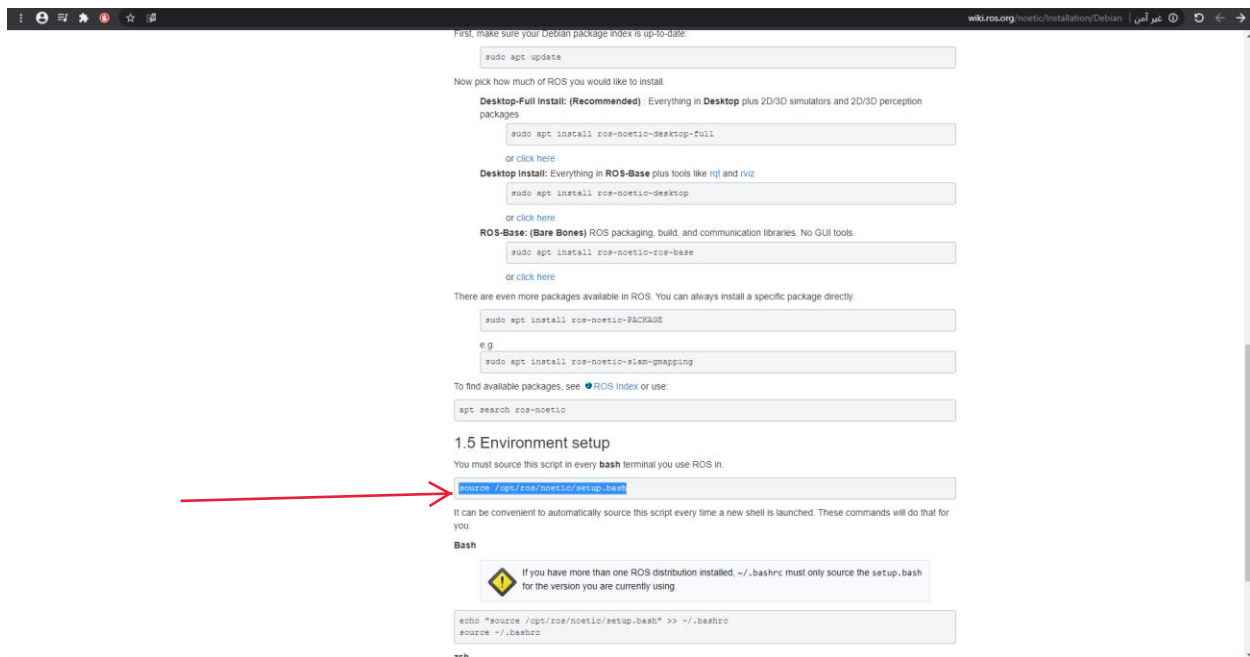
```
sudo apt install ros-noetic-slam-gmapping
```

4.2

Press 'y' to Continue



5-



6.1-

The screenshot shows the ROS Noetic installation page. A red arrow points to the command `echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc` in the Bash section. The page includes instructions for installing ROS packages, environment setup, and a warning about sourcing the setup.bash file.

```
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-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
```

2. Tutorials

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

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6.2-

The screenshot shows the ROS Noetic installation page. A red arrow points to the command `echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc` in the Bash section. The page includes instructions for installing ROS packages, environment setup, and a warning about sourcing the setup.bash file.

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sudo apt install ros-noetic-desktop
or click here
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e.g.
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echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc
source ~/.bashrc
```

zsh

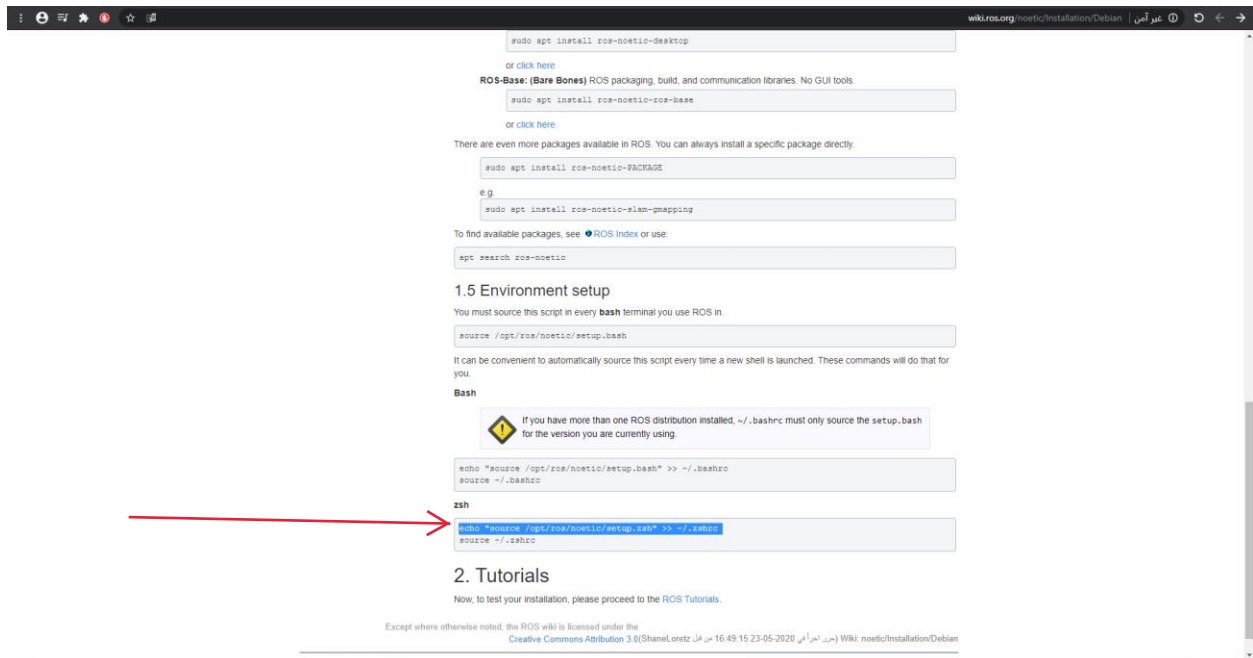
```
echo "source /opt/ros/noetic/setup.zsh" >> ~/.zshrc
source ~/.zshrc
```

2. Tutorials

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

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7.1-



The screenshot shows the ROS Noetic installation page. A red arrow points to the terminal command for zsh: `echo "source /opt/ros/noetic/setup.sh" >> ~/.zshrc`. The page content includes instructions for installing ROS-Base, ROS-Desktop, and specific packages like ROS-SLAM, along with environment setup instructions for bash and zsh.

```
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-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

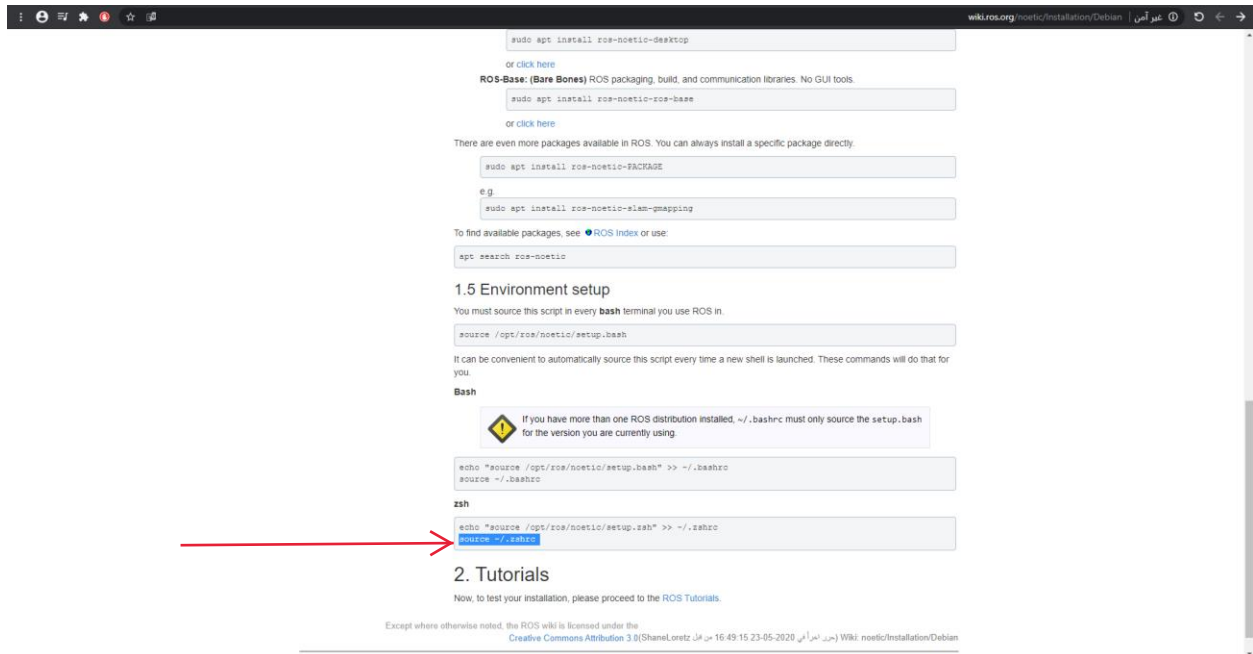
```
echo "source /opt/ros/noetic/setup.sh" >> ~/.zshrc
source ~/.zshrc
```

2. Tutorials

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

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7.2-



This screenshot is identical to the one for 7.1, showing the ROS Noetic installation page. A red arrow points to the terminal command for zsh: `echo "source /opt/ros/noetic/setup.sh" >> ~/.zshrc`. The page content includes instructions for installing ROS-Base, ROS-Desktop, and specific packages like ROS-SLAM, along with environment setup instructions for bash and zsh.

```
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-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.sh" >> ~/.zshrc
source ~/.zshrc
```

2. Tutorials

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

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****now the install is done****

```
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-viz (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:~$ rosverstion -d
noetic
mallikarjun@mallikarjun:~$
```

done