

## تنشيت نظام روز على نظام تشغيل اوبنتو

### installing ROS Noetic on last Ubuntu 20.04 OS

1- Open the terminal .

2- Setup your sources list:

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

3-set up your keys :

```
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-k
ey C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```

4-sudo apt update :

```
sudo apt-get update
```

5-Desktop-Full Install: (Recommended) : ROS, rqt, rviz,  
robot-generic libraries, 2D/3D simulators, navigation and  
2D/3D perception :

```
sudo apt-get install ros-kinetic-desktop-full
```

6-Initialize rasped :

```
sudo rosdep init
rosdep update
```

## 7- Environment setup:

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

## 8- Dependencies for building packages :

```
sudo apt install python-rosdep python-rosinstall python-rosinstall-generator python-wstool build-essential
```

## 9- check the Ross is working :

```
roscore
```

## Reference:

- 1-<http://wiki.ros.org/kinetic/Installation/Ubuntu>
- 2-<https://www.youtube.com/watch?v=vfqN-RRt84Q&t=156s>