

Install-arduino-robot-arm:

<https://github.com/kira-Developer/install-arduino-robot-arm>

for kinetic distro:

```
$ sudo apt-get install ros-kinetic-moveit
```

```
$ sudo apt-get install ros-kinetic-joint-state-publisher ros-kinetic-joint-state-publisher-gui
```

```
$ sudo apt-get install ros-kinetic-gazebo-ros-control joint-state-publisher
```

```
$ sudo apt-get install ros-kinetic-ros-controllers ros-kinetic-ros-control
```

for melodic distro:

```
$ sudo apt-get install ros-melodic-moveit
```

```
$ sudo apt-get install ros-melodic-joint-state-publisher ros-melodic-joint-state-publisher-gui
```

```
$ sudo apt-get install ros-melodic-gazebo-ros-control joint-state-publisher
```

```
$ sudo apt-get install ros-melodic-ros-controllers ros-melodic-ros-control
```

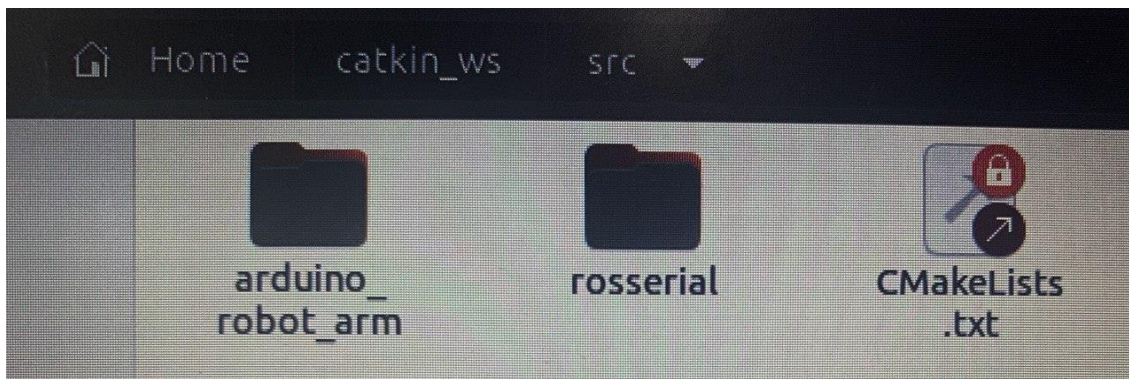
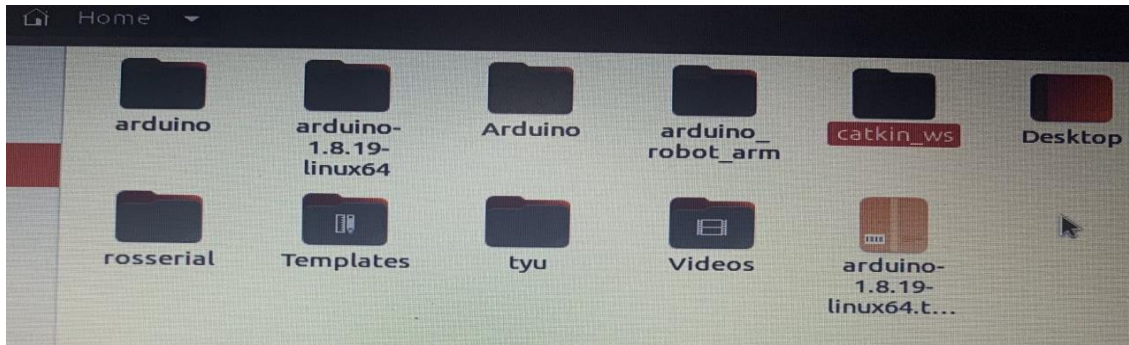
for noetic distro:

```
$ sudo apt-get install ros-noetic-moveit
```

```
$ sudo apt-get install ros-noetic-joint-state-publisher ros-noetic-joint-state-publisher-gui
```

```
$ sudo apt-get install ros-noetic-gazebo-ros-control joint-state-publisher
```

```
$ sudo apt-get install ros-noetic-ros-controllers ros-noetic-ros-control
```



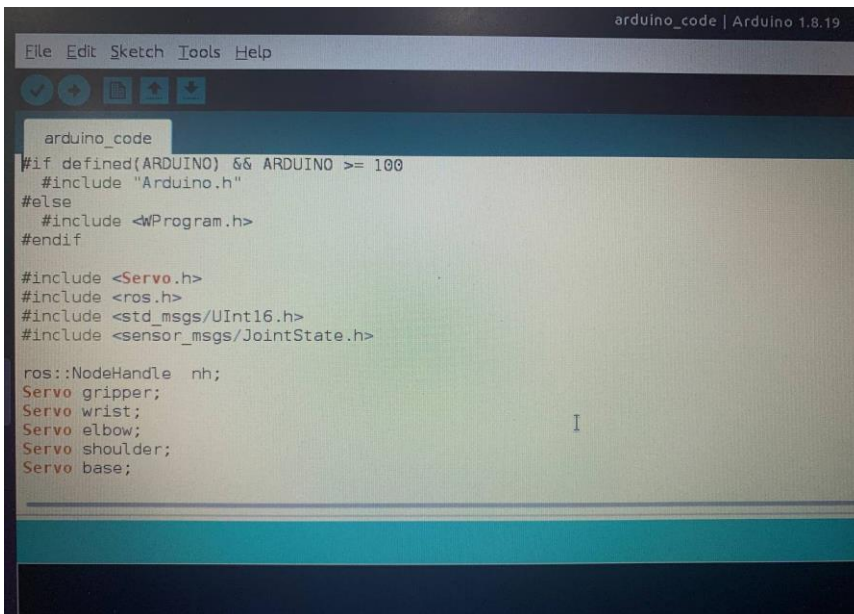
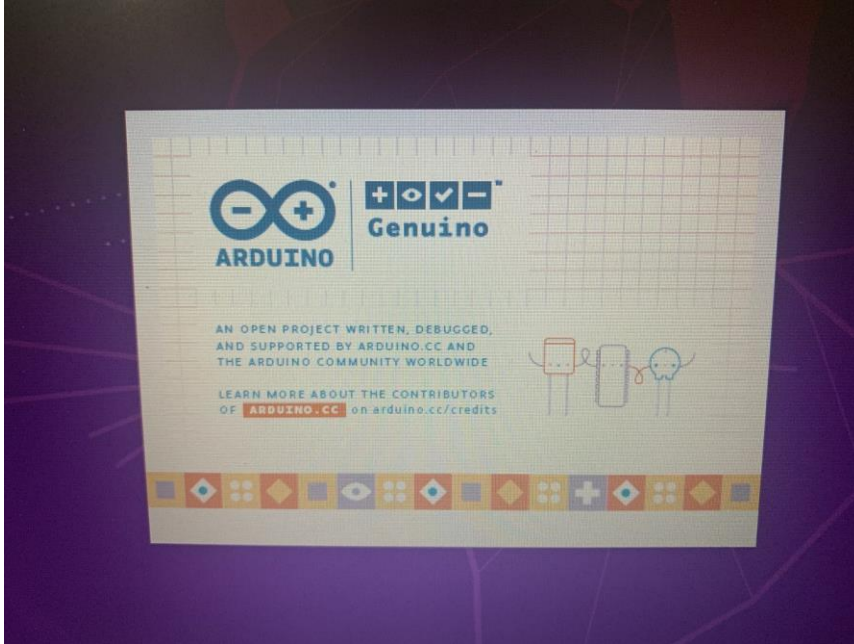
Install-arduino-robot-arm:

<https://www.arduino.cc/en/software>

\$ sudo ./install.sh

هذا الفيديو لتتبع خطوات تثبيت البرنامج :

<https://arduino-er.blogspot.com/2020/06/install-arduino-ide-1813-on-ubuntu-2004.html>



Install-arduino-robot-arm:

http://wiki.ros.org/rosterial_arduino/Tutorials/Arduino%20IDE%20Setup

```
#include <ros.h>
```

```
#include <std_msgs/String.h>
```

```
$sudo apt-get install ros-noetic-rosterial-arduino
```

```
$sudo apt-get install ros-noetic-rosterial
```

```
$cd <ws>/src
```

```
$ git clone https://github.com/ros-drivers/rosterial.git
```

```
$ cd <ws>
```

```
$ catkin_make
```

```
$ catkin_make install
```

```
$ rm -rf ros_lib
```

```
$ rosrn rosterial_arduino make_libraries.py .
```

```
$cd <some_empty_directory>
```

```
$ rosrn rosterial_arduino make_libraries.py
```

