## مهمة الذكاء الاصطناعي

## الأوامر:

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb release -sc) main" >
/etc/apt/sources.list.d/ros-latest.list'
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key
C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
sudo apt-get update
sudo apt-get install ros-kinetic-desktop-full
apt-cache search ros-kinetic
echo "source /opt/ros/kinetic/setup.bash" >> ~/.bashrc
source ~/.bashrc
sudo apt install python-rosdep python-rosinstall python-rosinstall-generator python-
wstool build-essential
sudo apt install python-rosdep
sudo rosdep init
rosdep update
sudo apt-get install ros-noetic-catkin
mkdir -p ~/catkin_ws/src
cd ~/catkin_ws/
catkin_make
cd ~/catkin_ws/src
git clone https://github.com/smart-methods/arduino robot arm.git
cd ~/catkin ws
rosdep install --from-paths src --ignore-src -r -y
sudo apt-get install ros-kinetic-moveit
sudo apt-get install ros-kinetic-joint-state-publisher ros-kinetic-joint-state-
publisher-gui
sudo apt-qet install ros-kinetic-qazebo-ros-control joint-state-publisher
sudo apt-get install ros-kinetic-ros-controllers ros-kinetic-ros-control
sudo nano ~/.bashrc
at the end of the (bashrc) file add the follwing line
(source /home/wesam/catkin_ws/devel/setup.bash)
ctrl + o
source ~/.bashrc
roslaunch robot arm pkg check motors.launch
```



