1-Download and install the virtual box

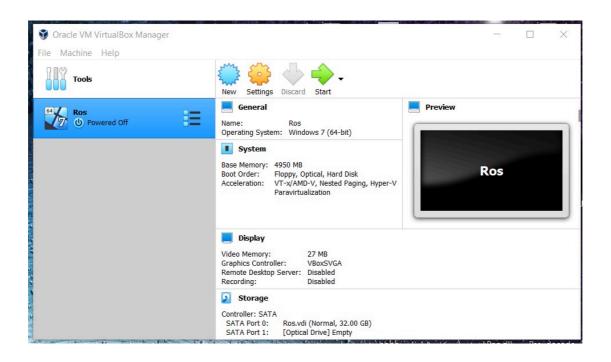




2-Download Ubuntu



3-Open the virtual box and click on new to create a new virtual machine





4-Open the terminal and enter the commands to install the system from this site

https://s-m.com.sa/ros.txt

```
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-get install ros-kinetic-gazebo-ros-control joint-statepublisher

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) then ctrl + o

source ~/.bashrc

roslaunch robot_arm_pkg check_motors.launch

reference: https://youtu.be/fr6TXEd2rXI