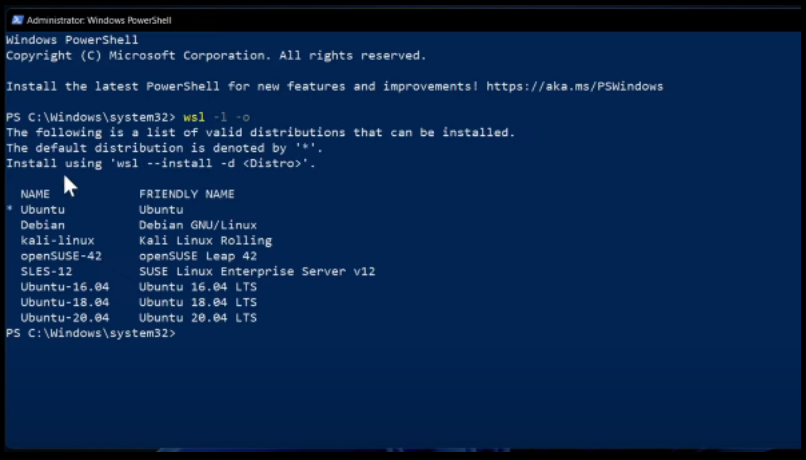
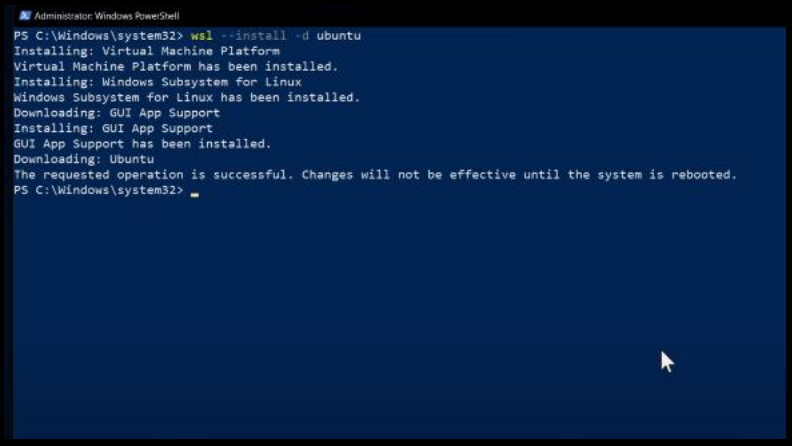
How can I install ROS 1 on Ubuntu (just to be clear my laptop is windows 11):

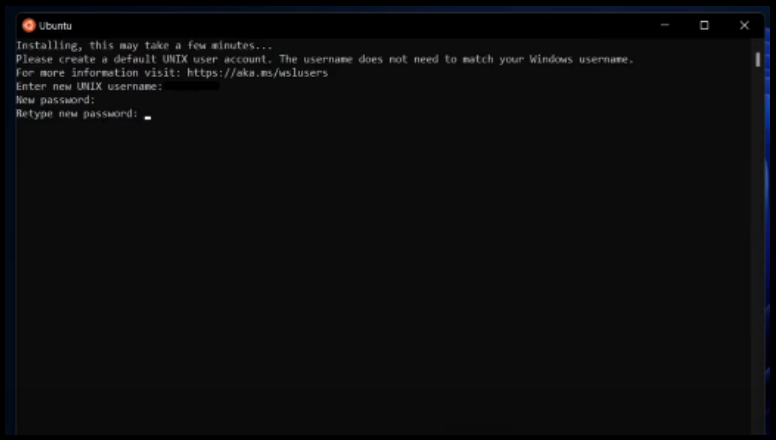
- First you have to make sure that your device is up to date and has **OS build 22000** or more, now to check that: go to **search** icon and type **about your PC** then scroll down until you find OS build.
- Second and here is the **beginning of the installation** you're going to search Icon again and search for PowerShell **but** run it as administrator.
- To see the distributions of WSL write this command and one of them is ubuntu:



- Now to install ubuntu write this command:
  wsl --install -d ubuntu



- Restart the laptop:
  Once you restart your laptop, ubuntu will continue the installation and after that, it will ask you to put your username and password thus, you must write down them in a notebook, so you don't forget them.



- The command for Installing ROS 1 noetic on ubuntu:

- 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'
```

- Set up your keys:

```
sudo apt install curl # if you haven't already installed curl
curl -s https://raw.githubusercontent.com/ros/rosdistro/master/ros.asc | sudo apt-key add -
sudo apt update
```

```
sudo apt install ros-noetic-desktop-full
```

- Environment setup:

```
source /opt/ros/noetic/setup.bash
```

- gedit `~/.bashrc`

∇ Now you are ready to use it just write ----------→ roscore