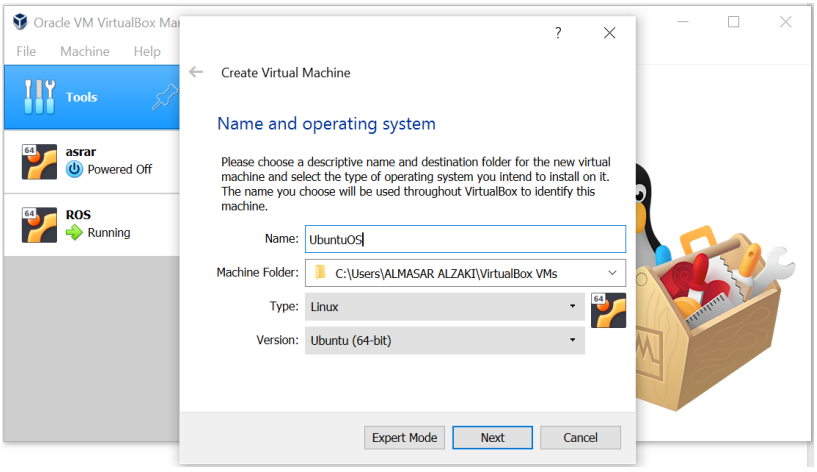
How to download ROS on Ubuntu

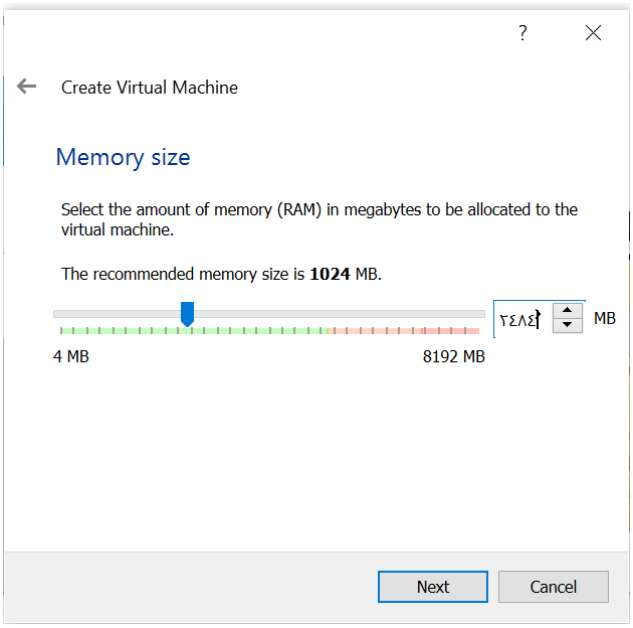
Download Virtualbox to your device to install Ubuntu from this link

https://www.virtualbox.org/wiki/Downloads

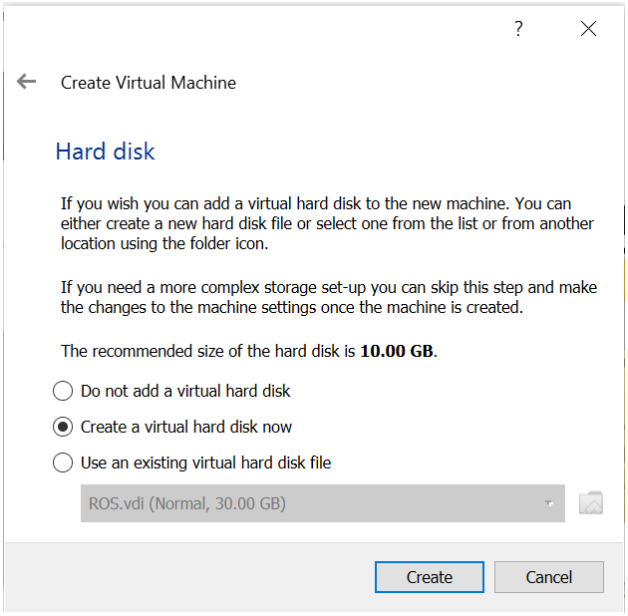
Download Ubuntu from https://ubuntu.com/download/desktop and then from virtualbox choose new and choose the type of operating system linux as shown in the picture



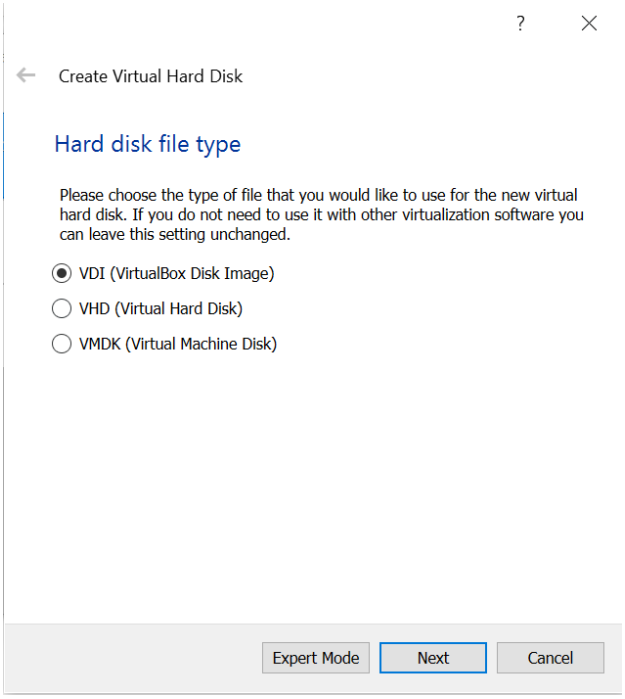
Choose the memory size, then click Next



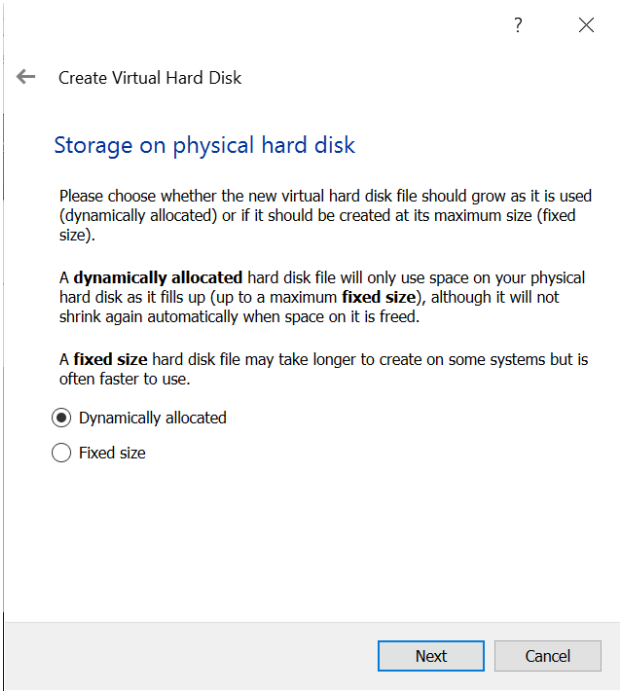
Choose the create a virtual hard disk now, then click Create



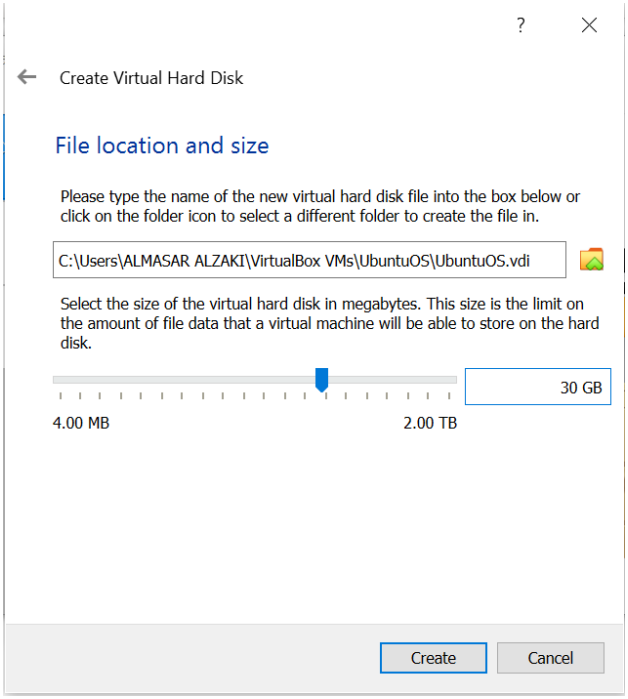
Choose the VID, then click Next



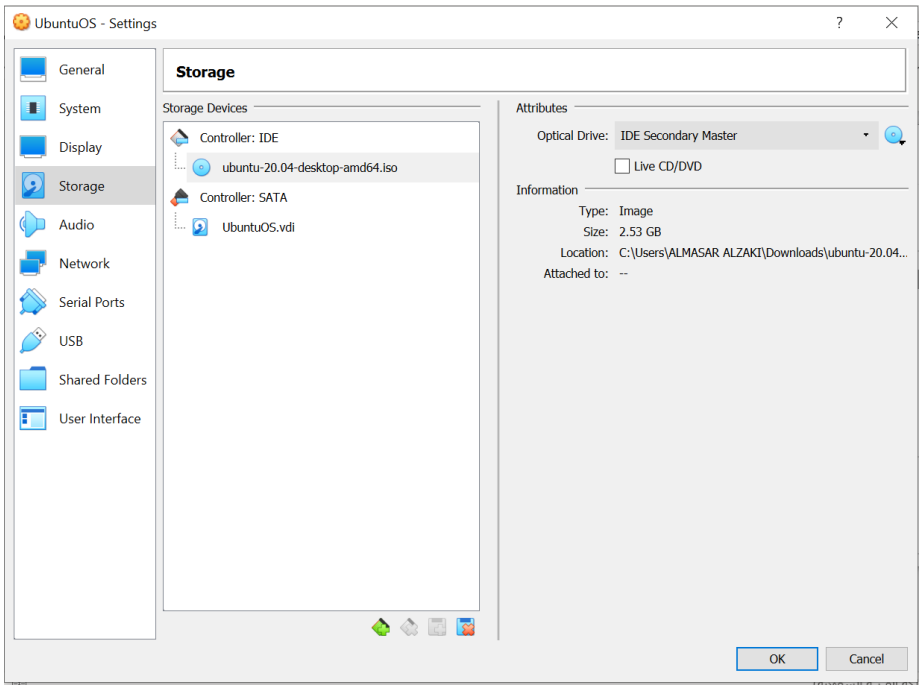
Choose the Dynamically allocted, then click Next



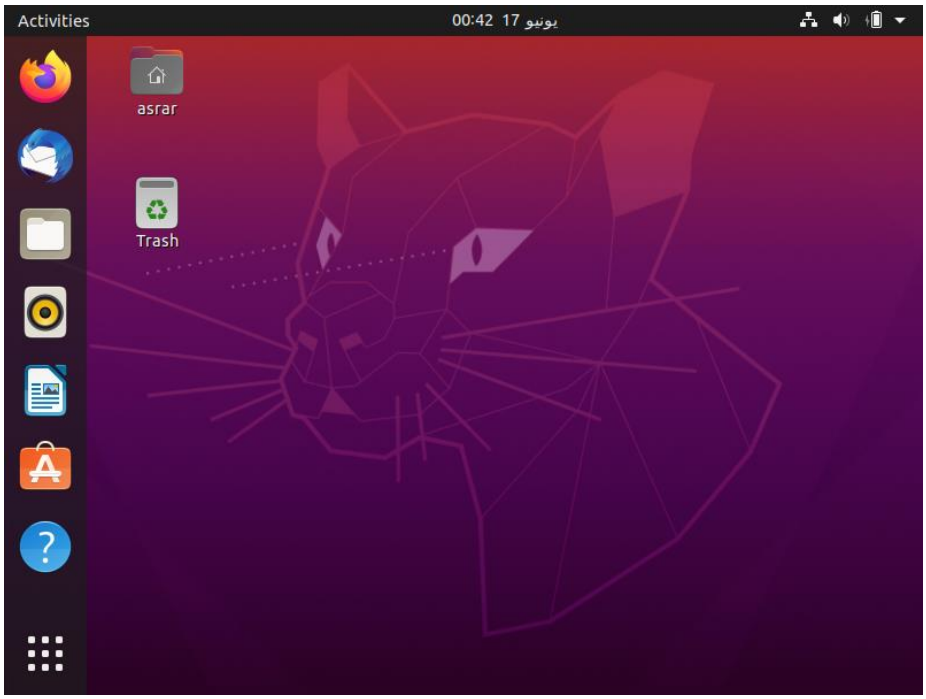
Choose 30 GB, then click Create



Then choose setting and then choose storage and then locate the ubuntu you have loaded on your device



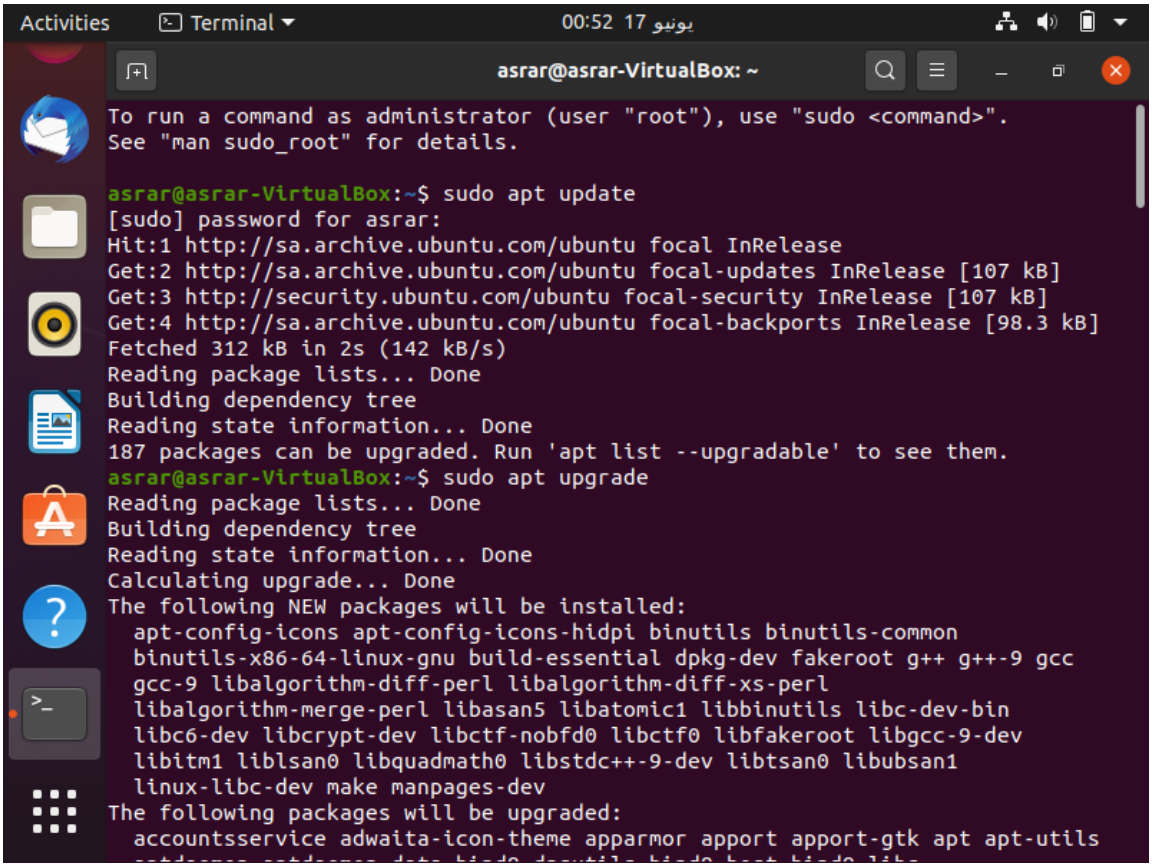
Then open the system that you made and download the Ubuntu and select the language and then choose in the type of download Erase disk and install ubuntu and finally put your name and a special password in you for the operating system and then wait for it to bear and open with you as in the picture



open the terminal and put the command line

Sudo apt update

Sudo apt upgrade

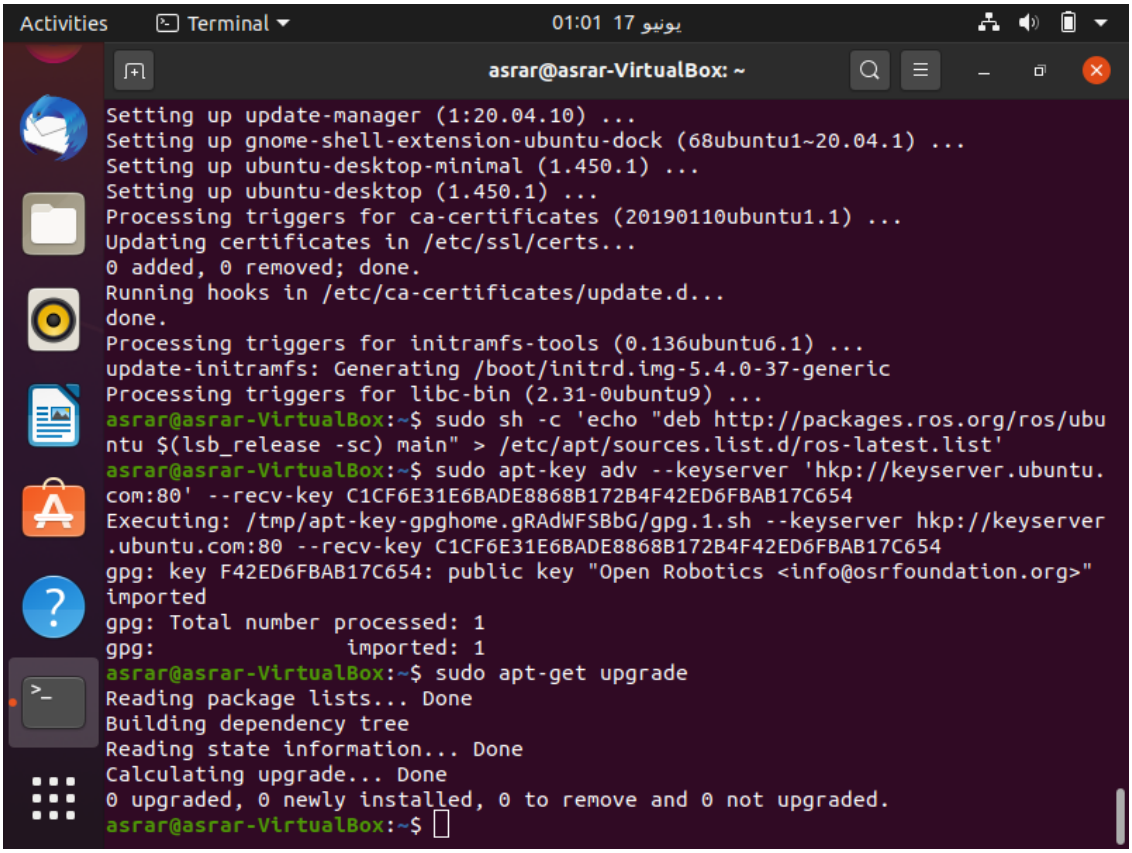


Putting the same command line as in the picture

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

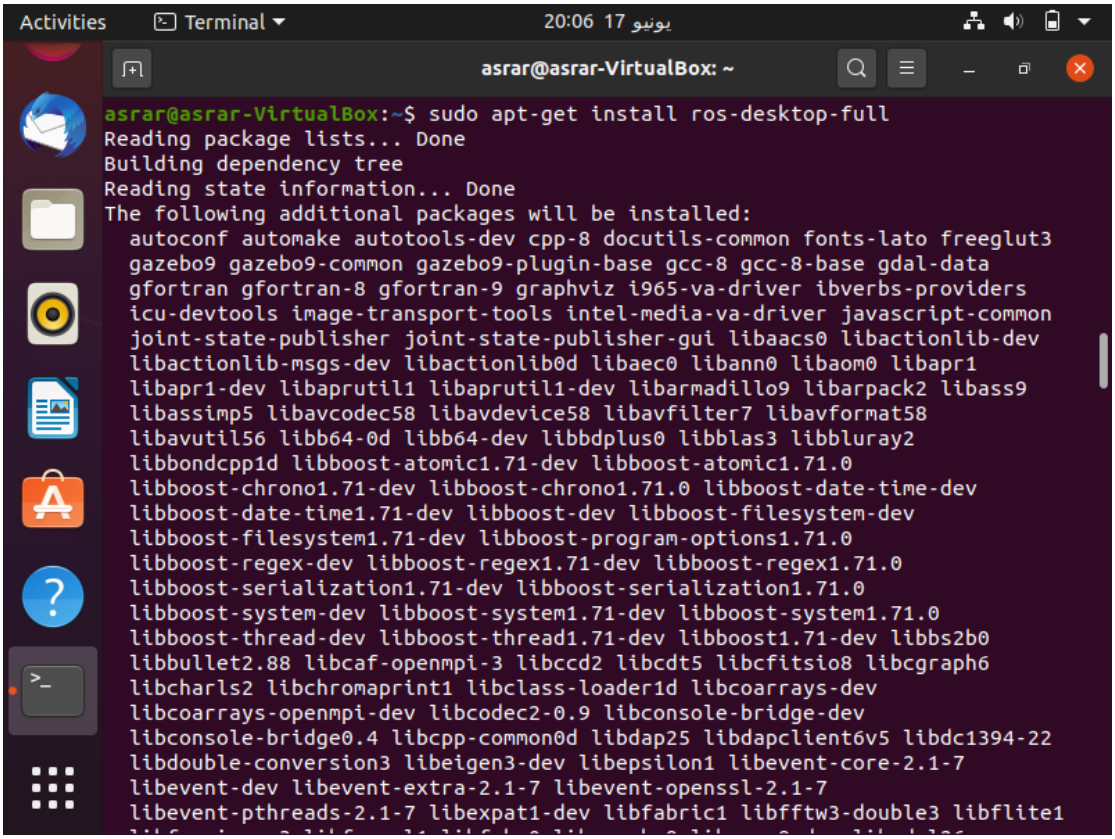
```
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```

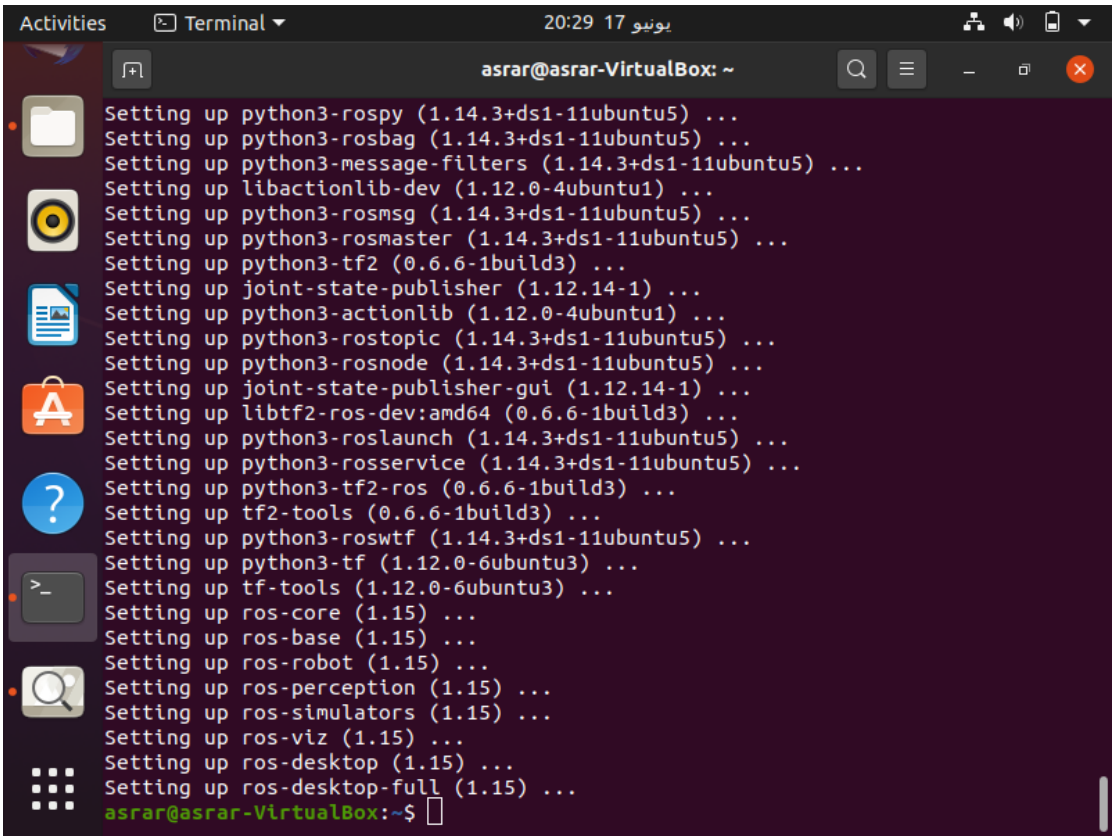
Sudo apt-get upgrade



Then put the command line to download ros

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





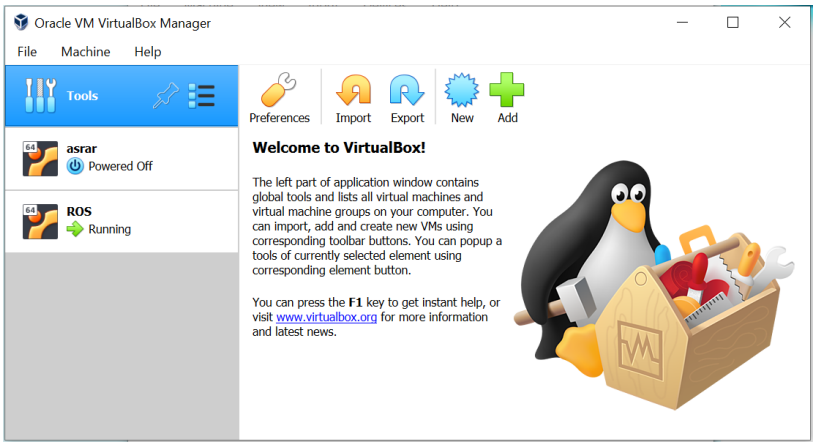
References:

1-https://www.udemy.com/course/ros-basics-program-robots/learn/lecture/8892578#overview

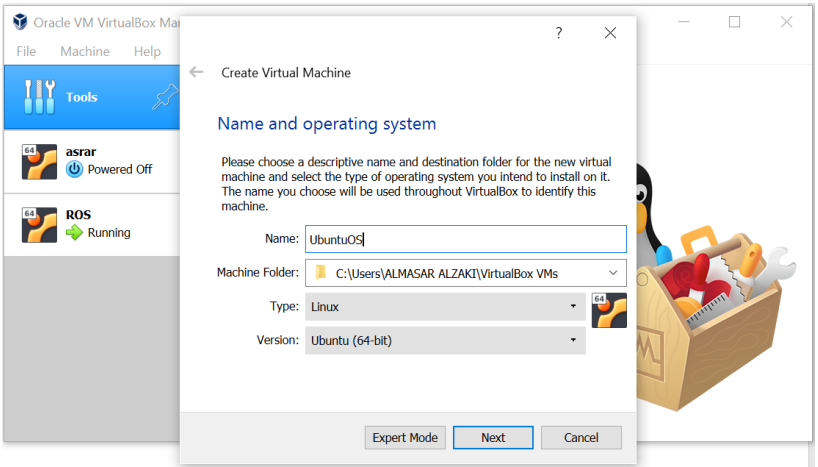
2- http://wiki.ros.org/kinetic/Installation/Ubuntu

طريقة تحميل ROS على Ubuntu

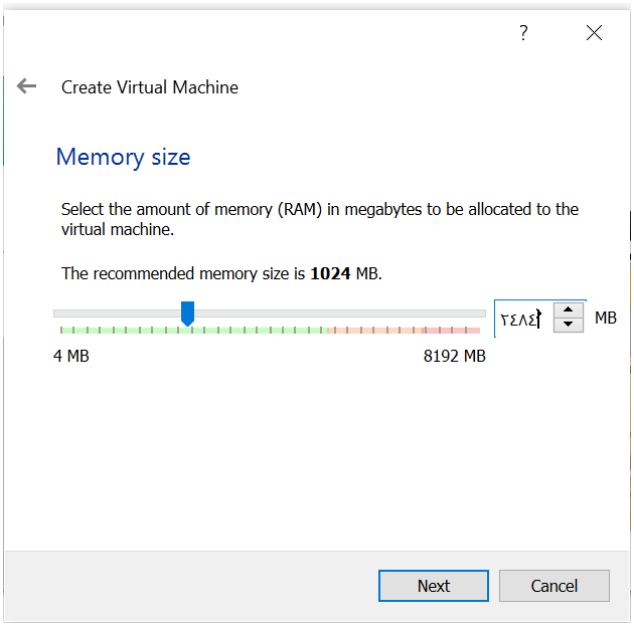
تحميل virtualbox على جهازك حتى تتمكن من تنصيب Ubuntu من هذا الرابط
https://www.virtualbox.org/wiki/Downloads



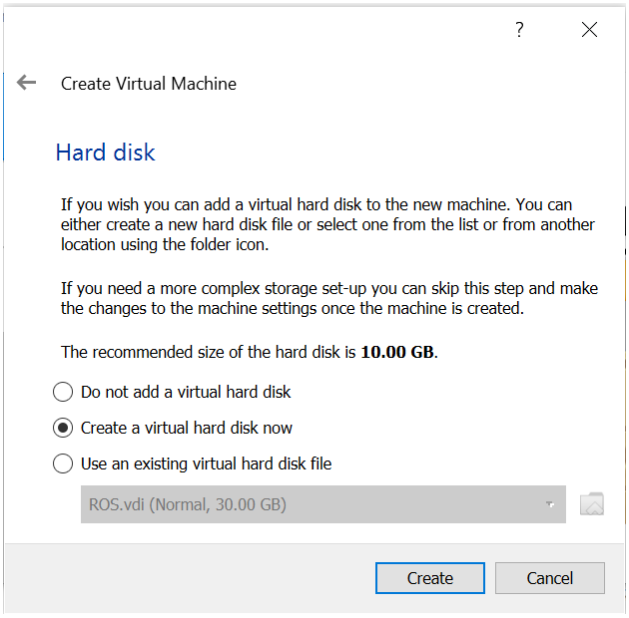
قم بتنزيل Ubuntu من الرابط https://ubuntu.com/download/desktop و بعد ذلك من virtualbox اختر new واختر نوع نظام التشغيل linux كما هو موضح في الصورة ثم اضغط على التالي



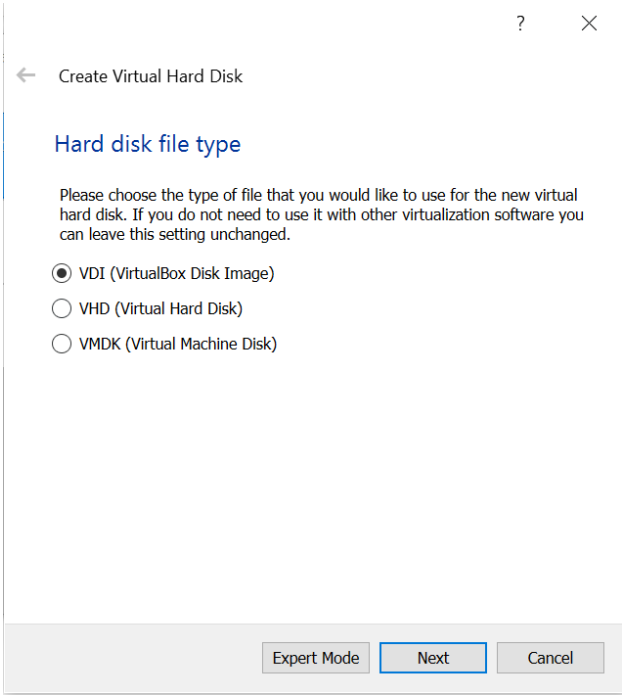
اختر حجم الذاكرة ثم اضغط على التالي



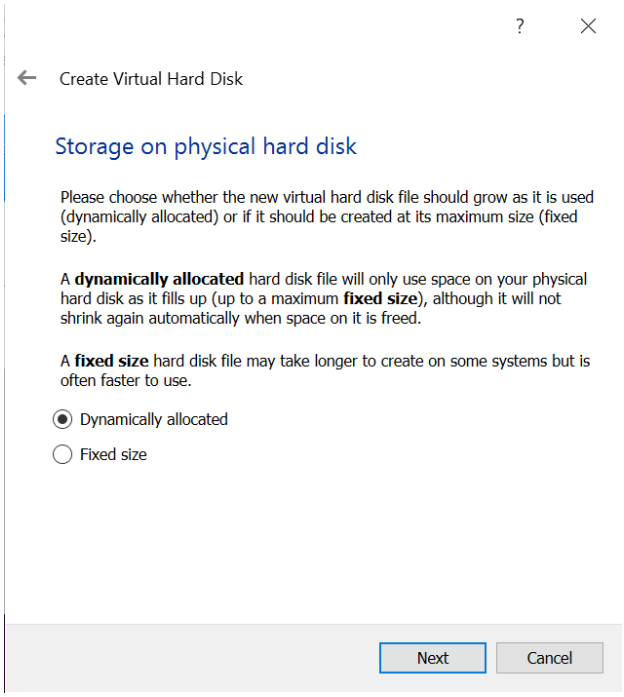
اختر create a virtual hard disk now ثم اضغط انشاء



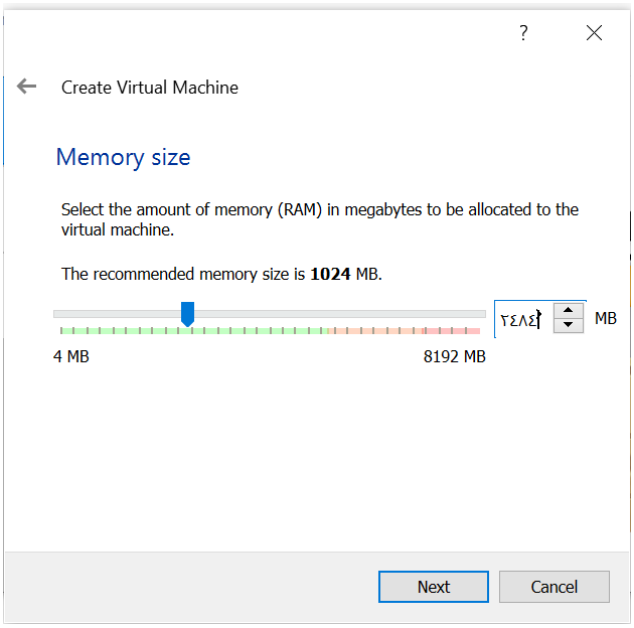
اختر VID ثم اضغط التالي



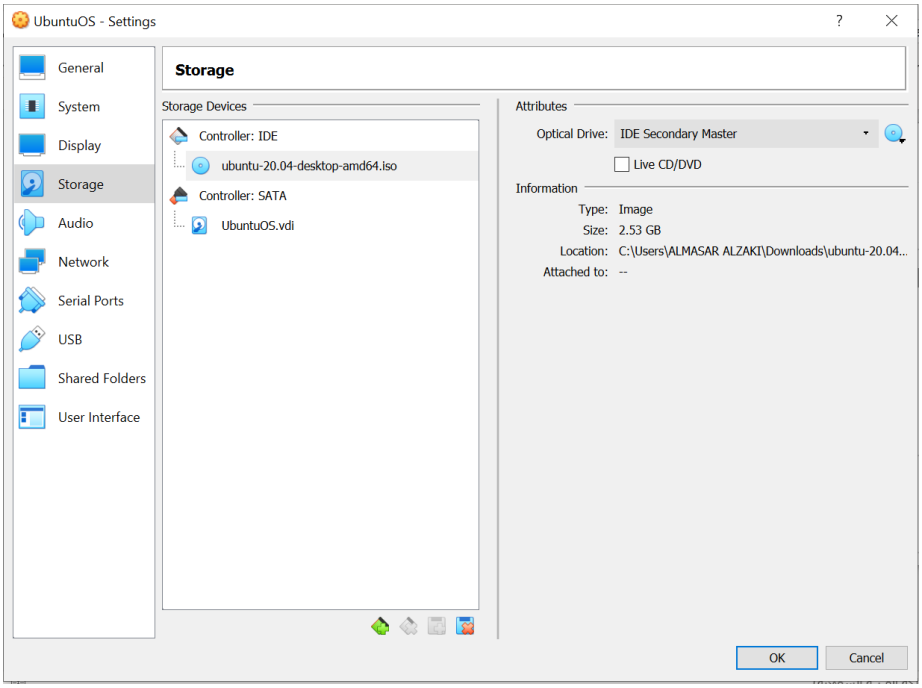
اختر Dynamically allocted ثم اضغط التالي



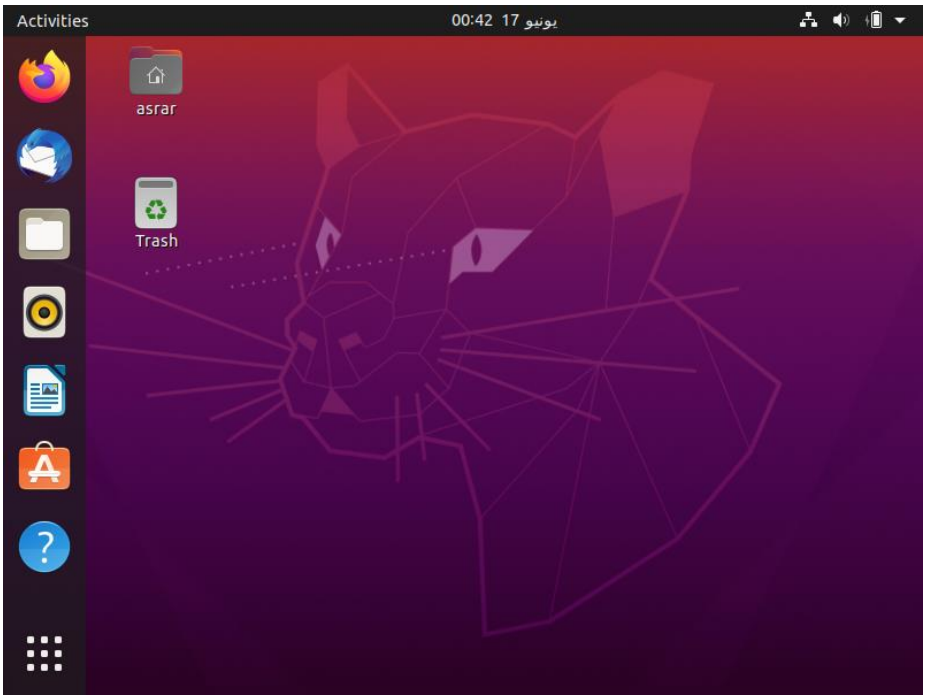
حدد حجم الملف 30 GB ثم اضغط انشاء



ثم اختر setting وبعدها اختر storage ثم حدد الموقع لل ubuntu الذي حملته على جهازك



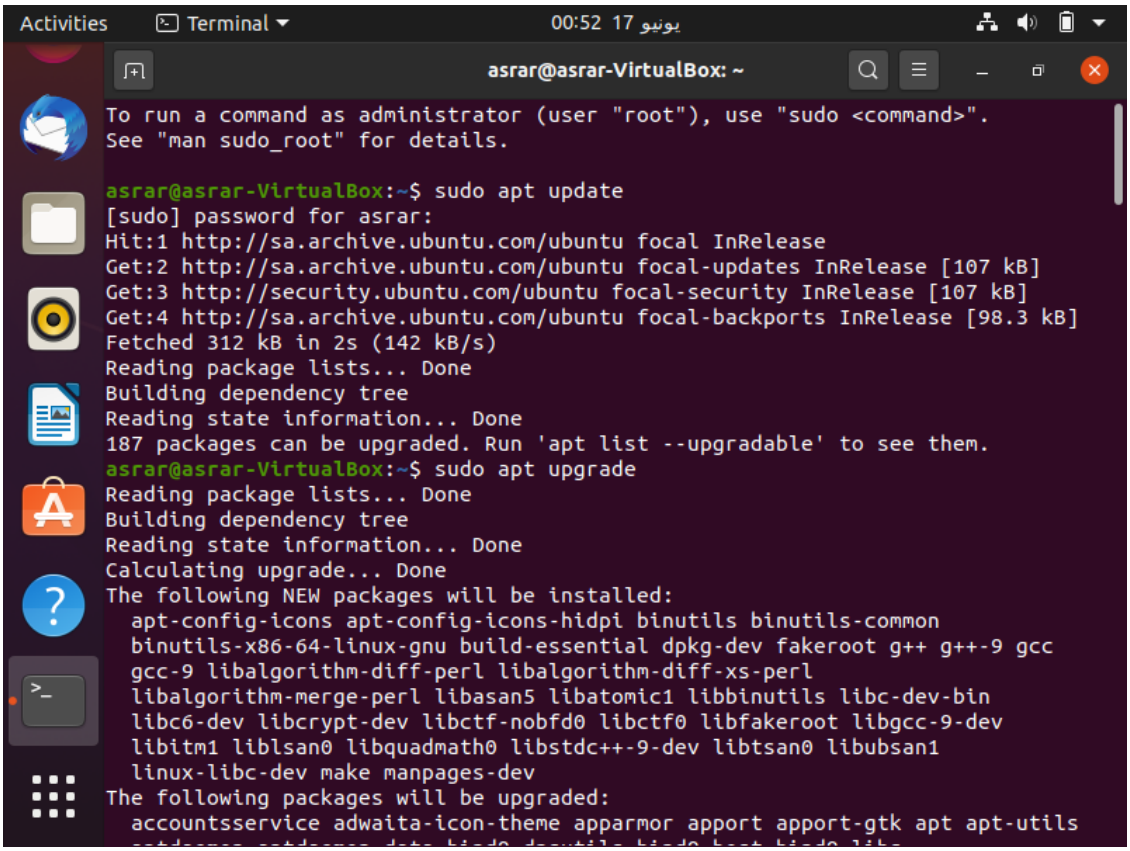
بعدها افتح النظام الذي عملته ونزل الابنتو وحدد اللغه وبعدها اختر في نوع التنزيل Erase disk and install ubuntu و اخر شي ضع اسمك و باسوورد خاص فيك للنظام التشغيل وبعدها تنتظر حتى يتحمل ويفتح معك كما في الصوره



افتح terminal ونضع الاوامر

Sudo apt update

Sudo apt upgrade

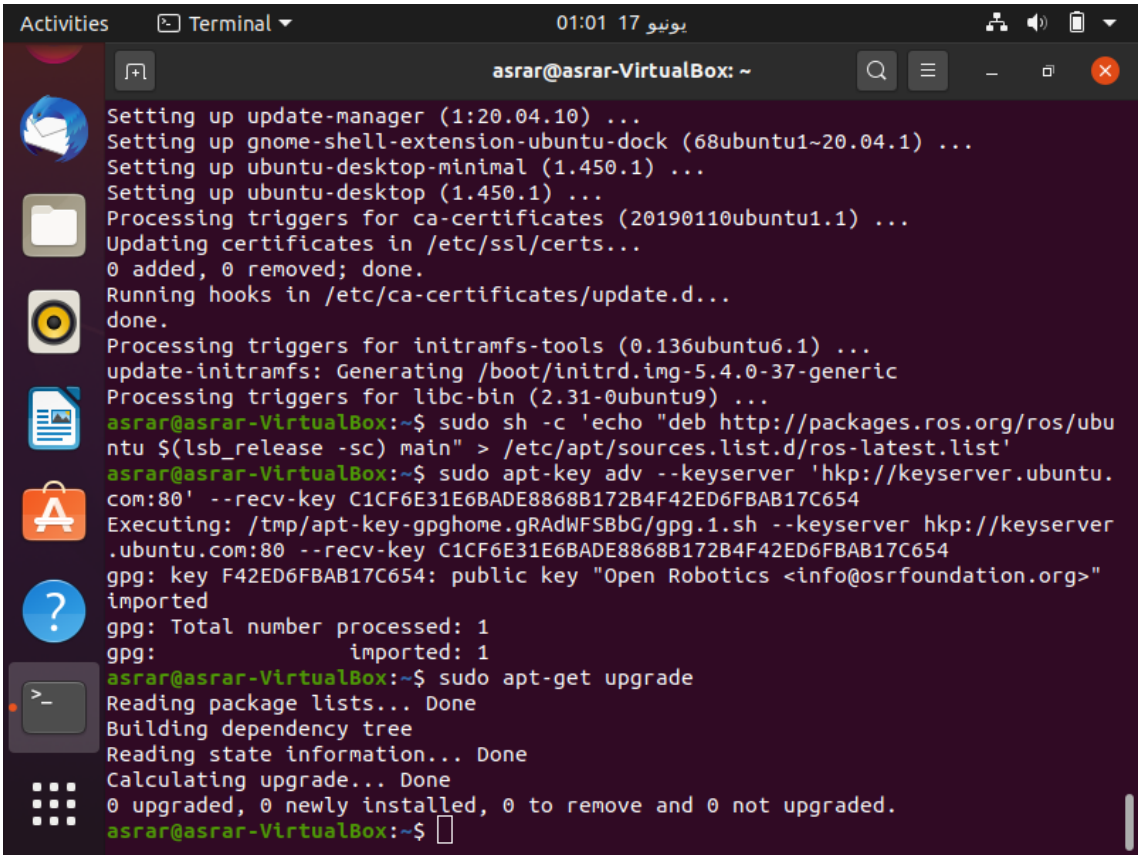


ونضع نفس اسطر الاوامر الموجوده كما في الصوره

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

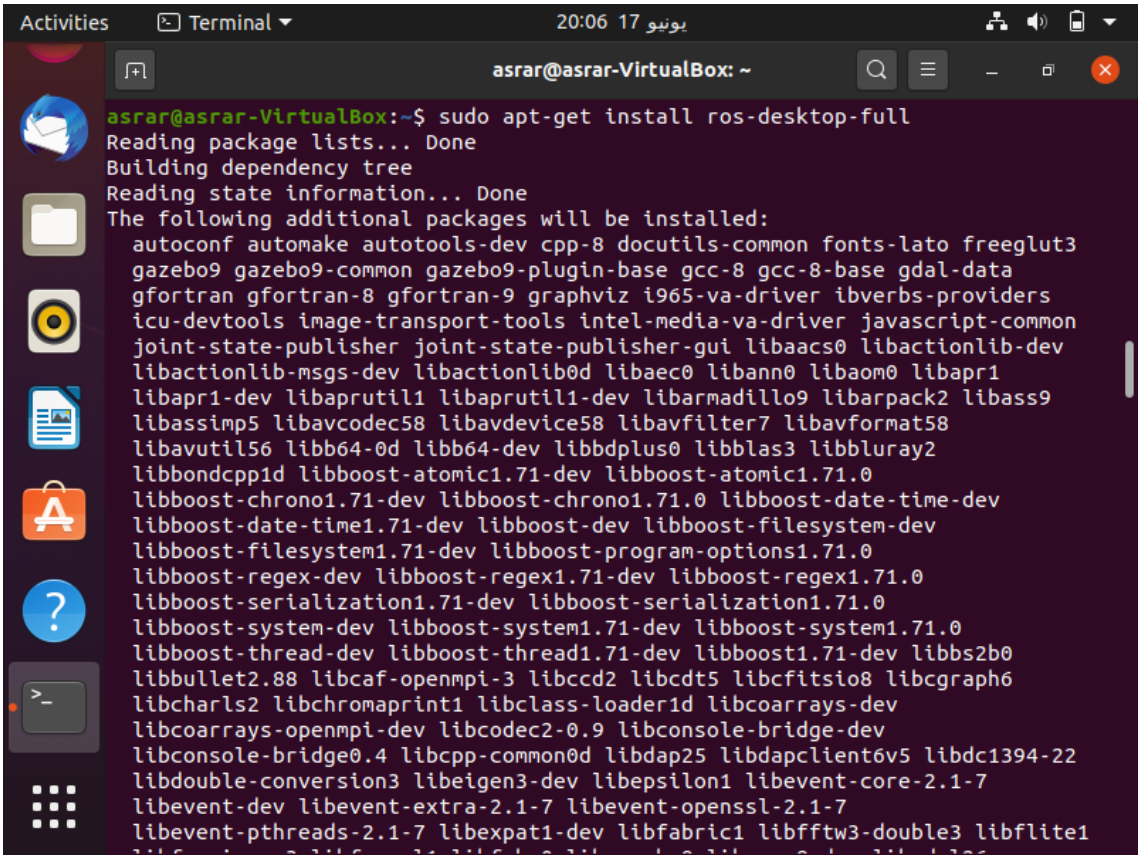
```
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```

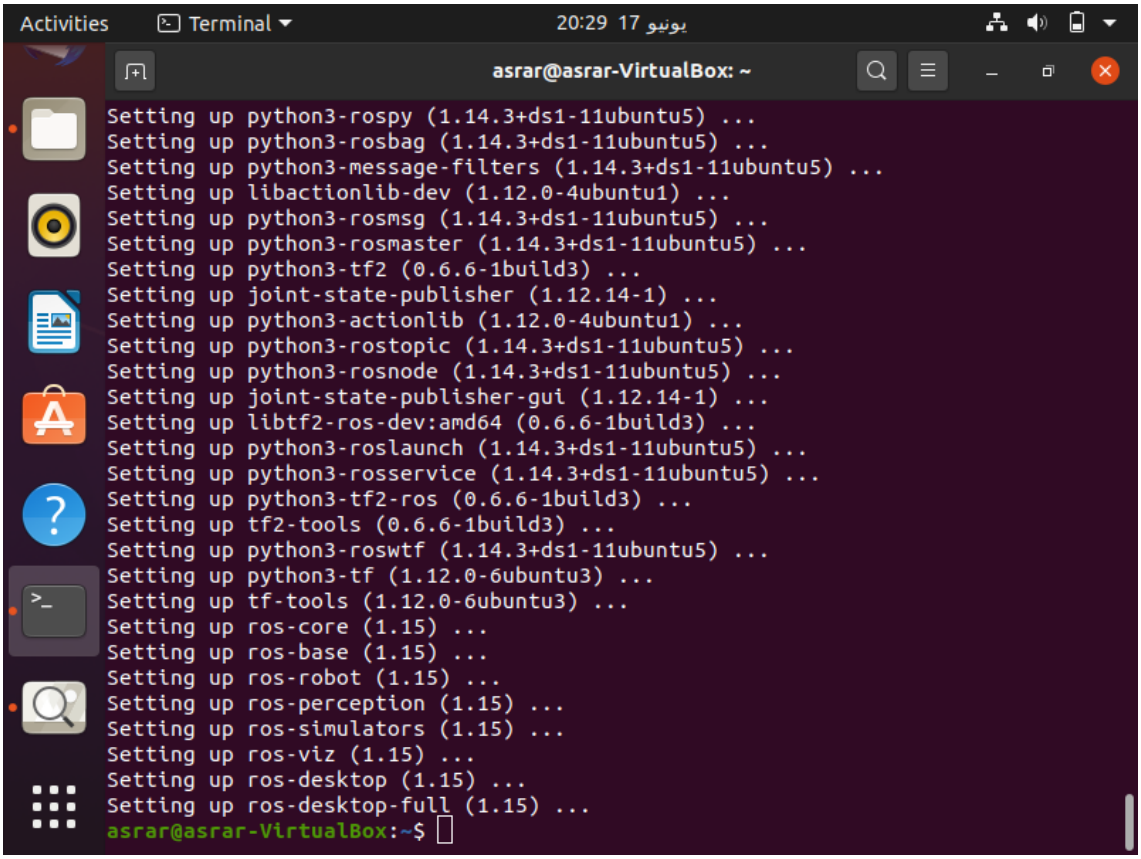
Sudo apt-get upgrade



وبعدها تضع الامر لتنزيل ros

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




Activities
Terminal
20:29 17 يونيو
asrar@asrar-VirtualBox: ~
Setting up python3-rospy (1.14.3+ds1-11ubuntu5) ...
Setting up python3-rosbag (1.14.3+ds1-11ubuntu5) ...
Setting up python3-message-filters (1.14.3+ds1-11ubuntu5) ...
Setting up libactionlib-dev (1.12.0-4ubuntu1) ...
Setting up python3-rosmsg (1.14.3+ds1-11ubuntu5) ...
Setting up python3-rosmaster (1.14.3+ds1-11ubuntu5) ...
Setting up python3-tf2 (0.6.6-1build3) ...
Setting up joint-state-publisher (1.12.14-1) ...
Setting up python3-actionlib (1.12.0-4ubuntu1) ...
Setting up python3-rostopic (1.14.3+ds1-11ubuntu5) ...
Setting up python3-rosnode (1.14.3+ds1-11ubuntu5) ...
Setting up joint-state-publisher-gui (1.12.14-1) ...
Setting up libtf2-ros-dev:amd64 (0.6.6-1build3) ...
Setting up python3-roslaunch (1.14.3+ds1-11ubuntu5) ...
Setting up python3-rosservice (1.14.3+ds1-11ubuntu5) ...
Setting up python3-tf2-ros (0.6.6-1build3) ...
Setting up tf2-tools (0.6.6-1build3) ...
Setting up python3-roswtf (1.14.3+ds1-11ubuntu5) ...
Setting up python3-tf (1.12.0-6ubuntu3) ...
Setting up tf-tools (1.12.0-6ubuntu3) ...
Setting up ros-core (1.15) ...
Setting up ros-base (1.15) ...
Setting up ros-robot (1.15) ...
Setting up ros-perception (1.15) ...
Setting up ros-simulators (1.15) ...
Setting up ros-viz (1.15) ...
Setting up ros-desktop (1.15) ...
Setting up ros-desktop-full (1.15) ...
asrar@asrar-VirtualBox:~$