

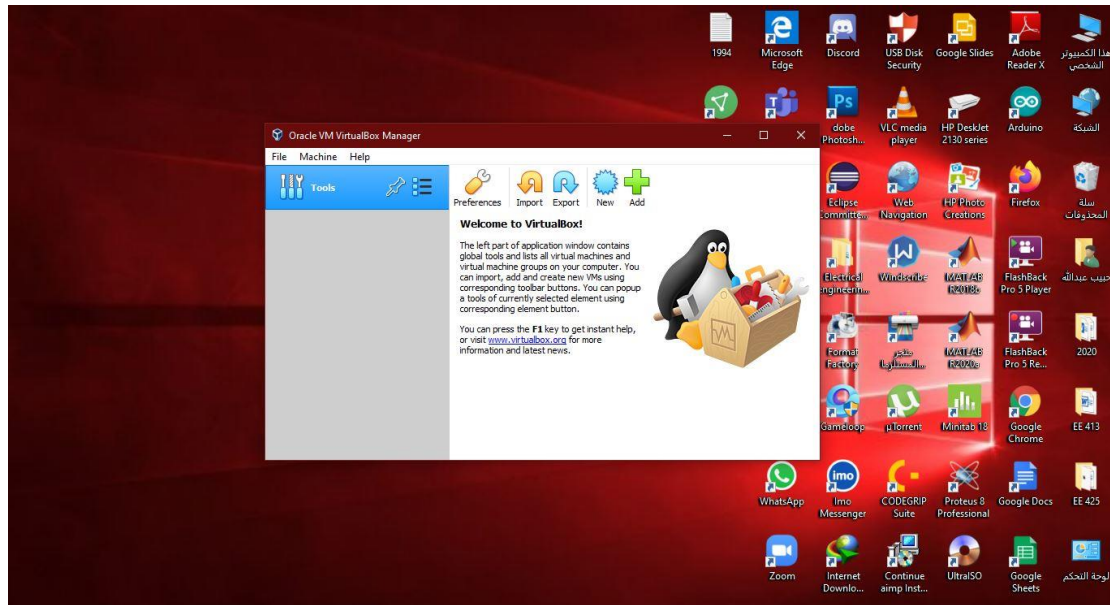
## Task#2

### Steps to Install virtual box, ubuntu, ROS

#### Step#1

Download virtual box from this website : <https://www.virtualbox.org/wiki/Downloads>

after you installed the program and its easy to install it you will get a window like below



#### Step#2:

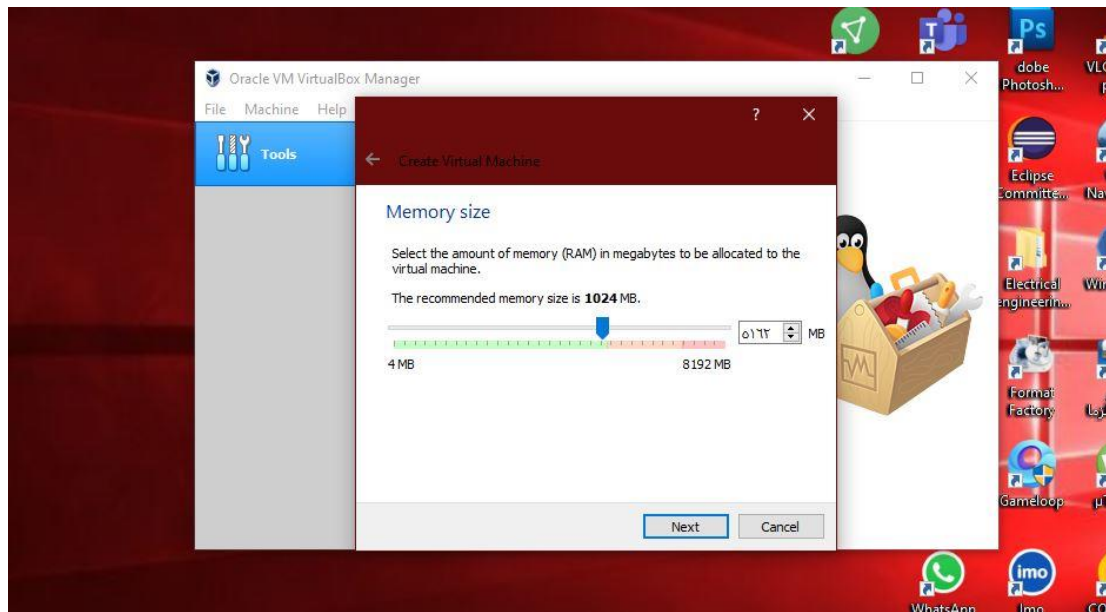
Download ubuntu from this site: <https://ubuntu.com/download/desktop>

Then start to install ubuntu inside virtual box by following the steps below:

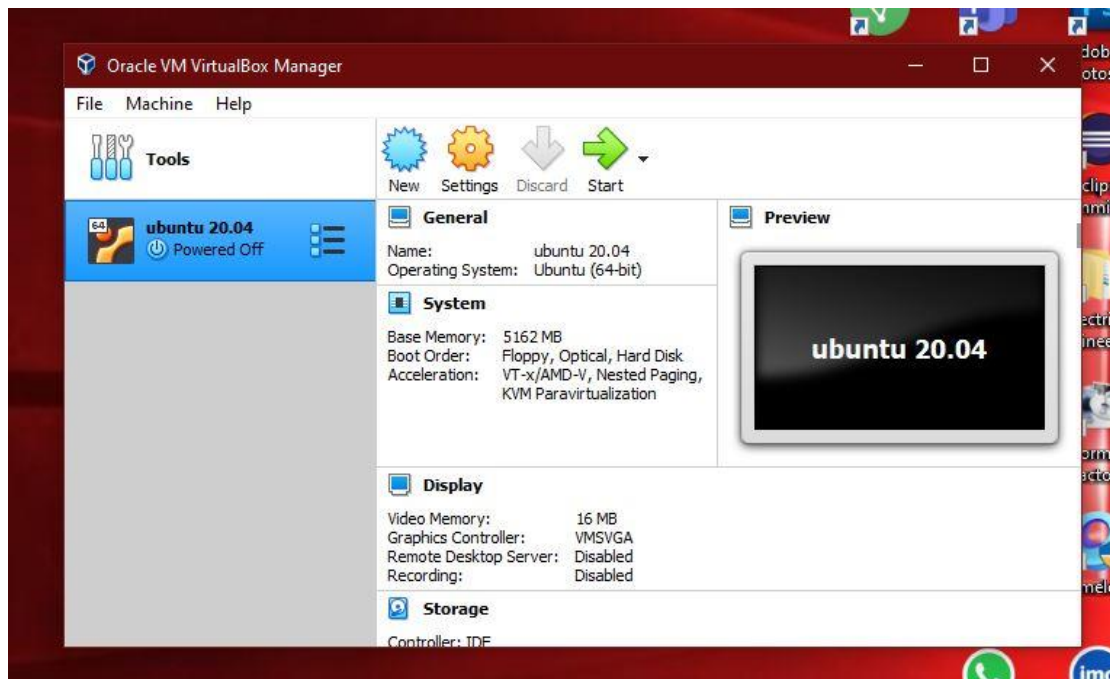


Click choice new in virtual box and then you will see a window like above pic so fill the name using the name of your ubuntu version and click next.

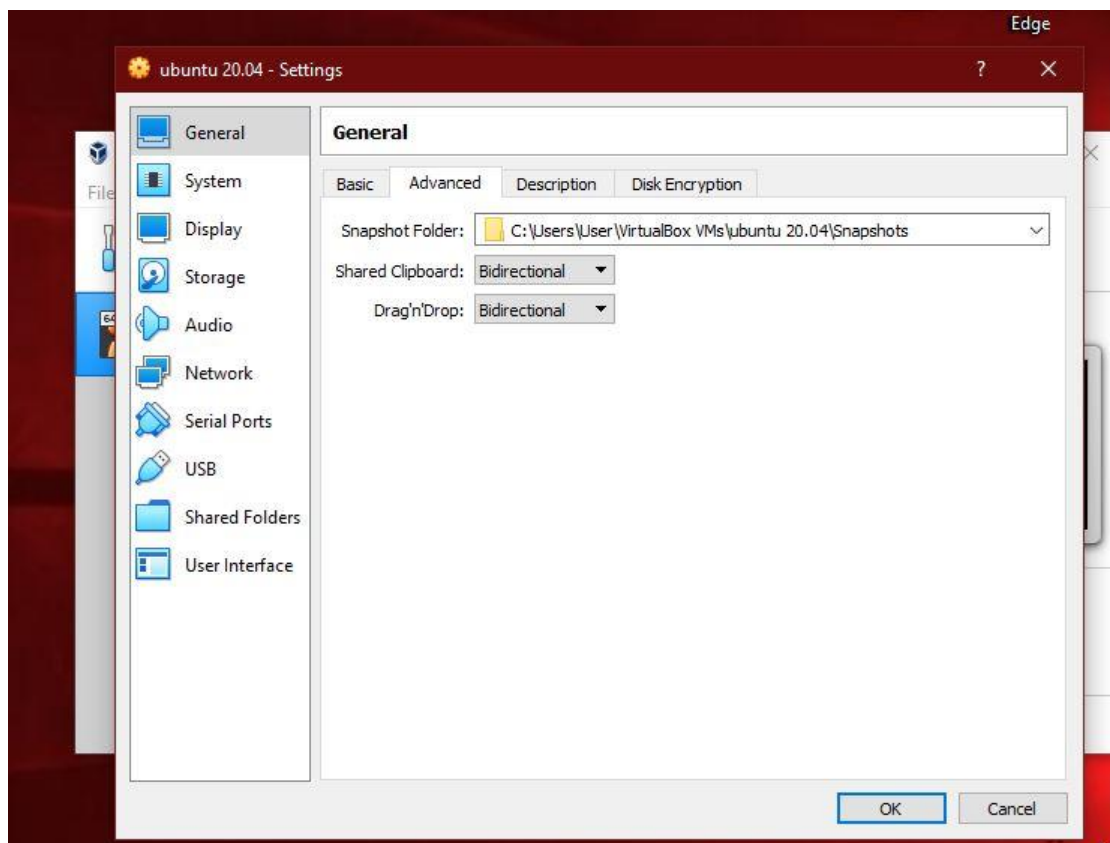
In this step do not pass the green area and in the next pics leave everything as default



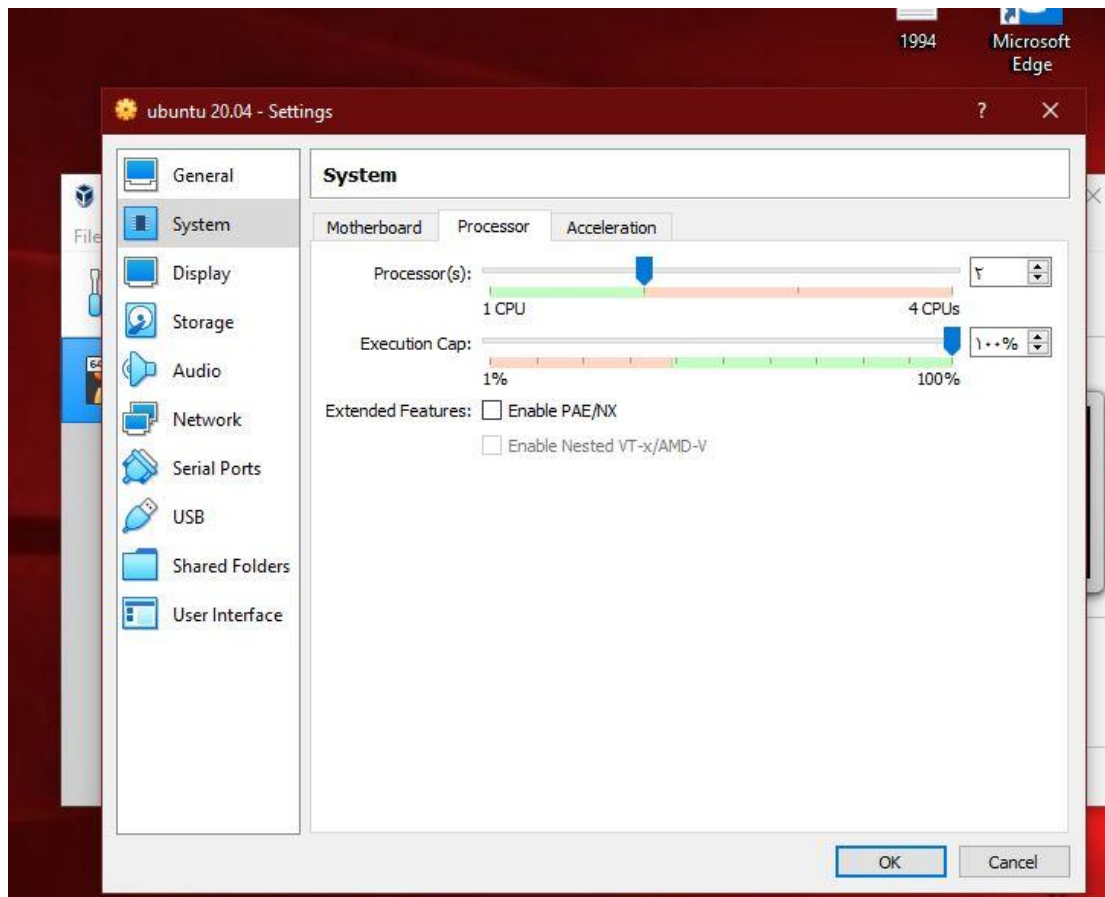
After you complete the step above you find a new choice added to your virtual box as below:



After that don't click start because there are some changes you have to do it as below  
Click settings and go to general and make the changes as below:

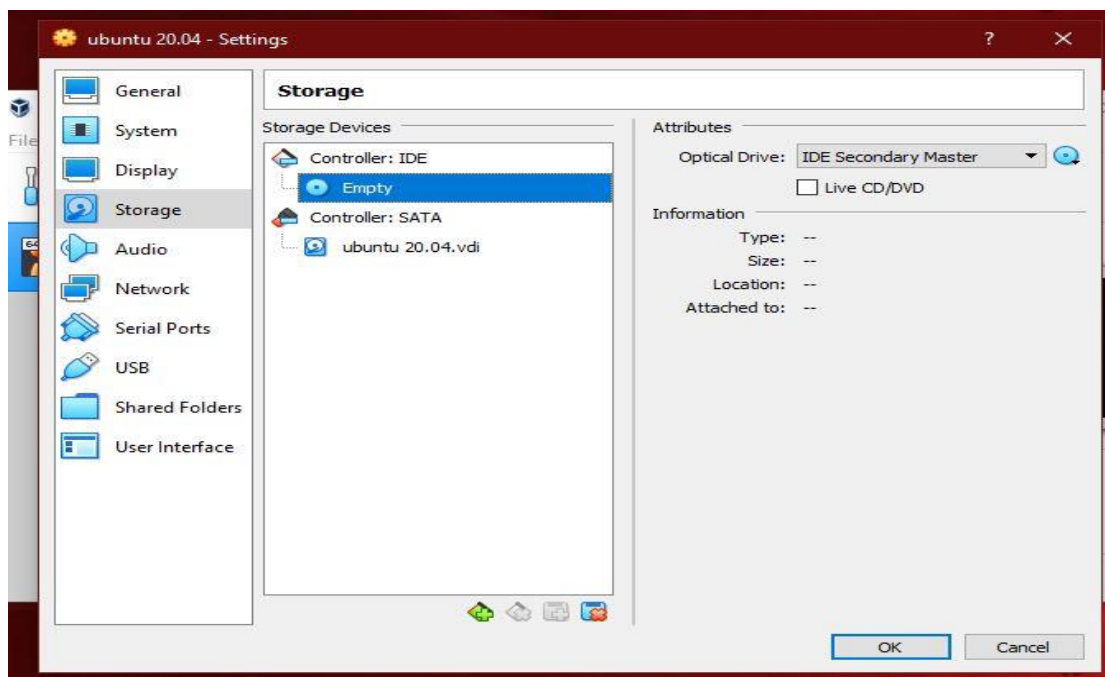


Then go to system :



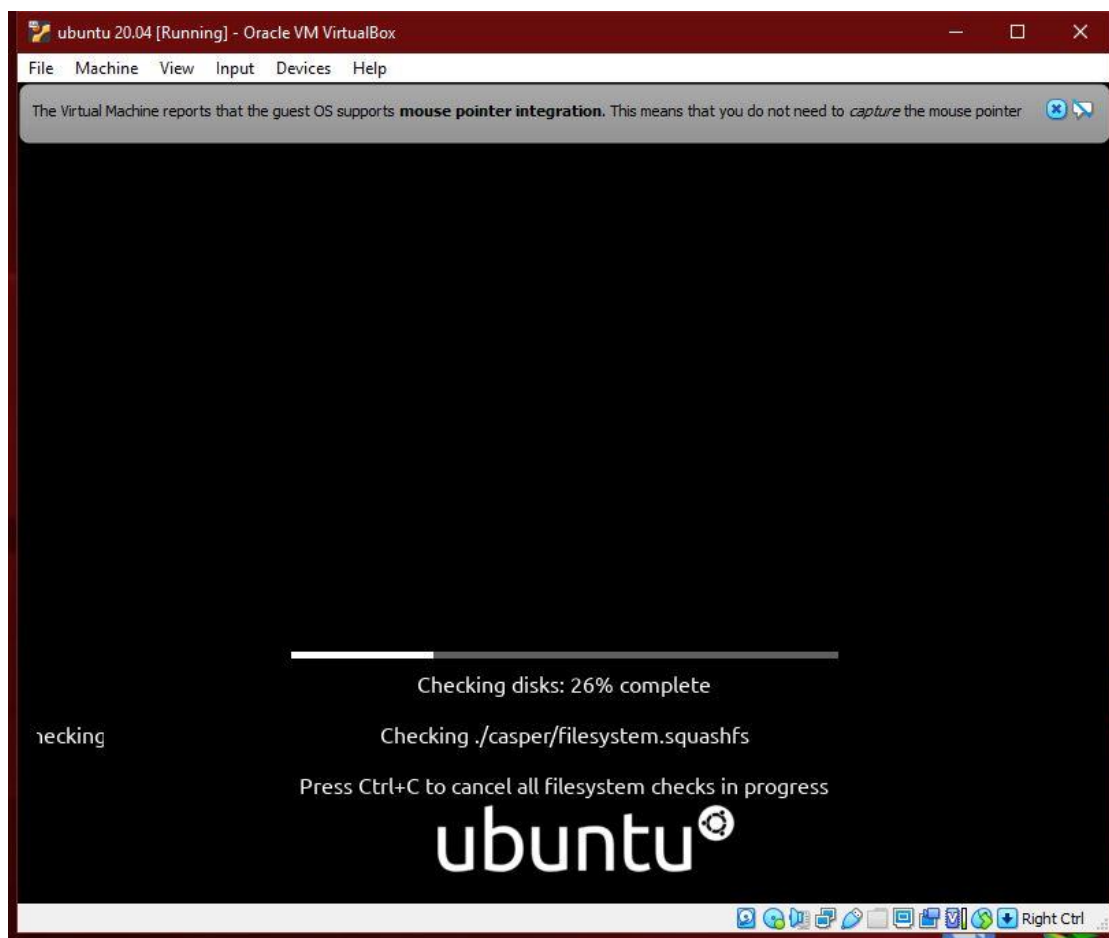
Now you must add the ubuntu file that you downloaded by following the steps below:

Go to storage and click empty and click the small blue disk in the right to get the file



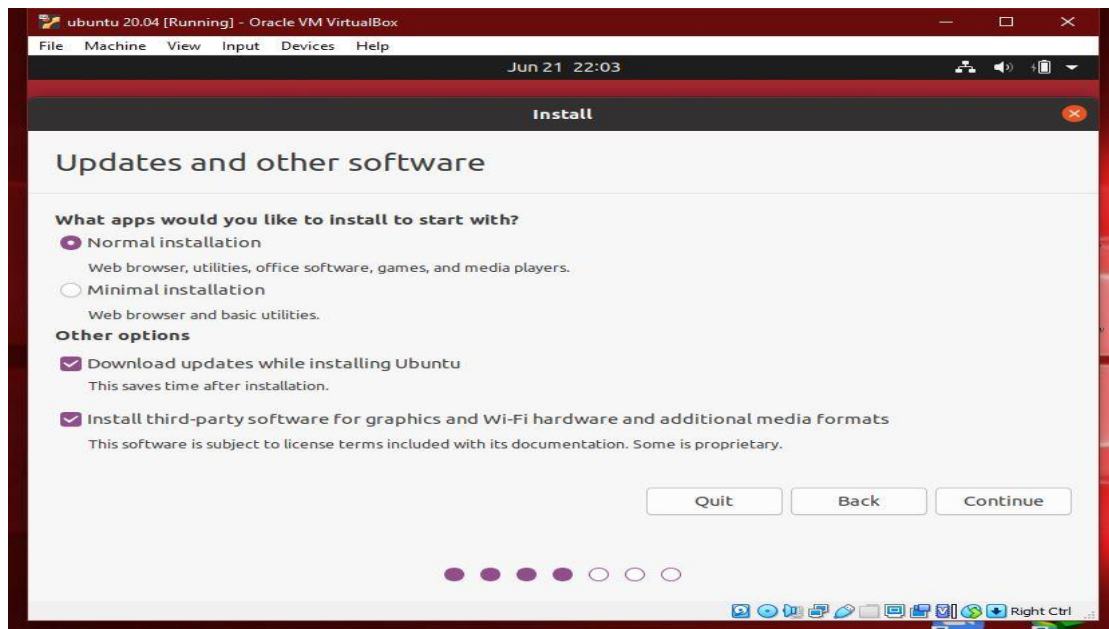
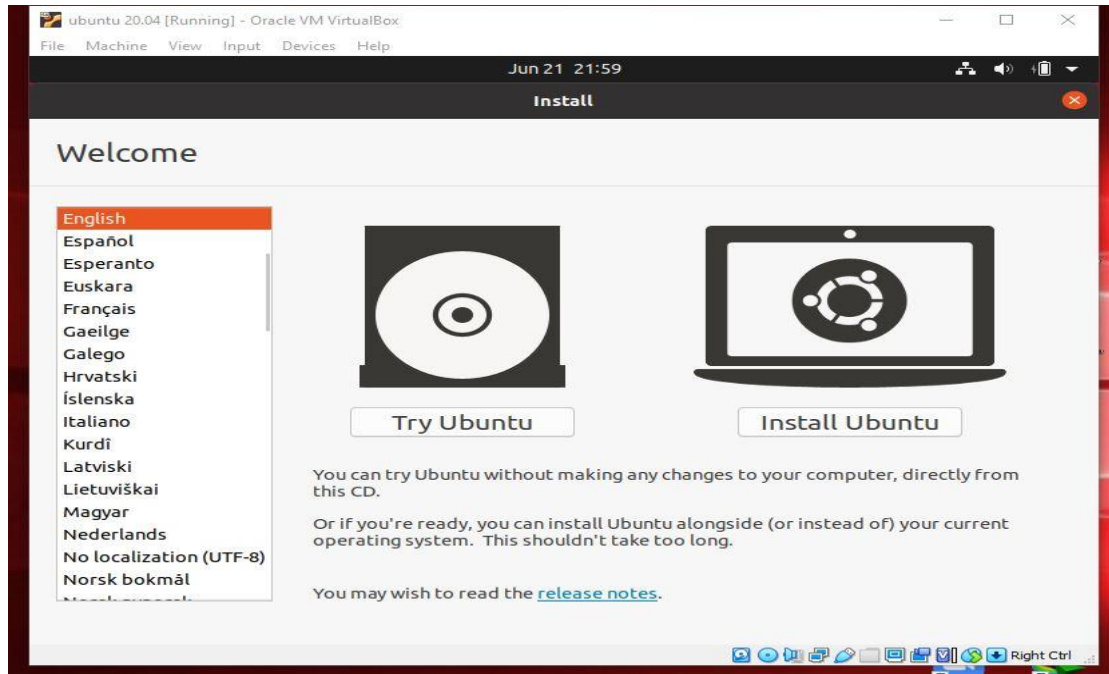
After you upload the file click ok you will get back to general window as below:

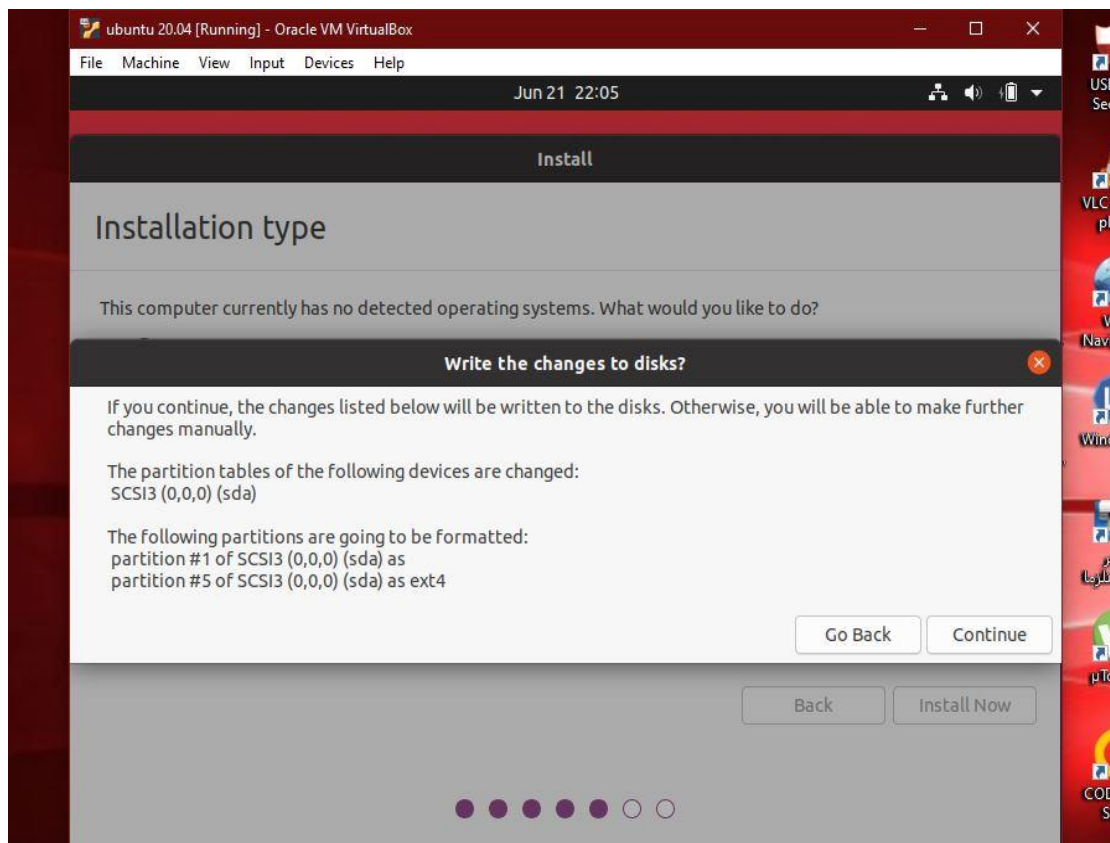
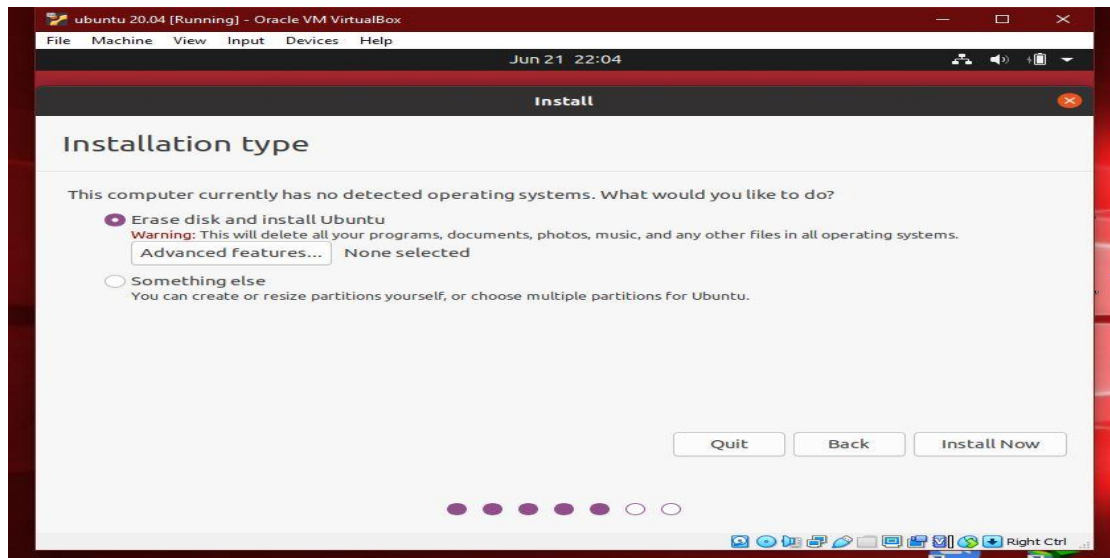
Click start option to start installing ubuntu and then wait for some minutes:



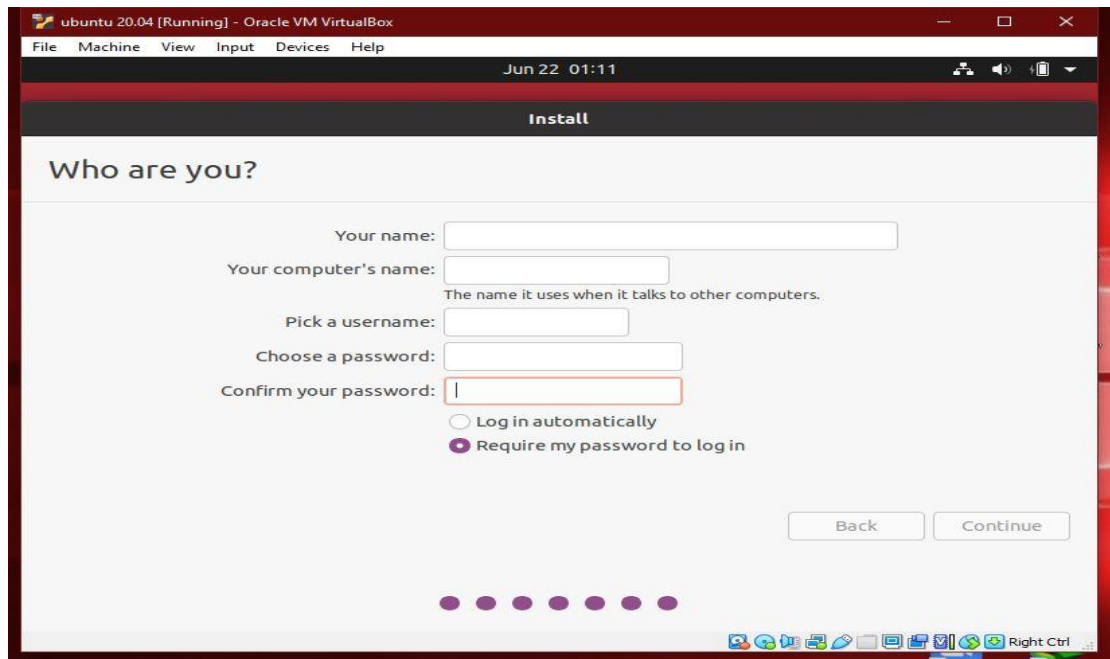


After completing installing you face some windows asking about the language of your computer and what kind of keyboard you are using. Follow the pics and click continue in every window after you apply what inside pics:

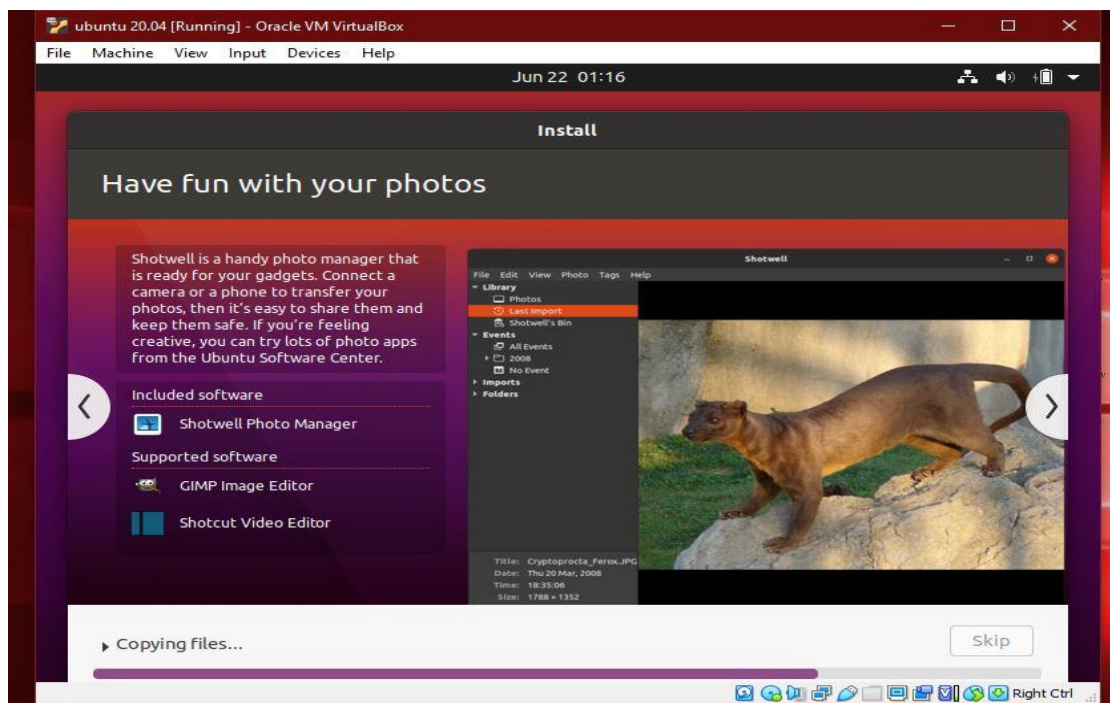




Now chose a name and password to your ubuntu:

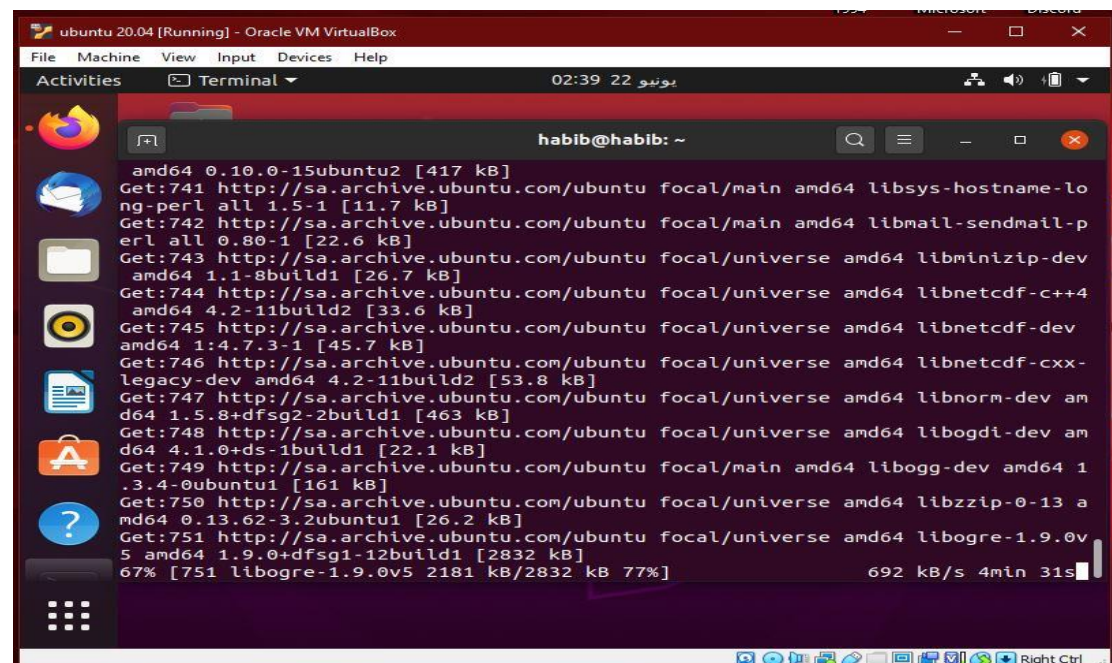


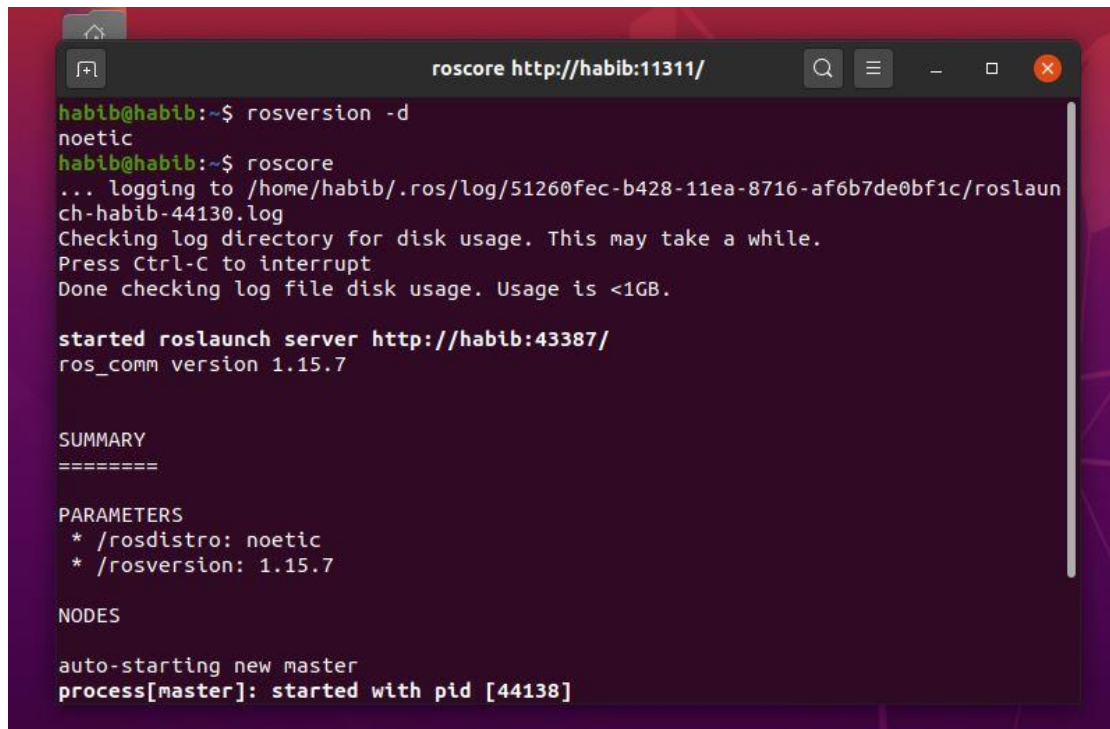
After clicking continue you will start install ubuntu system so you should be patient because it will take time to complete as below:





<http://wiki.ros.org/noetic/Installation/Ubuntu>



A terminal window titled 'roscore http://habib:11311/' is shown. The user 'habib@habib' runs 'rosversion -d' which returns 'noetic'. Then they run 'roscore', which logs to a file, checks disk usage, and starts a 'roslaunch server' on port 43387. It also displays a summary of parameters and nodes.

```
habib@habib:~$ rosversion -d
noetic
habib@habib:~$ roscore
... logging to /home/habib/.ros/log/51260fec-b428-11ea-8716-af6b7de0bf1c/roslaun
ch-habib-44130.log
Checking log directory for disk usage. This may take a while.
Press Ctrl-C to interrupt
Done checking log file disk usage. Usage is <1GB.

started roslaunch server http://habib:43387/
ros_comm version 1.15.7

SUMMARY
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PARAMETERS
* /rostdistro: noetic
* /rosversion: 1.15.7

NODES

auto-starting new master
process[master]: started with pid [44138]
```

## References:

1. <https://www.virtualbox.org/wiki/Downloads>
2. <https://ubuntu.com/download/desktop>
3. <http://wiki.ros.org/noetic/Installation/Ubuntu>
4. <https://www.youtube.com/watch?v=w4ekgzYG0bM>
5. <https://www.youtube.com/watch?v=x5MhydiJWmc&t=4s>