VMware Installation:

1. Go to https://www.vmware.com/au/products/fusion/fusion-evaluation.html
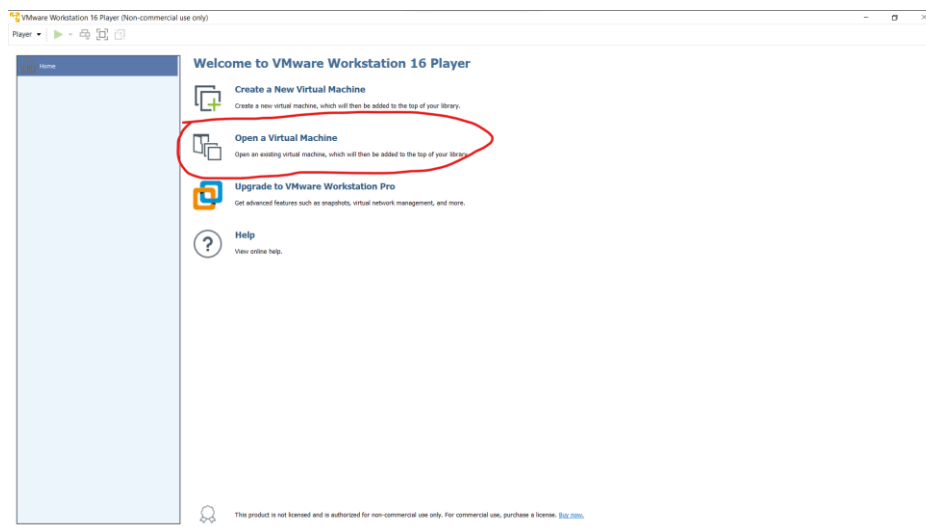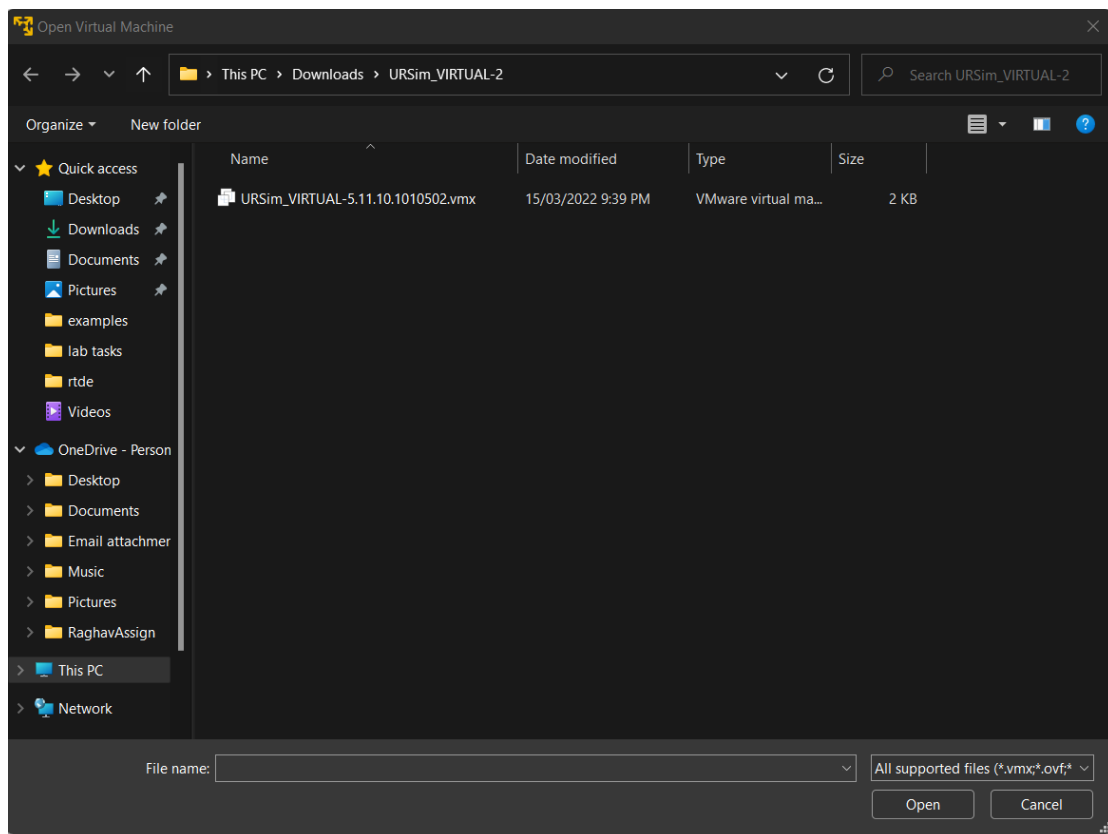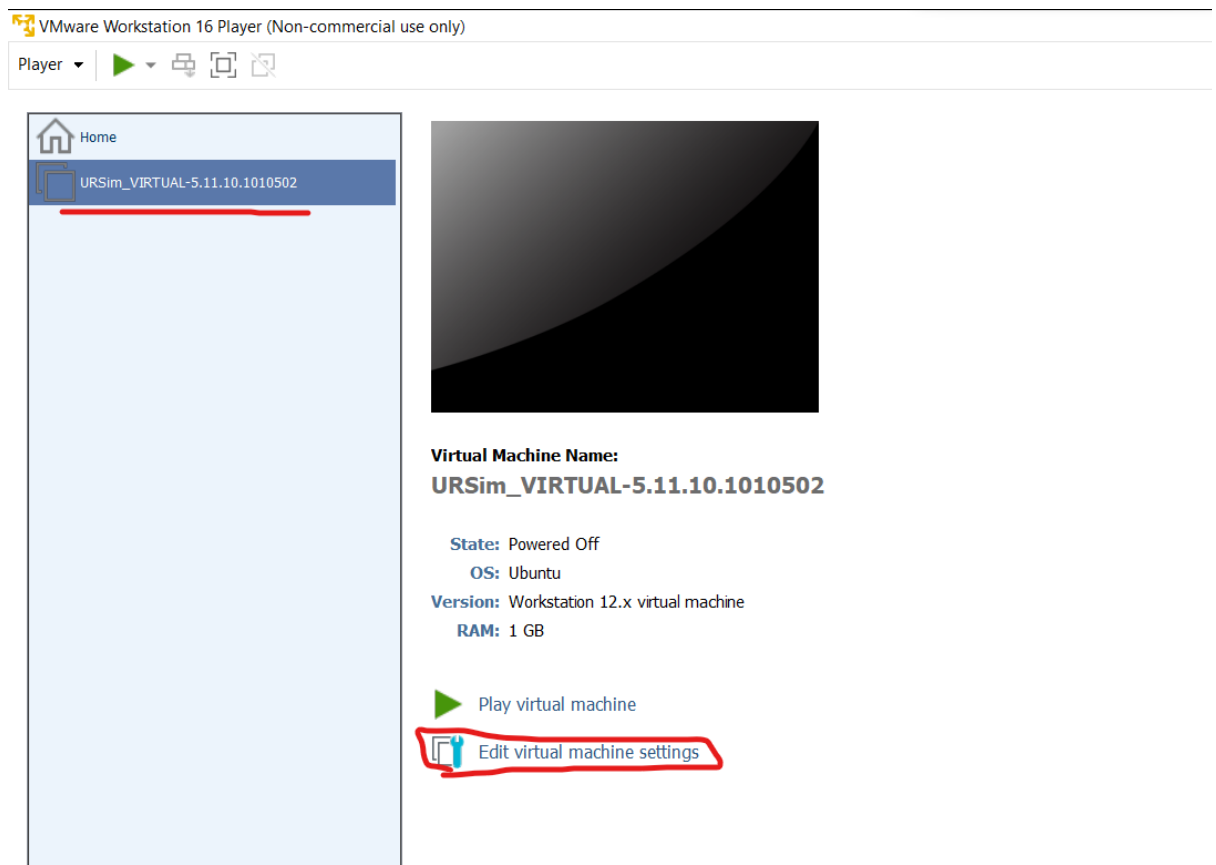   a. Download the correct version for your operating system.
   b. Select the free license when installing
2. Download the URsim image from the universal robotics website:
   a. https://www.universal-robots.com/download/software-e-series/simulator-non-linux/offline-simulator-e-series-ur-sim-for-non-linux-5110/
   b. Extract the contents of the folder
   c. Make sure to save the extract folder in a safe location. If you delete the vm image from inside vmware, you will be deleting all of the files etc.
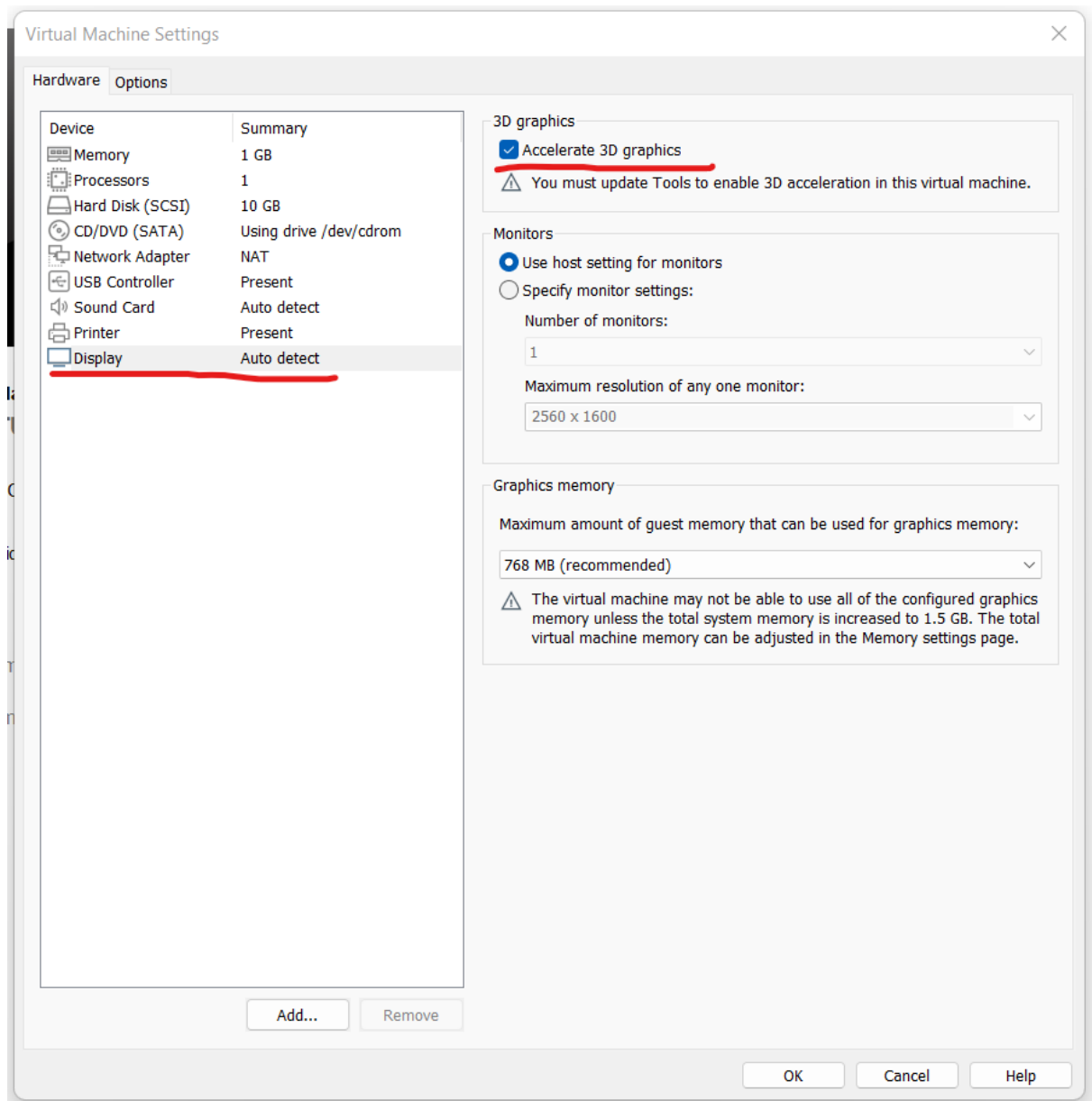3. Open VMware and select "Open a Virtual Machine"

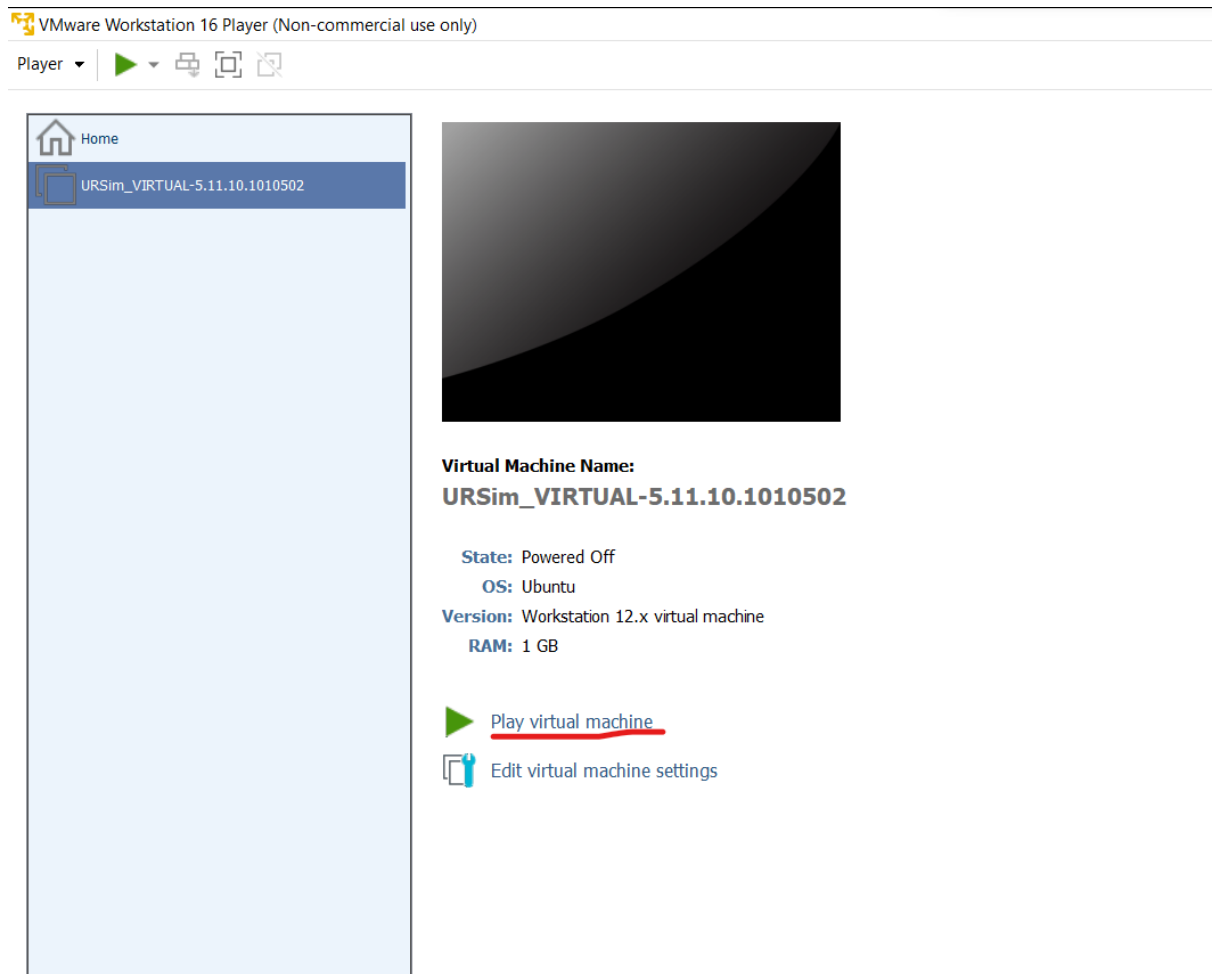4. Find the extracted folder in the file explorer window and select the ".vmx" file.

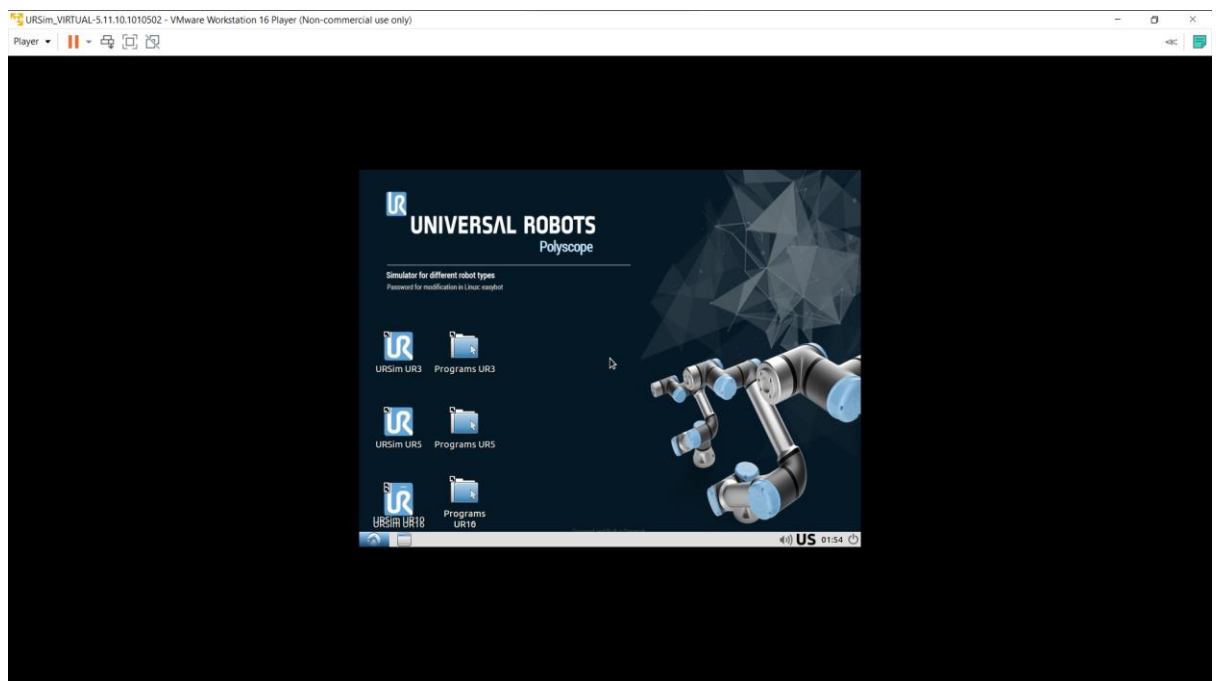5. Under URsim, select "Edit Virtual Machine Settings"

6. Under the Display tab, make sure "Accelerate 3D graphics" has been selected. Then hit okay.

7. Start the virtual machine by selecting the "Play virtual machine" button

8. This will now open up the virtual machine but in a very small window size.

9. To fix this, you should minimise the window and maximise it. This should, make the window size larger.
10. **Now go to the <u>VM installation instruction</u> file on moodle, and follow from step 17.**
    a. You will need to set mode and safety passwords
    b. You will need to set the default safety installation to 7D1C.
11. Download and setup the RTDE toolbox
12. Download and setup the RVC toolbox
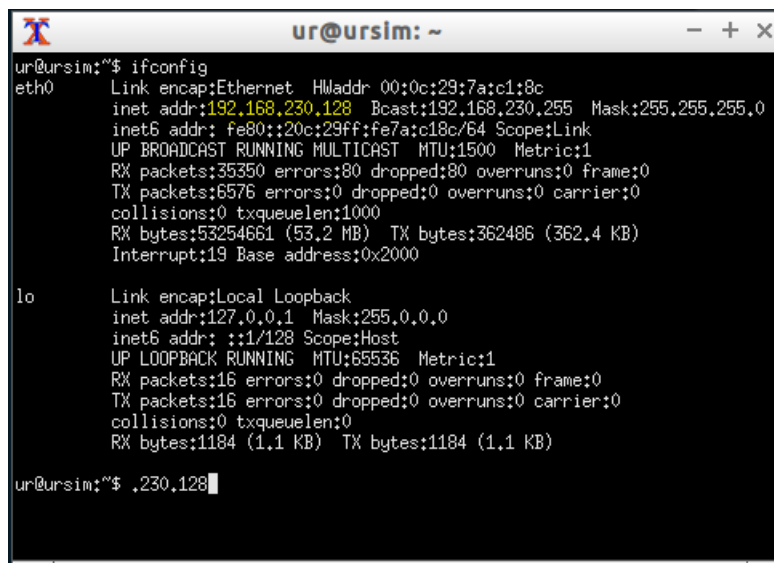13. Now follow instructions from the **VMware Port Setup** section below.

VMware Port setup:

1. Open up terminal

   ctrl + alt + t

2. Type in the following command:

   ifconfig

   You should get an output that looks like:

3. Take note of the "inet addr:"

   This is the IP address that you will need to use in your MATLAB code.

   So in the matlab code, whenever the IP address is:

host = '127.0.0.1'

replace it with

host = '192.168.230.128'   -> Make sure you use the IP address that you got.

4. Try out one of the RTDE MATLAB examples to make sure it works properly.