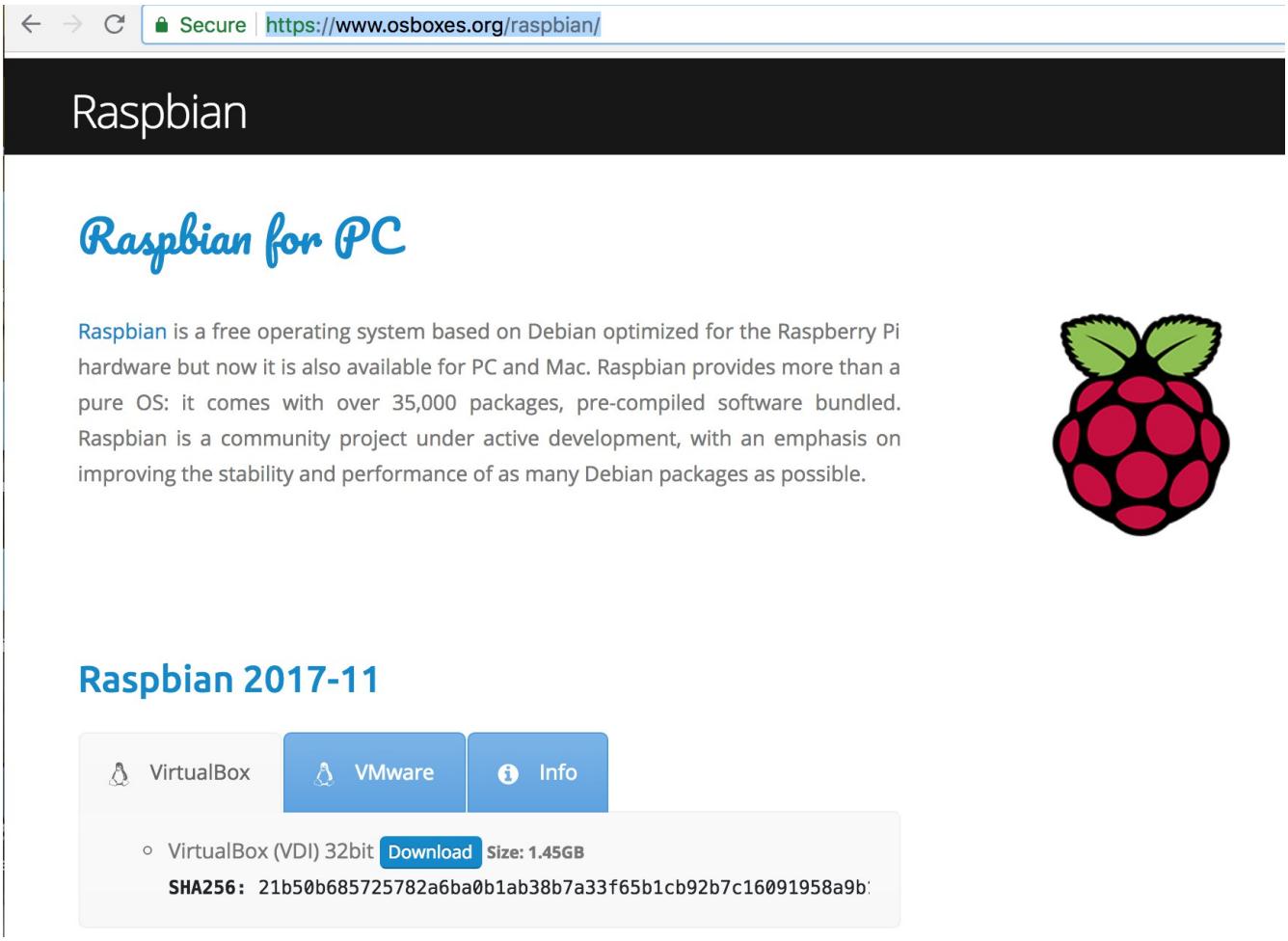
Setting up your virtual environment. Part 1

1. Start by downloading and installing Oracle Virtual Box

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

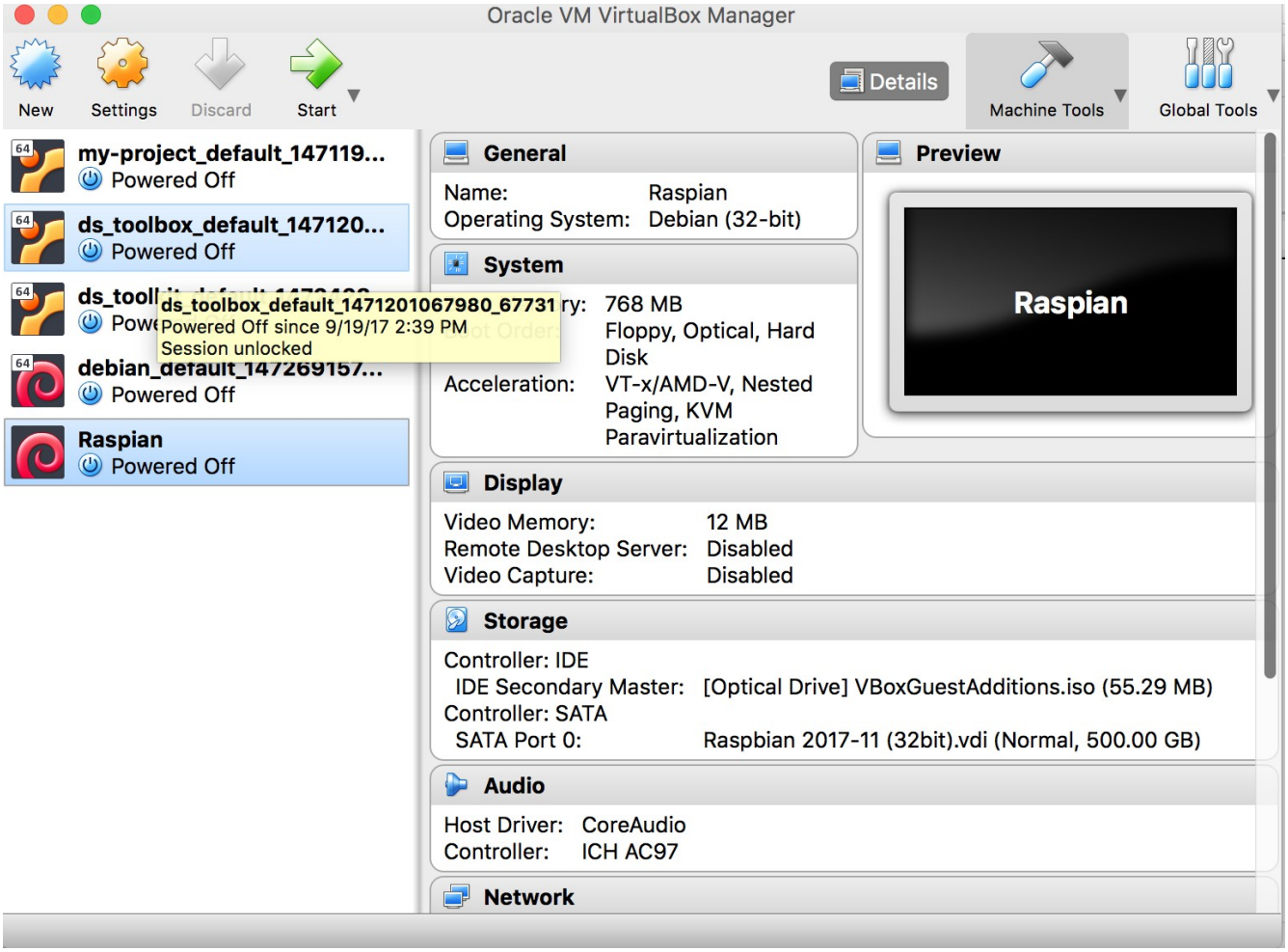
2. Next, download the Raspian virtual disk image:

https://www.osboxes.org/raspbian/



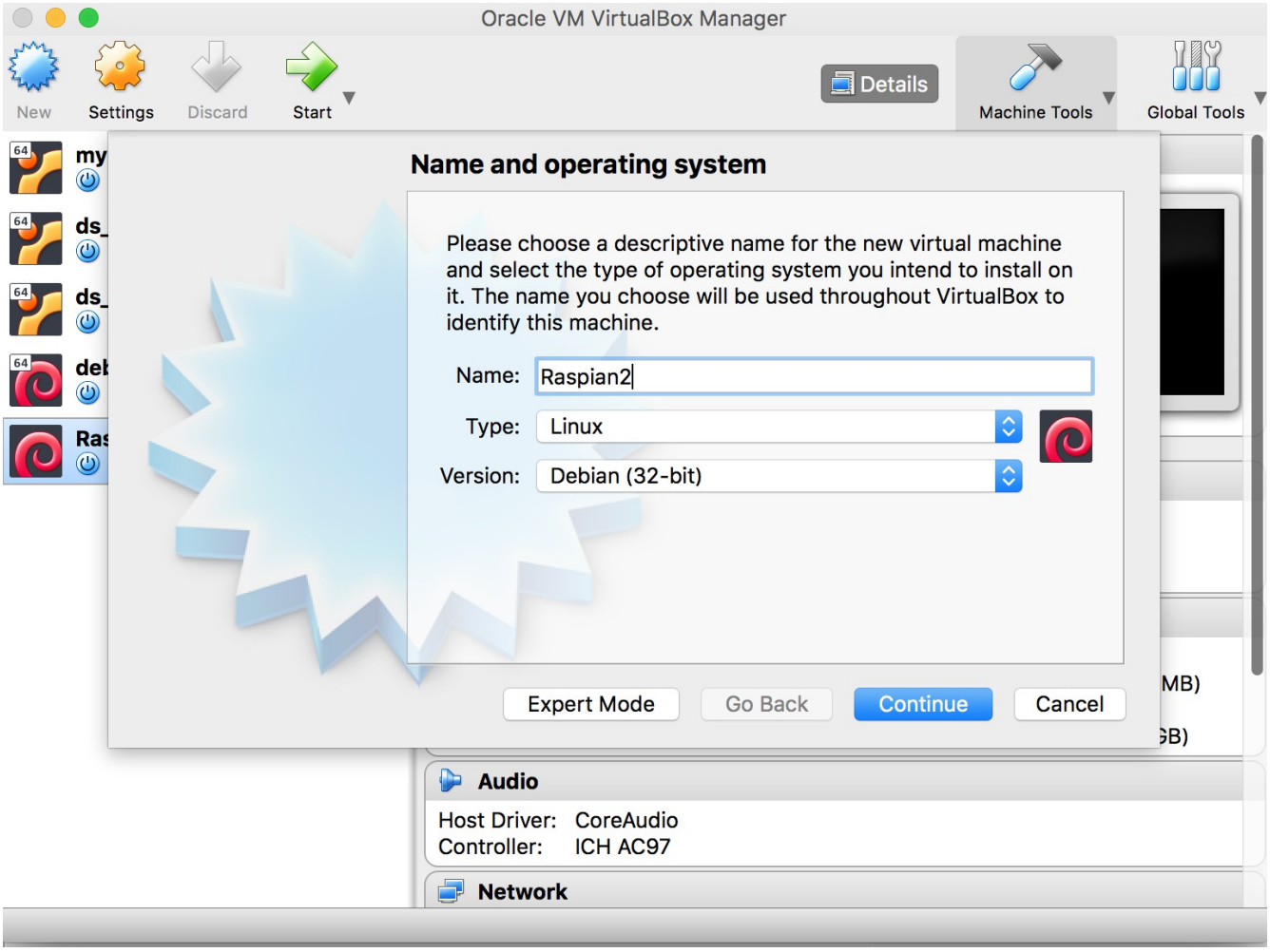
3. Decompress the Raspian vdi file you downloaded. Raspbian_2017-11-VB-32bit.7z Annoyingly it's been compressed with 7zip, so you may need WinRar to open it on Windows, or an app from the app store. Decompressing gets you a file called Raspbian 2017-11 (32bit).vdi That's the file we will use in virtual box.

4. Launch virtualbox. It will look a bit like this one:



You won't have so many (or any) virtual machines yet, but the one at the bottom, the one that says “Raspian” is the one we want to build. I've already built one for the class, but I will build another to illustrate how it is done. This screenshot is from a Mac, Windows will look a bit different, but that is mostly the window decorations. The procedure to complete our new machine is the same.

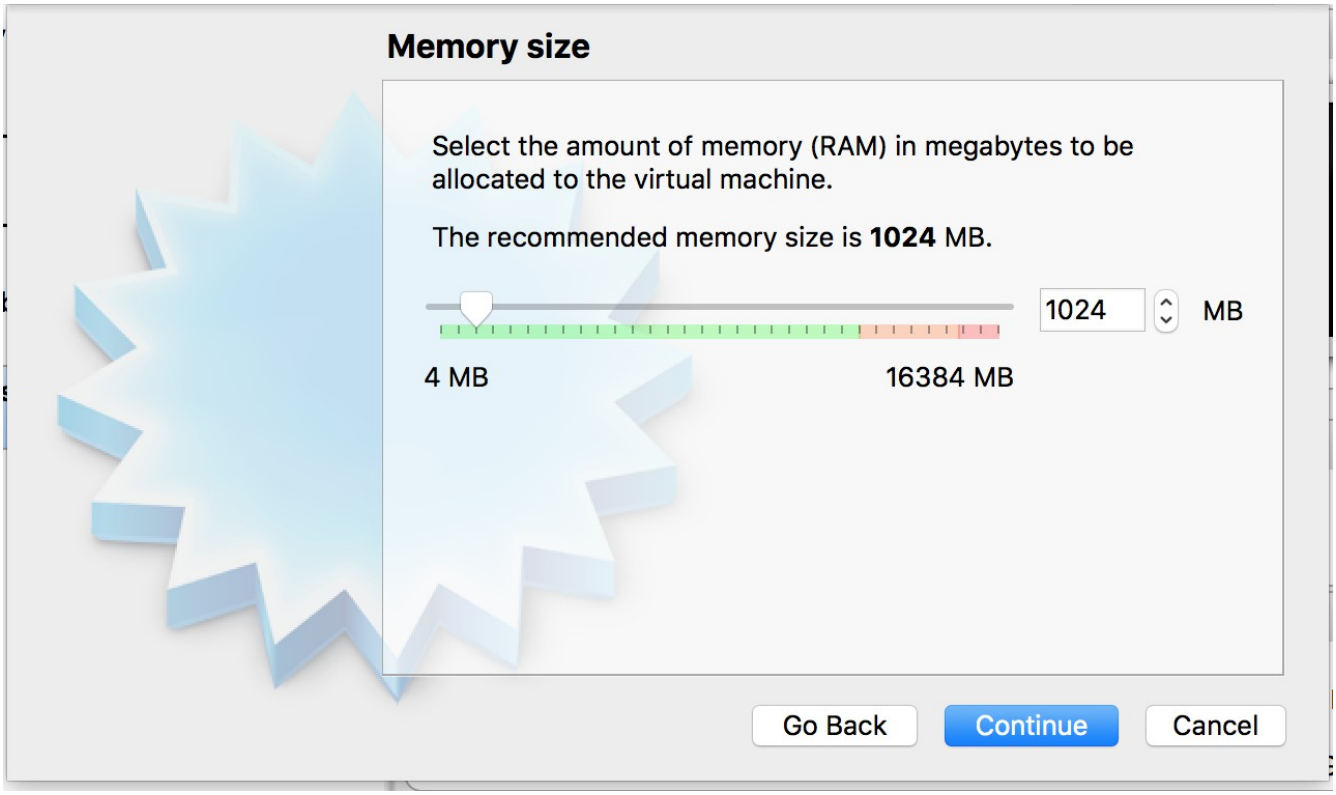
5. Click on New. Complete the resulting dialog so it looks like this:



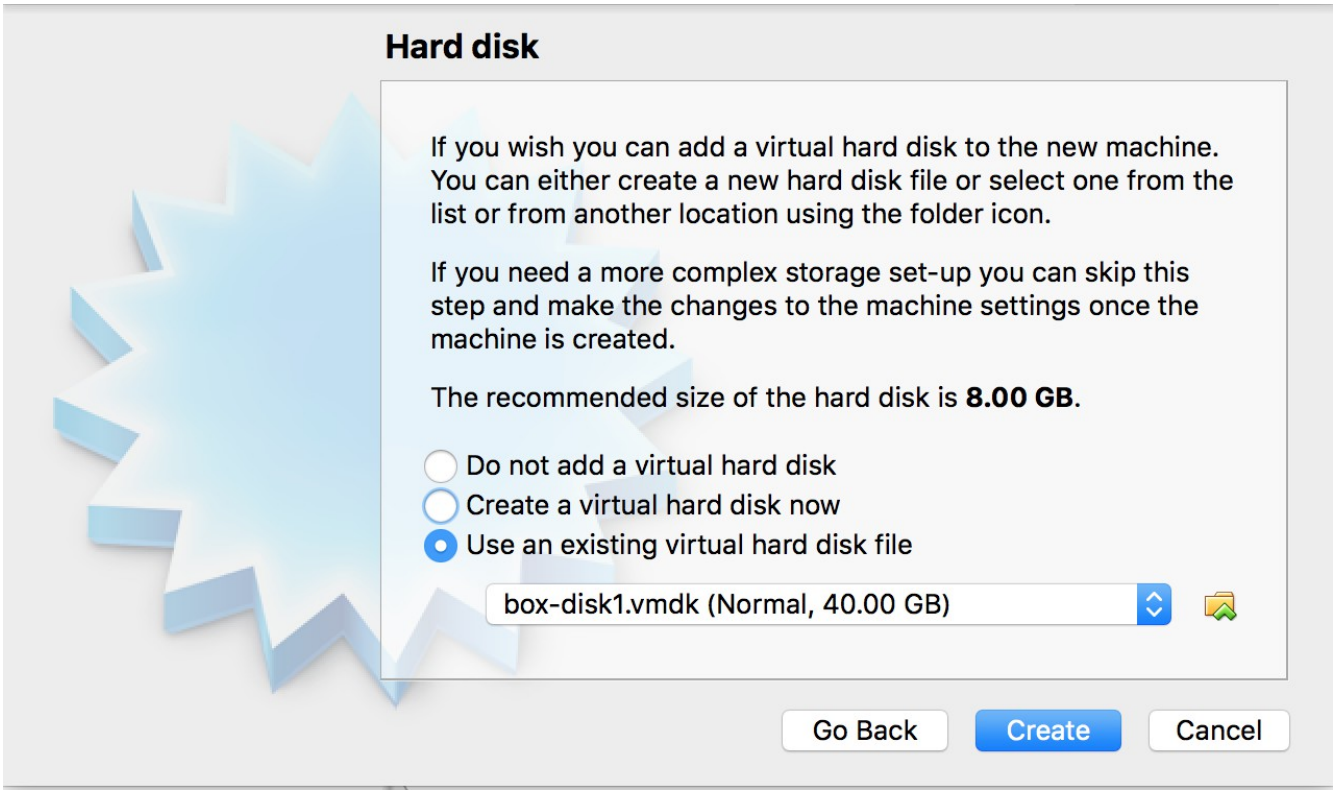
(Just name yours Raspian. I added the Raspian2 because I already have one box set up).

6. Click Continue.

7. And continue past this one:

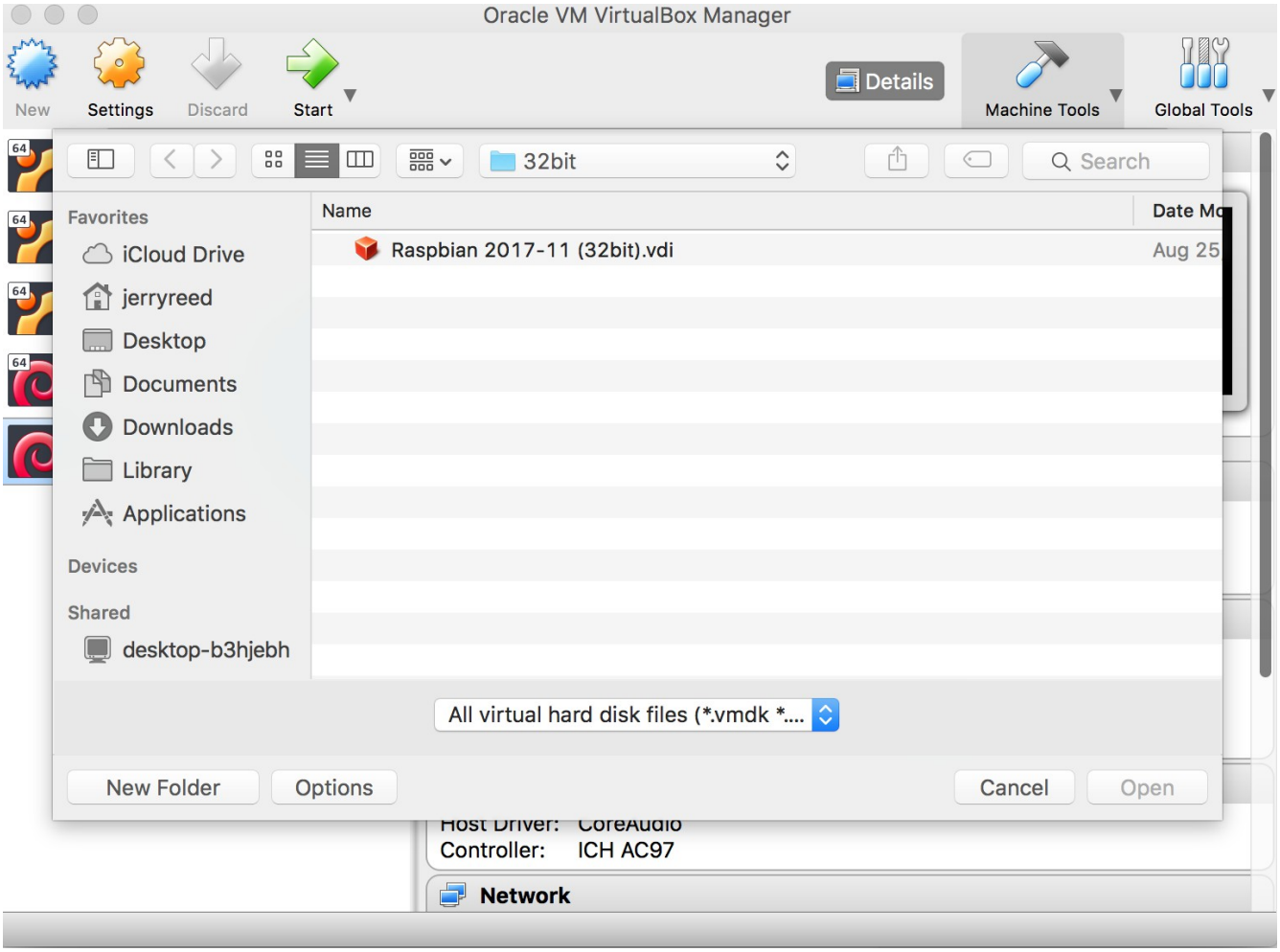


8. Then you will see this dialog:



I've selected “Use an existing virtual hard disk file”. Click on the tiny, subtle folder icon just above Cancel, and navigate to the location on your host machine where you decompressed the Raspian vdi file.

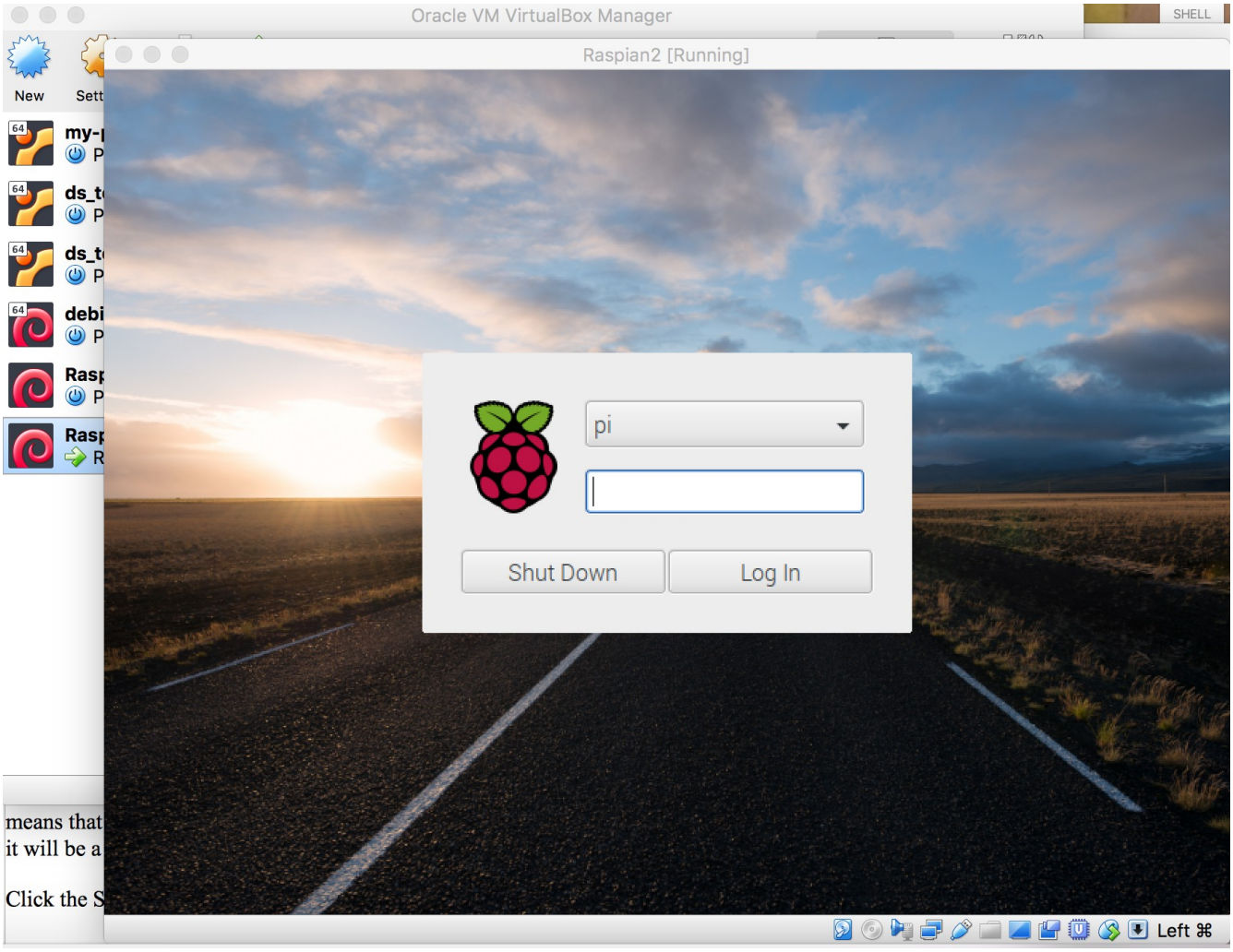
Here's mine:



9. Click on the vdi file and then click Open. Then click Create. Don't worry about the 500GB – that means that your virtual disk COULD grow to 500GB if you go crazy with adding stuff, but in practice it will be a whole lot smaller.

10. Click the Start arrow/button to boot the machine.

If everything goes well, and after you wait through a couple of scary-looking screens, you should see the initial Raspian GUI, like this:

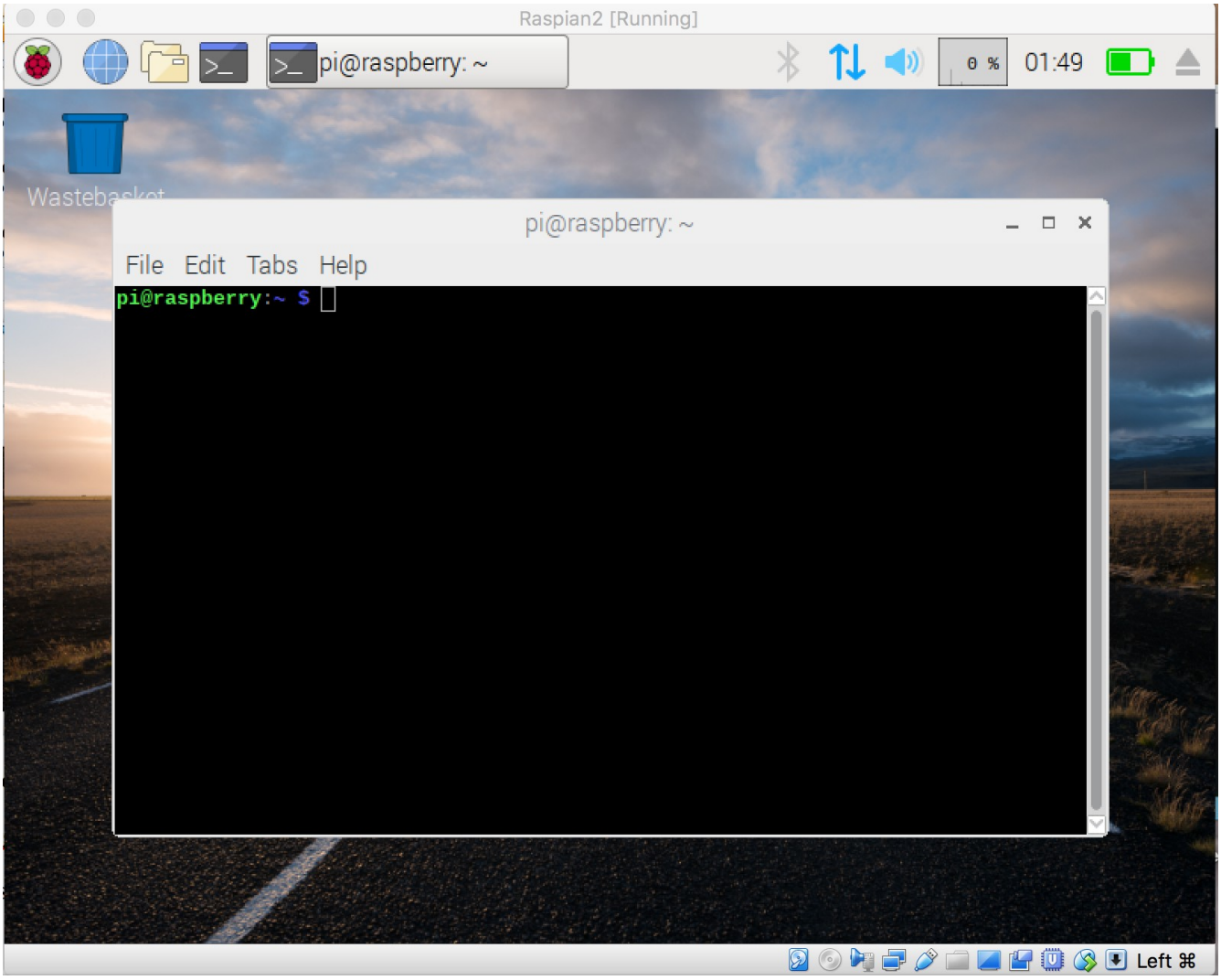


11. The password is:

osboxes.org

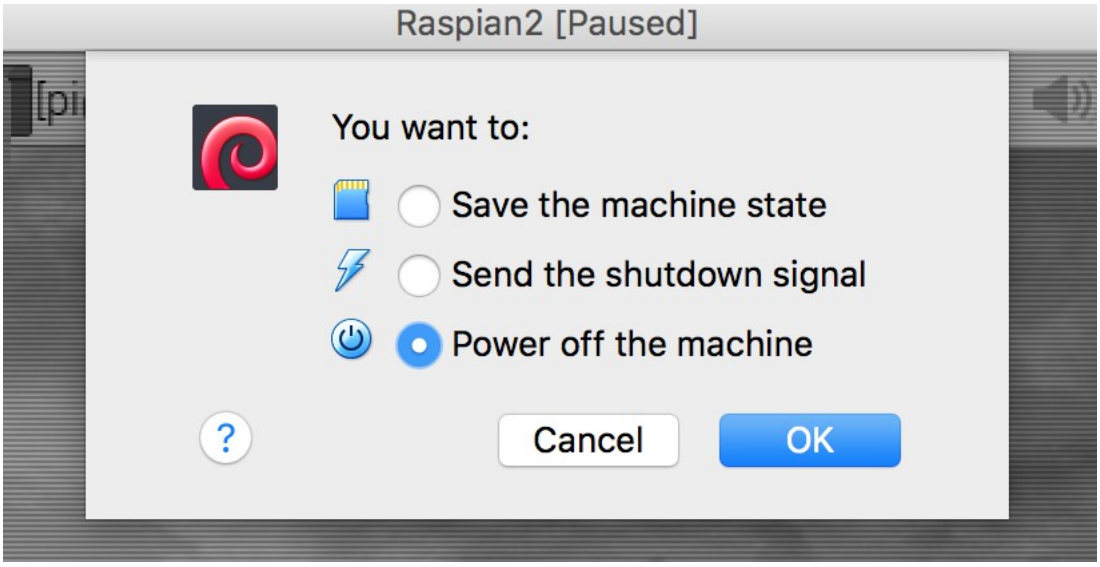
You can change it if you like, but you are responsible for remembering it.

After you successfully log in, and click on the terminal icon, you should see this:



That's the terminal command line we'll be learning to use in this class.

12. To stop the VM when you are done, click the close gadget in the VM window and you'll see this dialog:



13. Select “Save the machine state”, and click OK. The VM will shutdown, saving all your current work, and you will be returned to the virtual box application.