Configuring Raspberry Pi 3

Now that you have Raspbian installed and running on your Raspberry Pi 3 (RPi3), there are certain steps you have to perform to configure your RPi3 for its efficient working.

Please start the terminal on RPi3 and type the following command at prompt to start configuring, and press enter:
sudo raspi-config

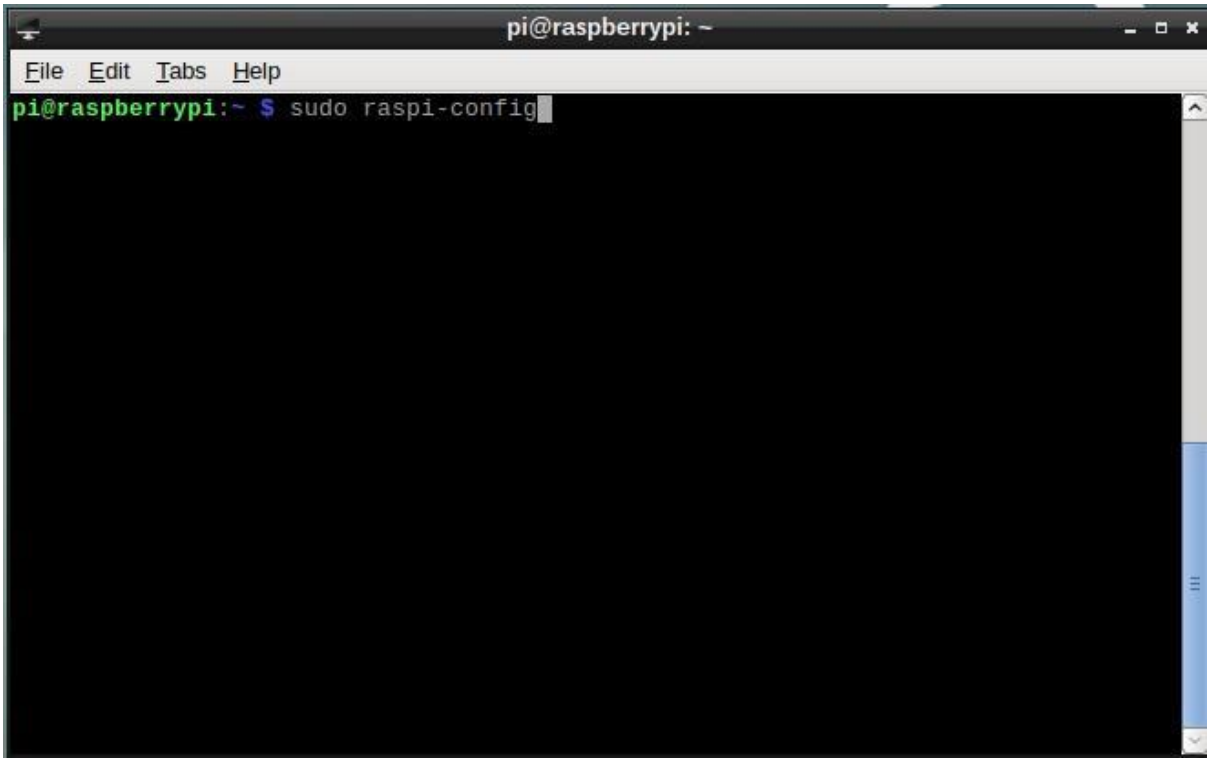

Figure 1: Configuration Command

On pressing enter, a configuration screen will occur with various configurable properties of the RPi3 as shown on the next page in Figure 2.:

Figure 2: Advanced Options

Move the UP-Down arrow keys + enter to select the configurable property. And Left-Right arrow keys to make decision selections.

Perform following configuration steps:

1. Expand Filesystem
   Please select property 7. named “Advanced Options” as shown in Figure 2. above. The screen then looks like that shown in Figure 3

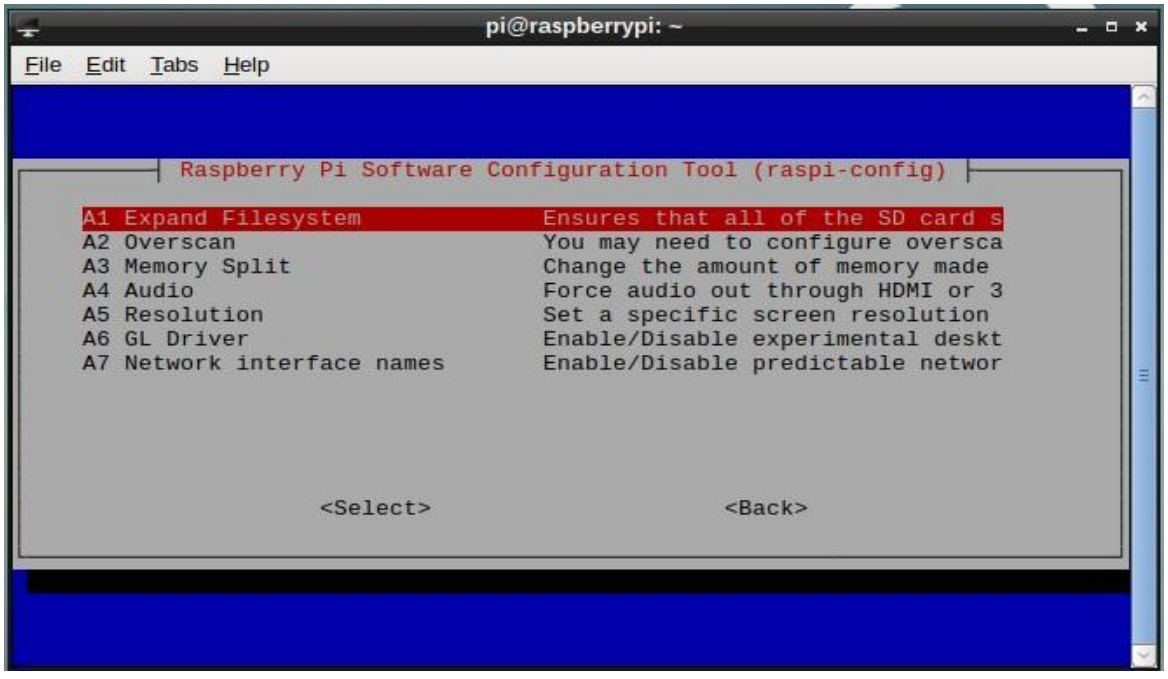

Figure 3: Expand Filesystem

To select to expand the Filesystem press enter on this property and the following screen will appear:

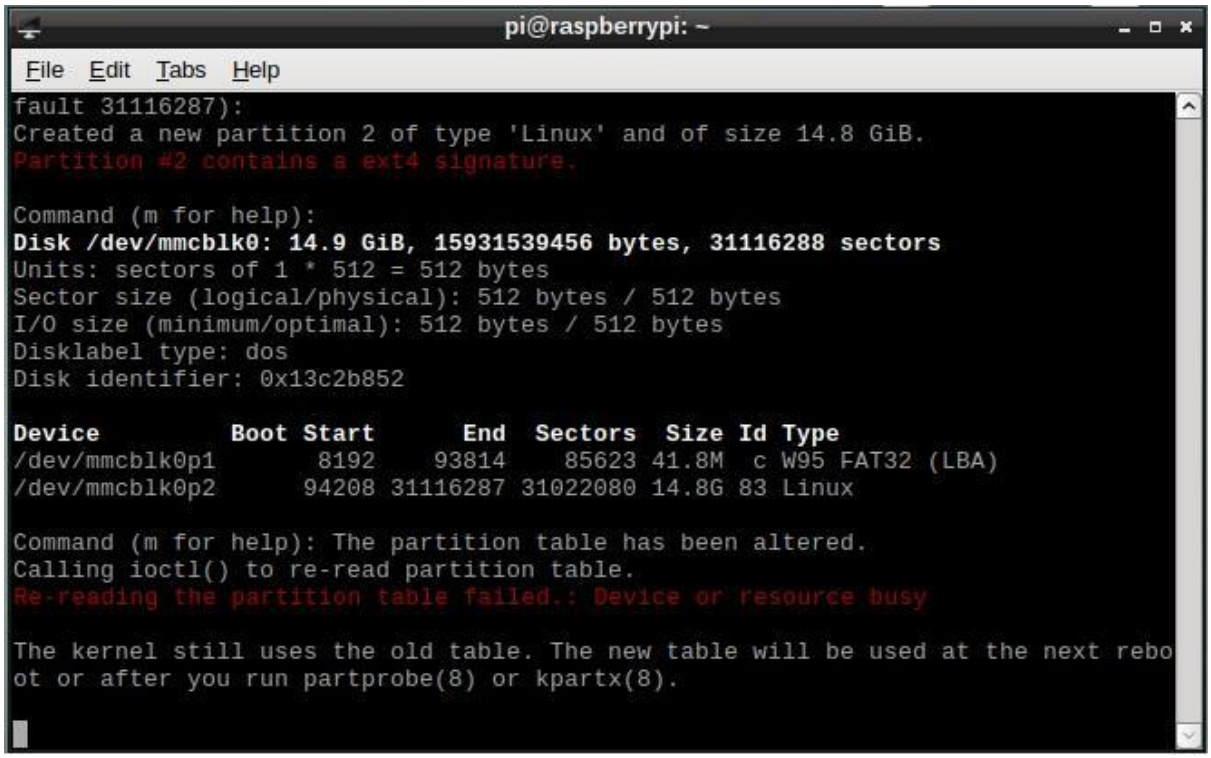

Figure 4: Expanding the Filesystem

Once the filesystem is expanded, the following screen shown in Figure 5. will appear:

Figure 5: Done expanding Filesystem

Please select “OK” to finish this configuration.

2. Enable PiCamera (PiCam)
   In order for the provided PiCam to work with your RPi3, you need to select the 5th property called “Interfacing Options”, as shown in the Figure 6.:

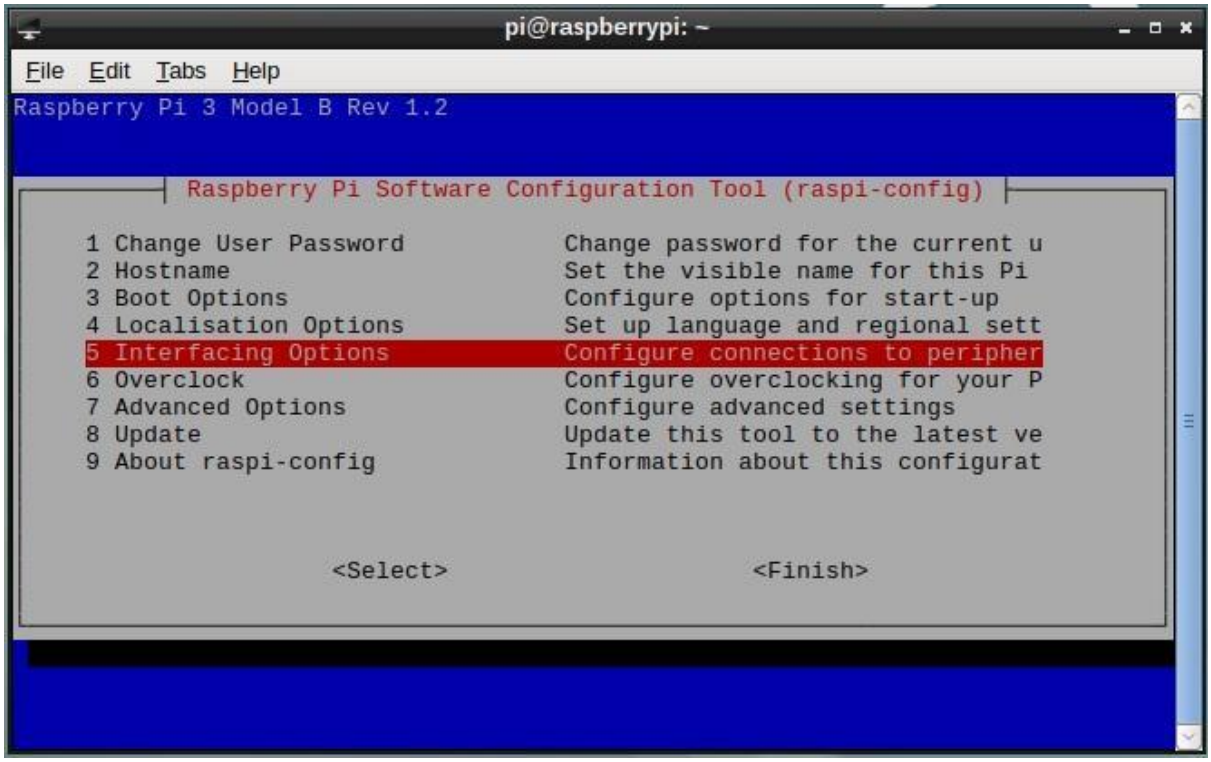

Figure 6: Camera Enabling via peripheral interfacing

On selecting this property, the “Camera” is property P1 in the new list of properties, as shown in the Figure 7. below:

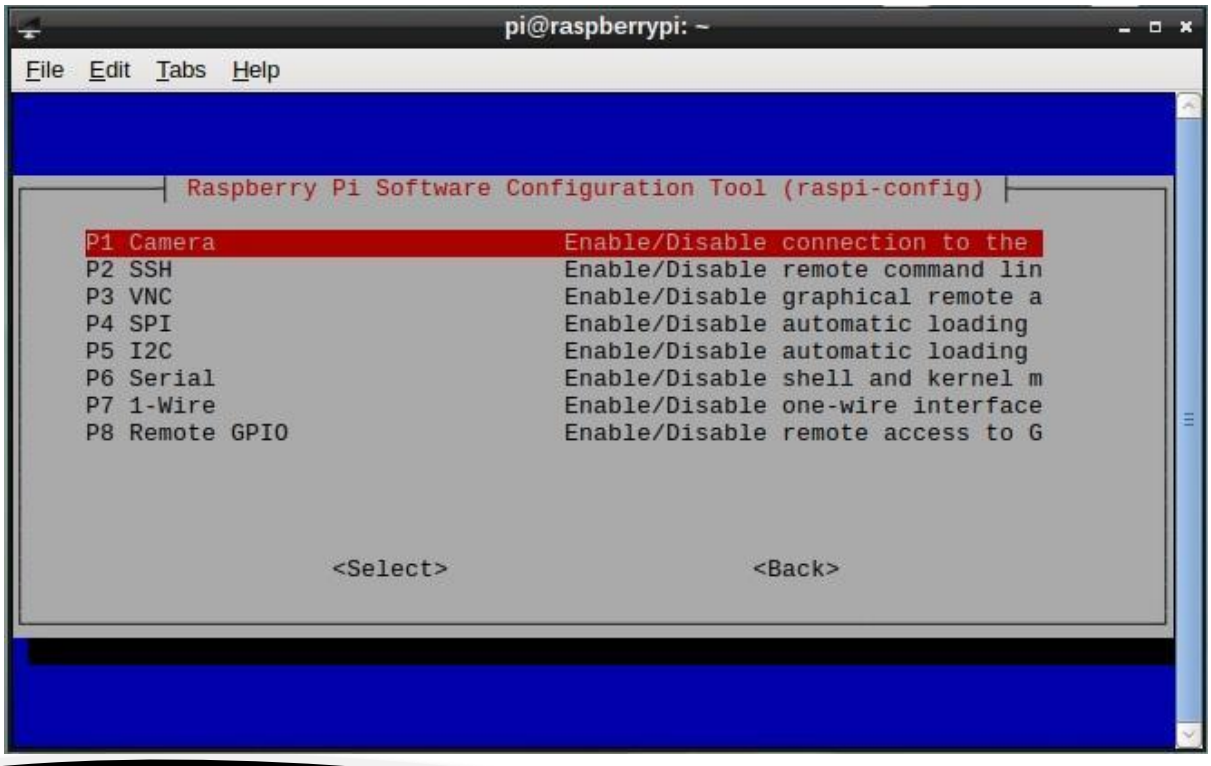

Figure 7: Camera selection

You will be asked if you want to enable the camera interface, please select “Yes” as shown in the Figure 8. below:

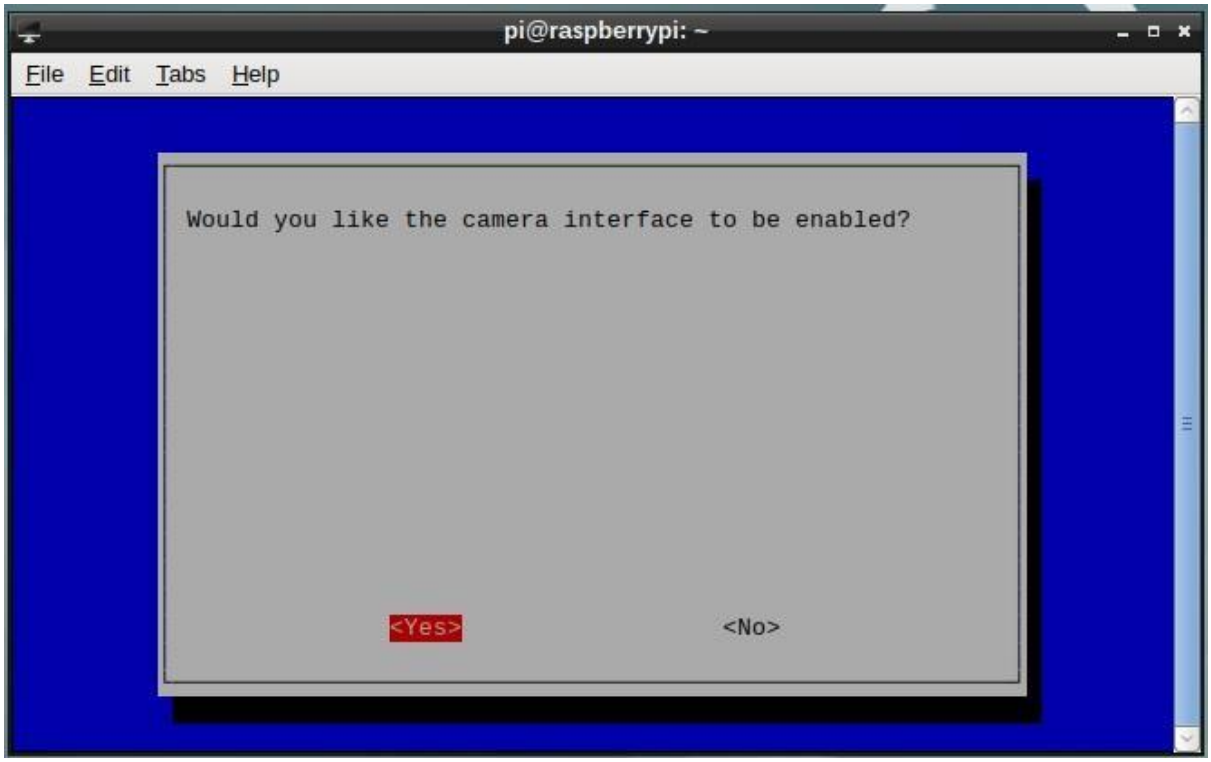

Figure 8: Enable Camera Question

You will be prompted about the status of enabling the PiCam, as shown in the Figure 9. below:

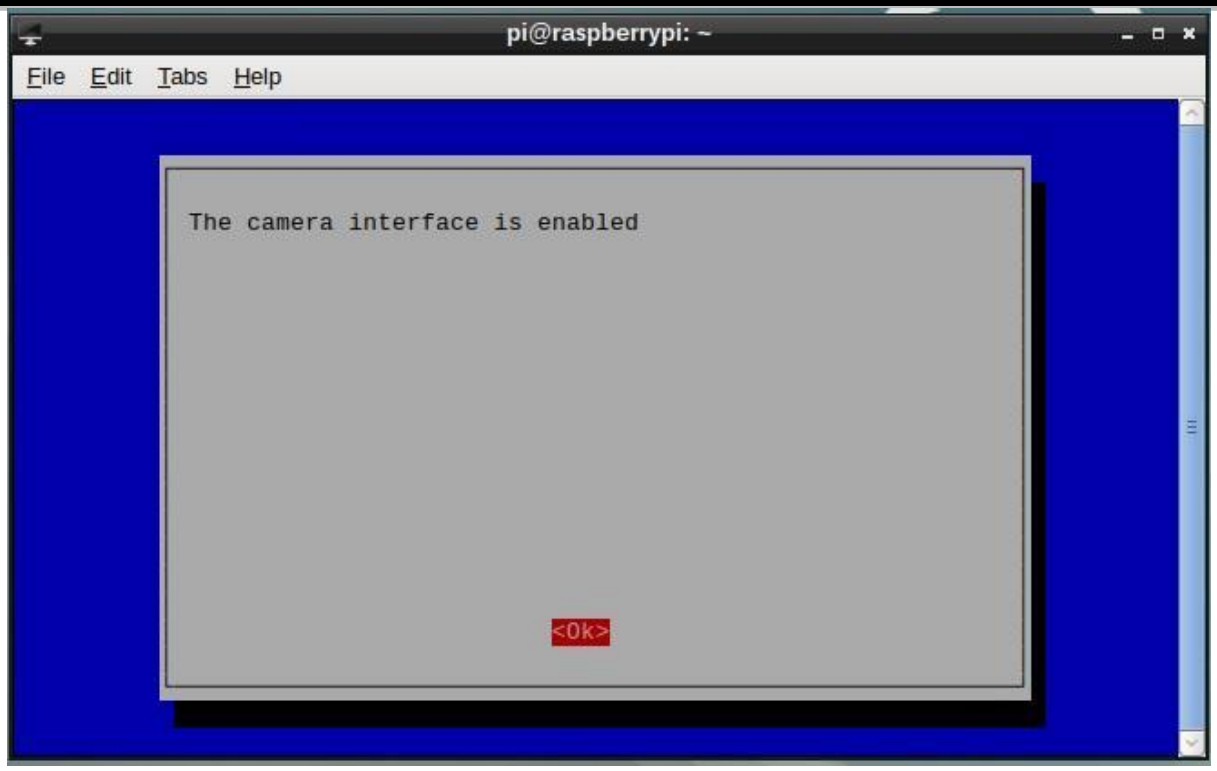

Figure 9: Camera Enable Status

On selecting this property, it enables the RPi3 OS to work smoothly using the PiCam. If this property is not selected, the PiCam will not capture any image or video via RPi3 at all.

3. Expand Memory allocation
   In order for the provided PiCam to work with your RPi3, you need to select the 7th property called “Advanced Options”

Figure 10: Advanced Options

On selecting this property, you must select the property named “Memory Split” from the new list of properties which is the property A3 from the new list of properties; shown in the Figure 11. below

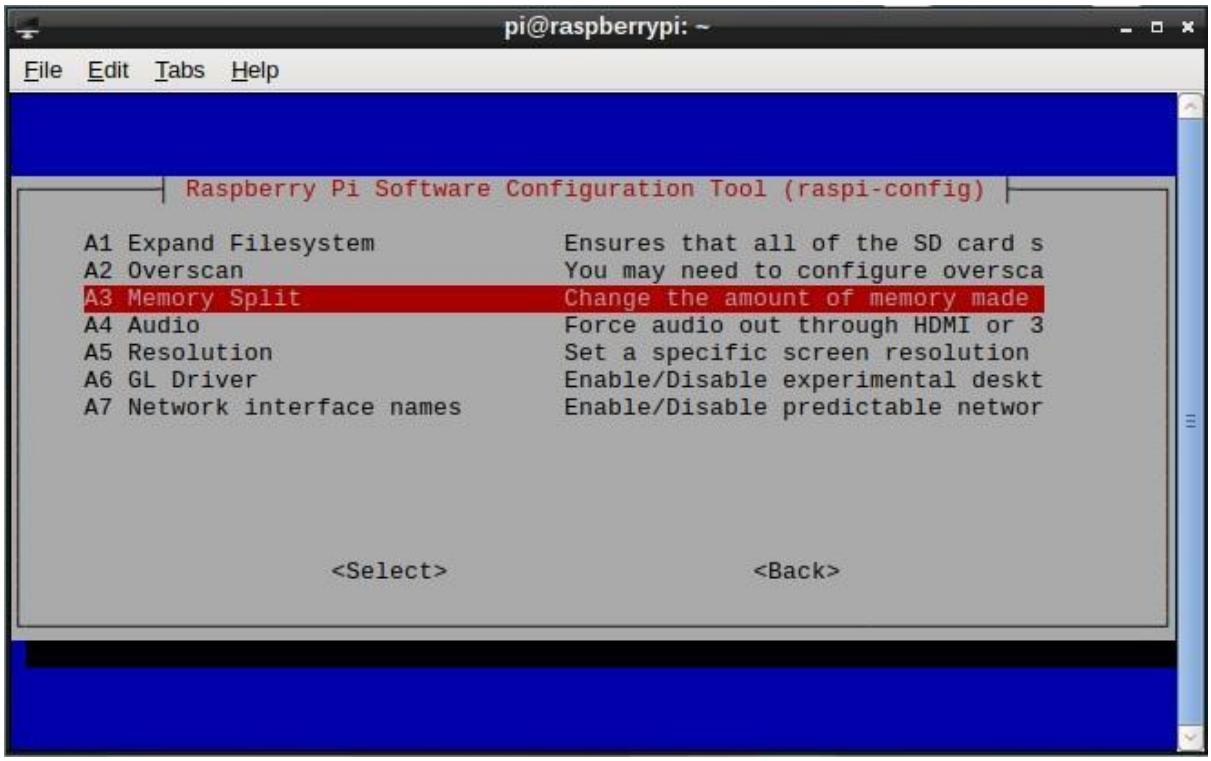

Figure 11: Memory Split

By default, the memory is set to 128 (MB), as shown in the Figure 12. below:

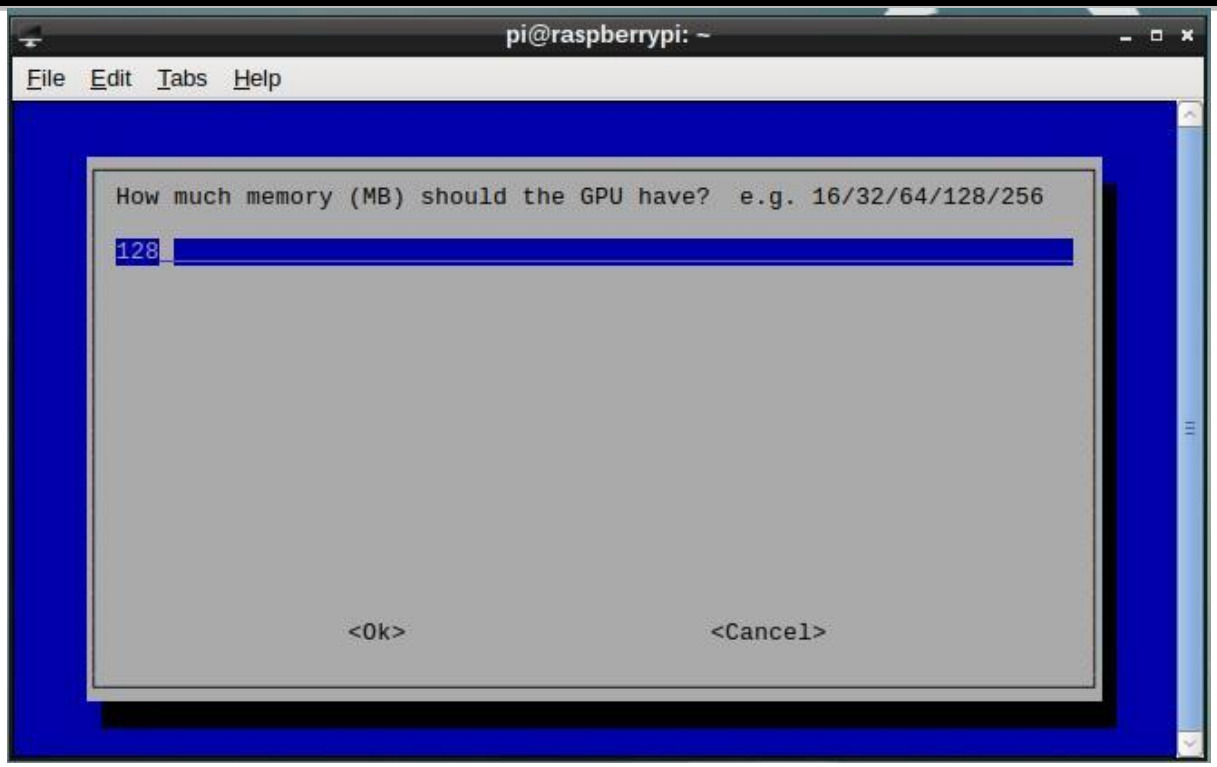

Figure 12: Memory Pre-Allocation

We recommend you set it to 256 (MB), by typing 256 in the text box provided; as shown in the Figure 13. below:

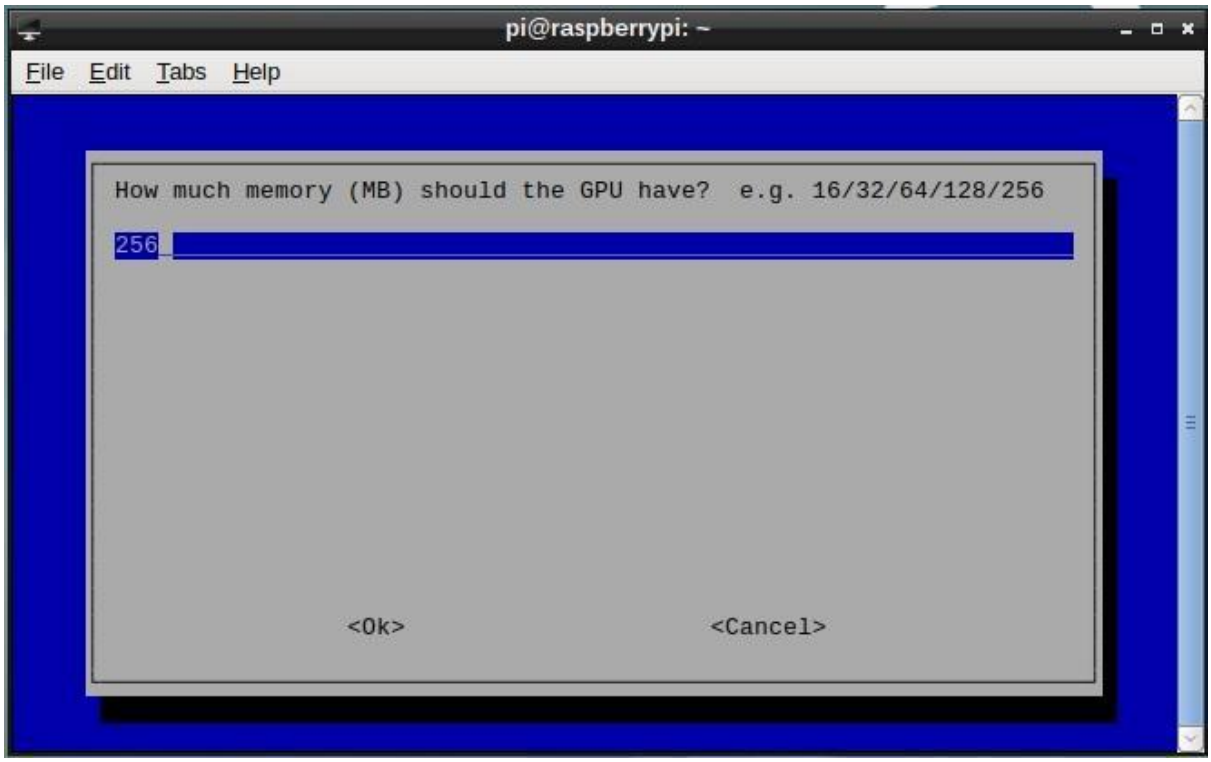

Figure 13: Change in Memory Allocation

Once you have set the memory to your requirement, select “OK”; as shown in the Figure 14. below:

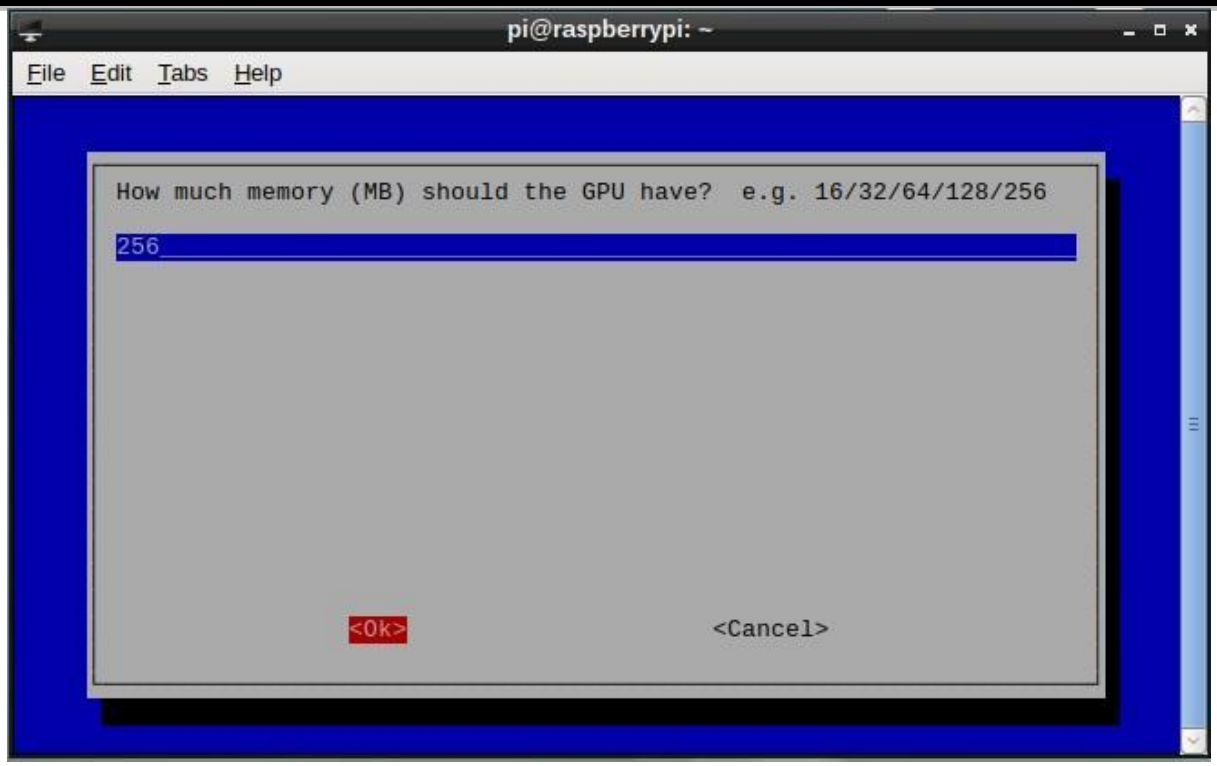

Figure 14: Memory set to 256 MB

Finally select “Finish” and you have finished configuring your RPi3, as shown in the Figure 15. below:

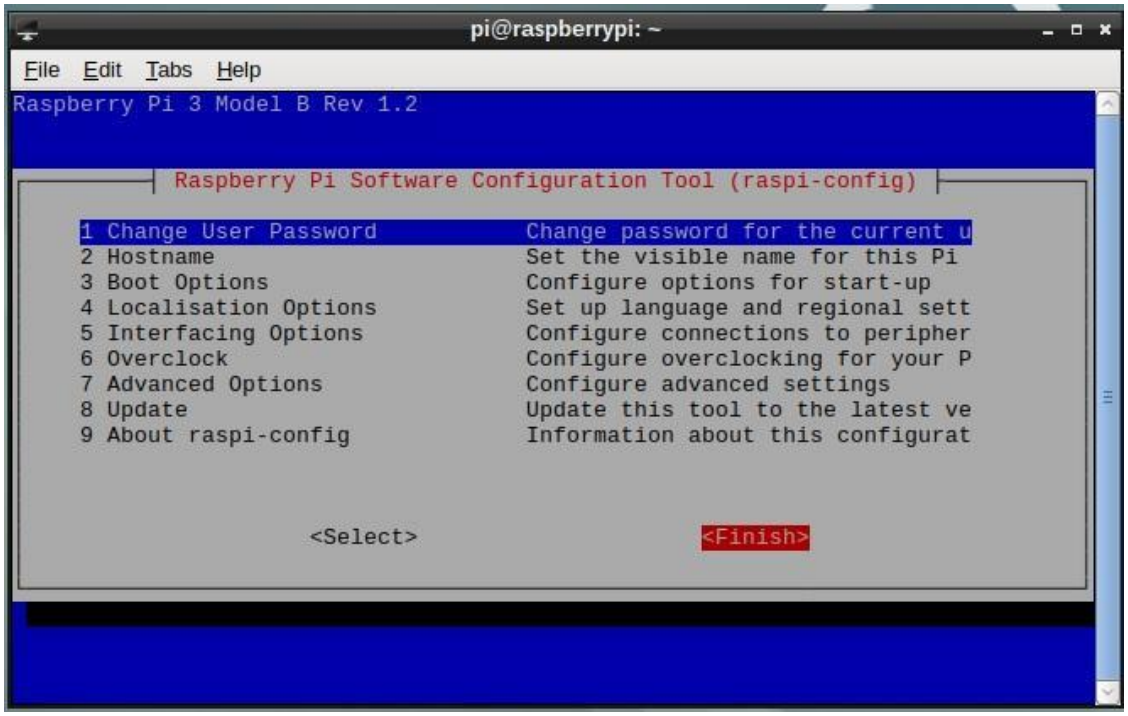

Figure 15: Finish