

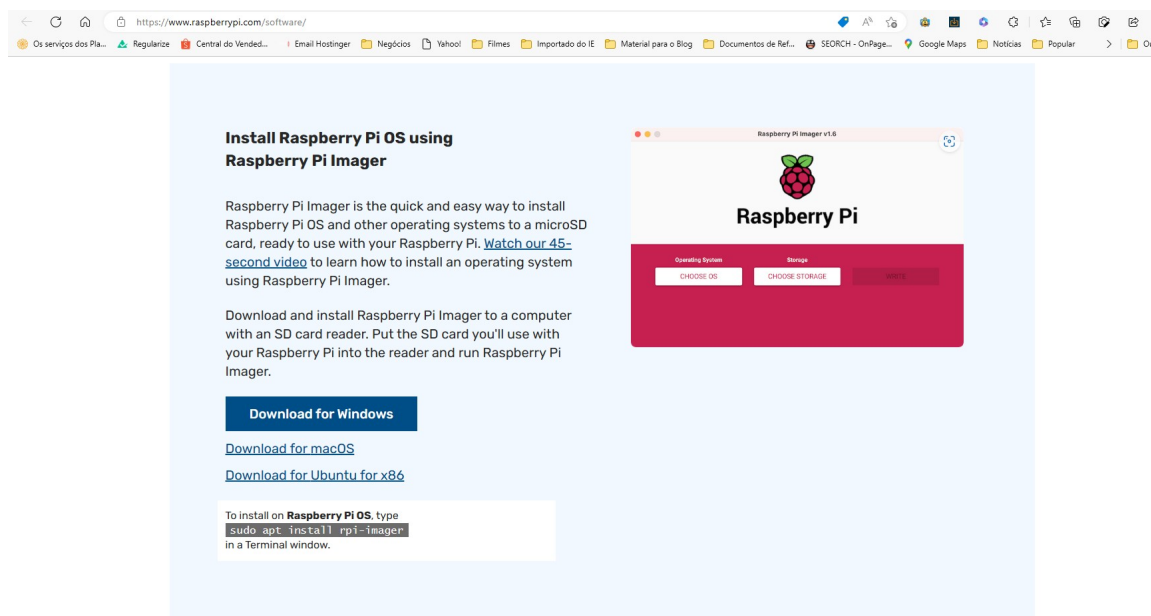


*** This is a MSXPi Developer Contribution by Retropix Brazil ***

This tutorial will help you in a simple, direct and didactic way to prepare and install all the necessary software on the Micro SD card to use your MSXPi.

Downloading the Installation Software for the Raspberry Pi OS

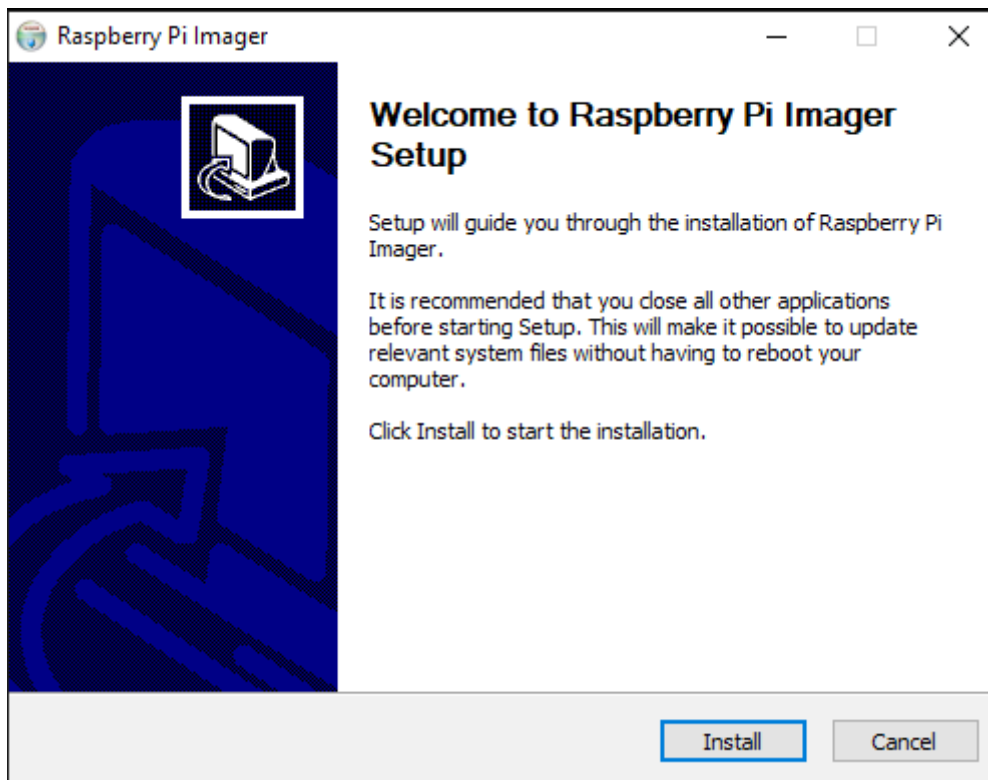
1st. Go to the link <https://www.raspberrypi.com/software/> to download and run the software that will install the Raspberry Pi OS on your micro SD card.



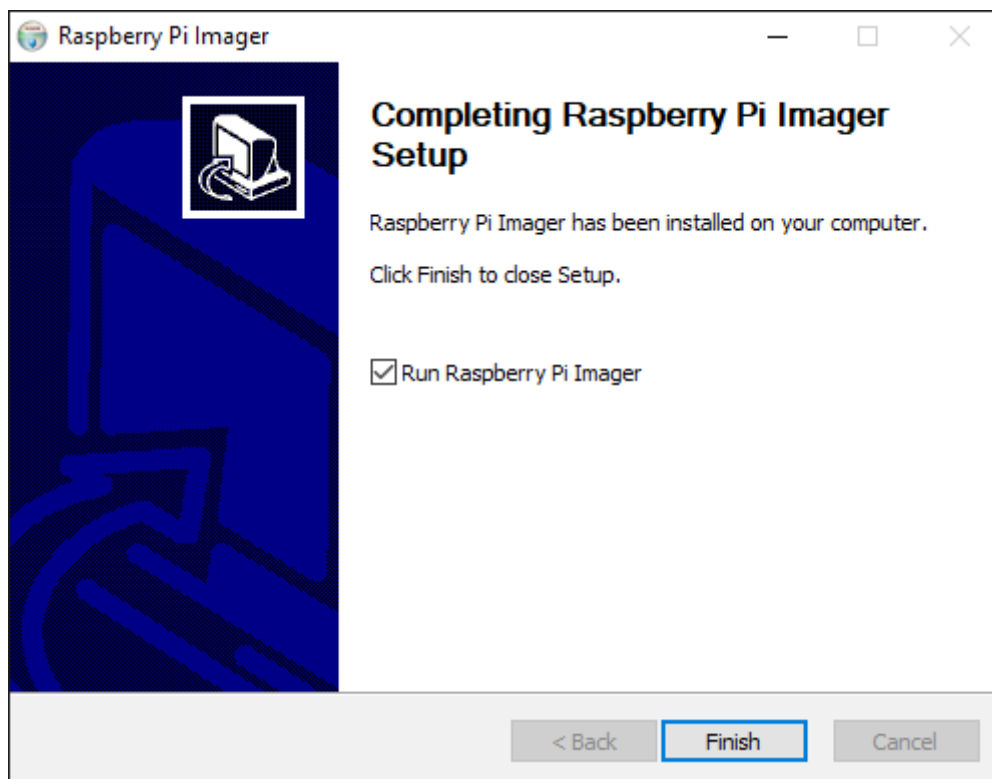
2nd. Download the installer for the platform that suits you best. The options are for Windows, macOS, and Ubuntu.

In this tutorial we will do the installation using Windows 10.

3rd. After downloading the **imager_1.7.4.exe** file (latest version) in your download area. Click on it to run.



4th. Click **Install** and wait for the installation of the application that will help you create the SD card with the Raspberry Pi OS.

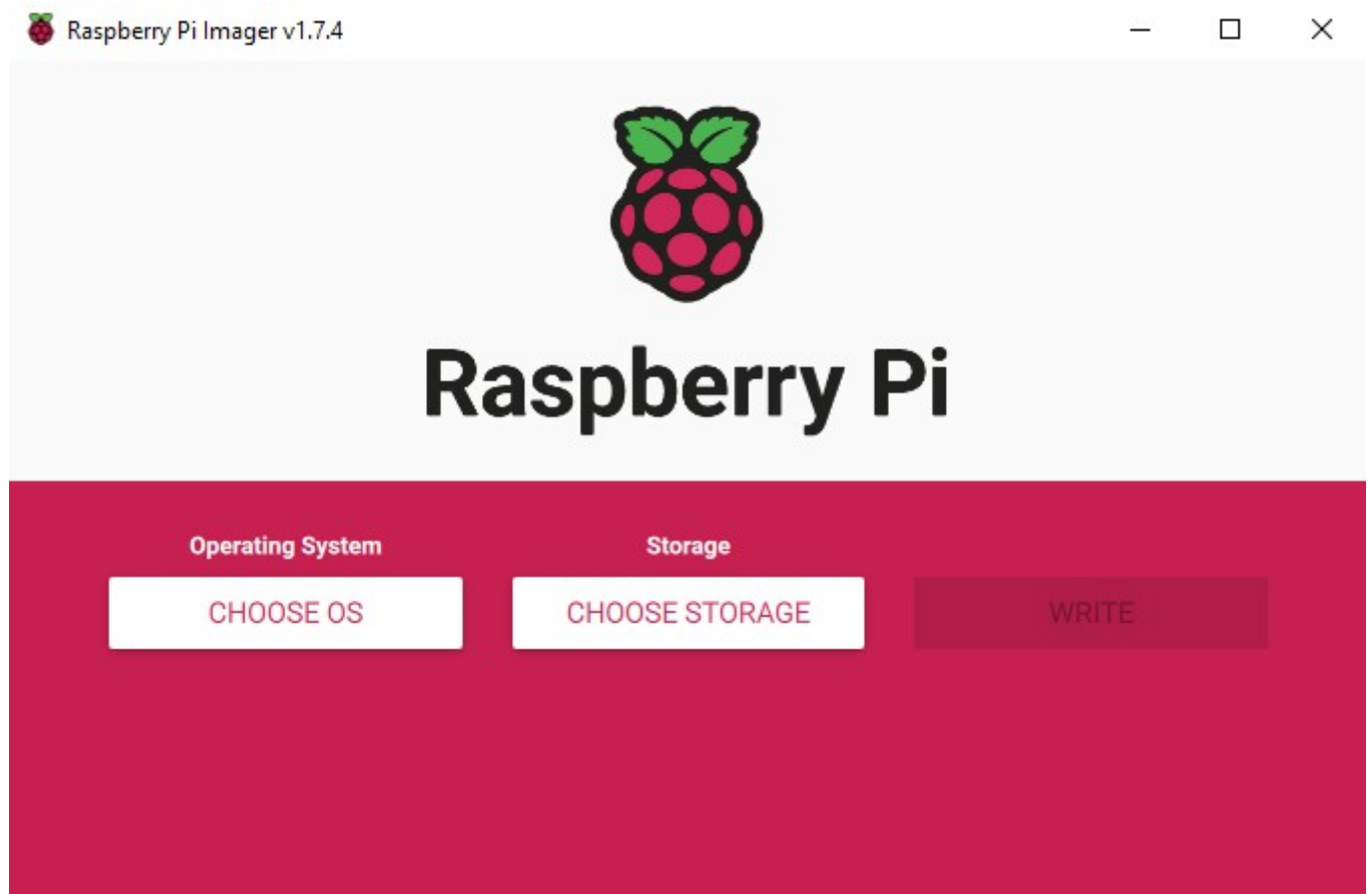


5th. Click **Finish** to finish the installation and run the SD Card image creation program.

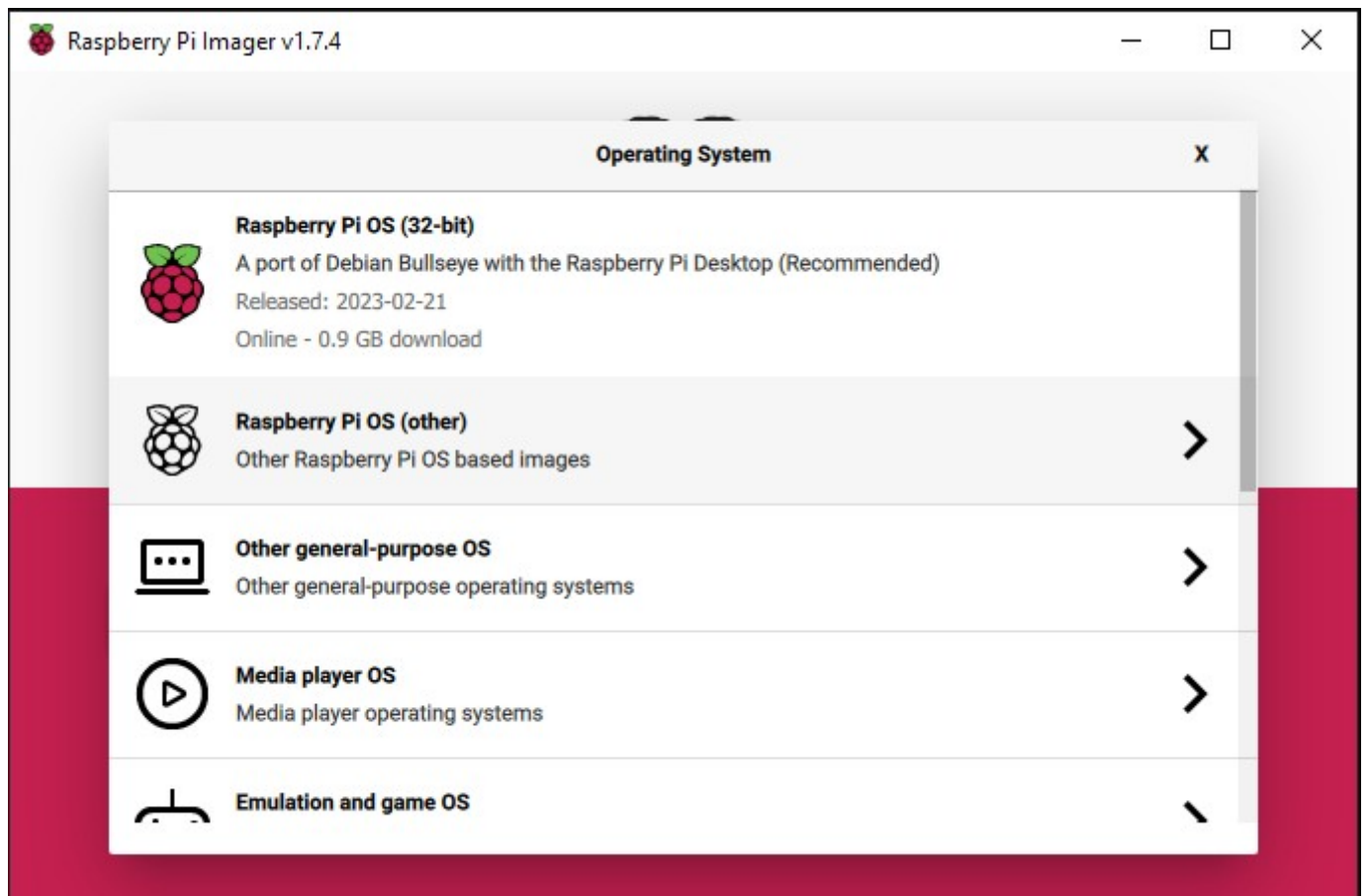
Installing the Raspberry Pi OS System Properly

1st. Insert the Micro SD card you want to use into your Computer.

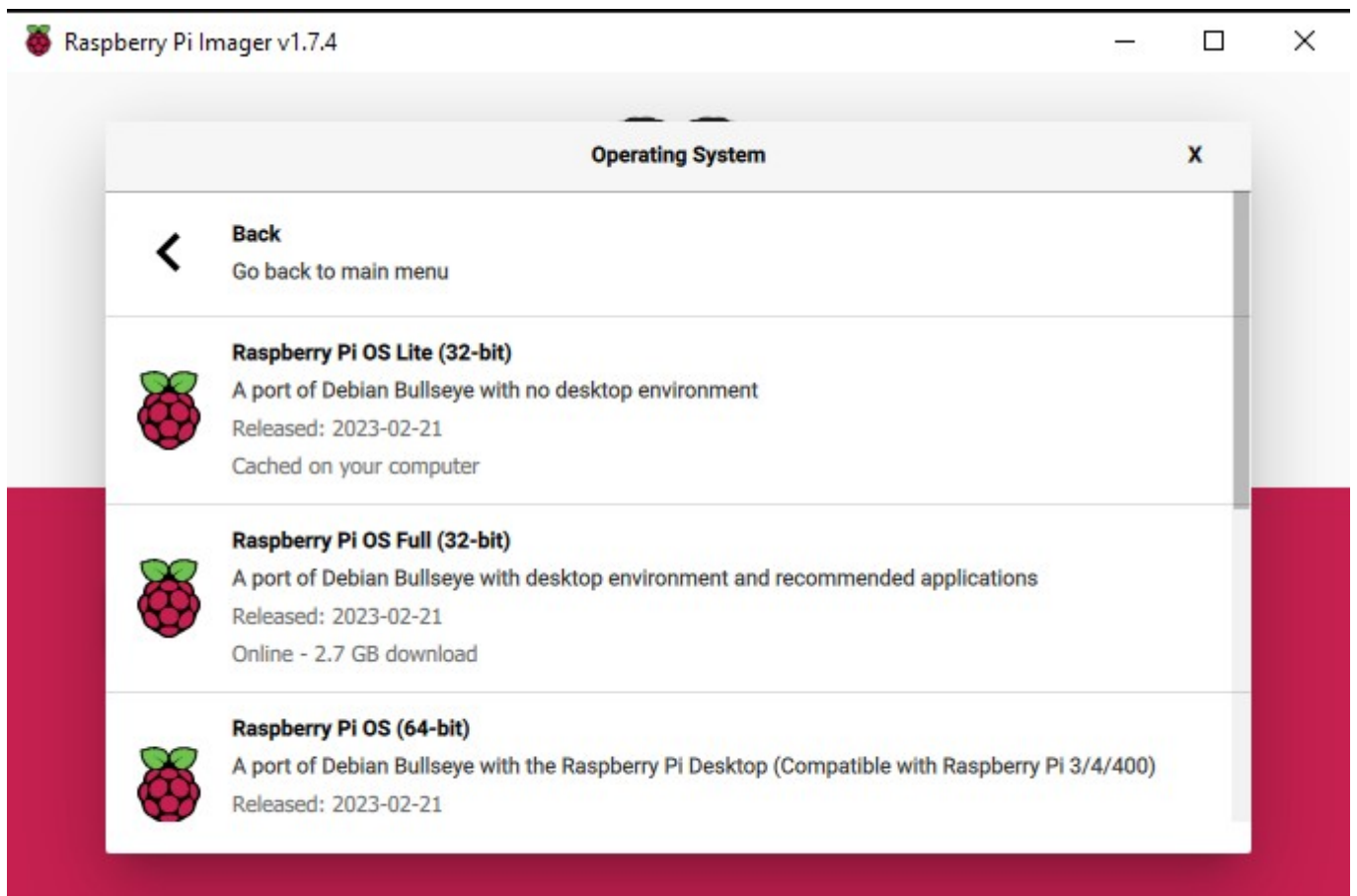
2nd. With the application open and the Micro SD card already inserted, first click on **CHOOSE OS**.



3rd. Choose the **Raspberry Pi OS (Other)** option to choose the version we use on the MSXPi.



4th. Choose the **Raspberry Pi OS Lite (32-bit)** option



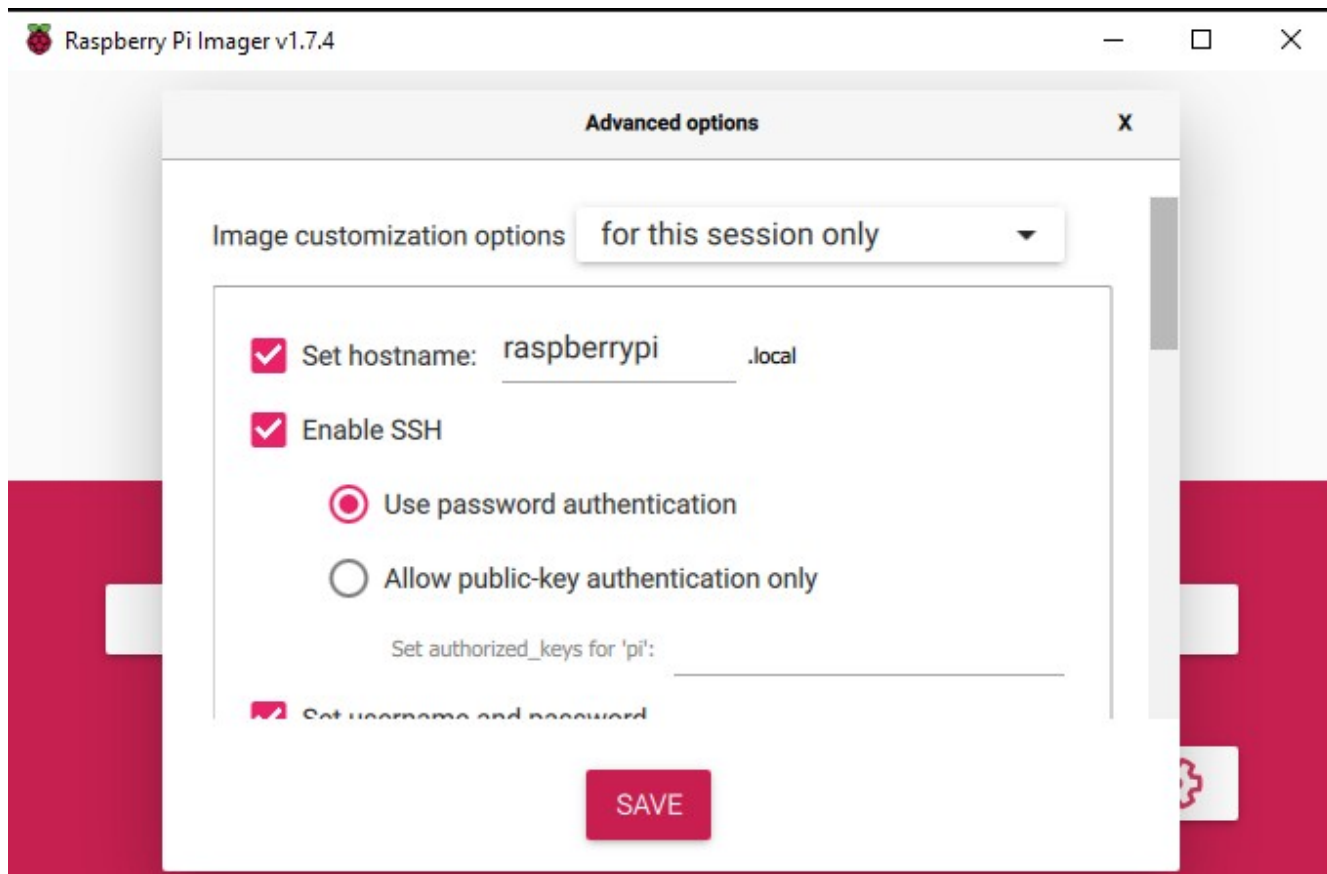
5th. Now click on **CHOOSE STORAGE** button to choose your Micro SD card and install Raspberry Pi OS



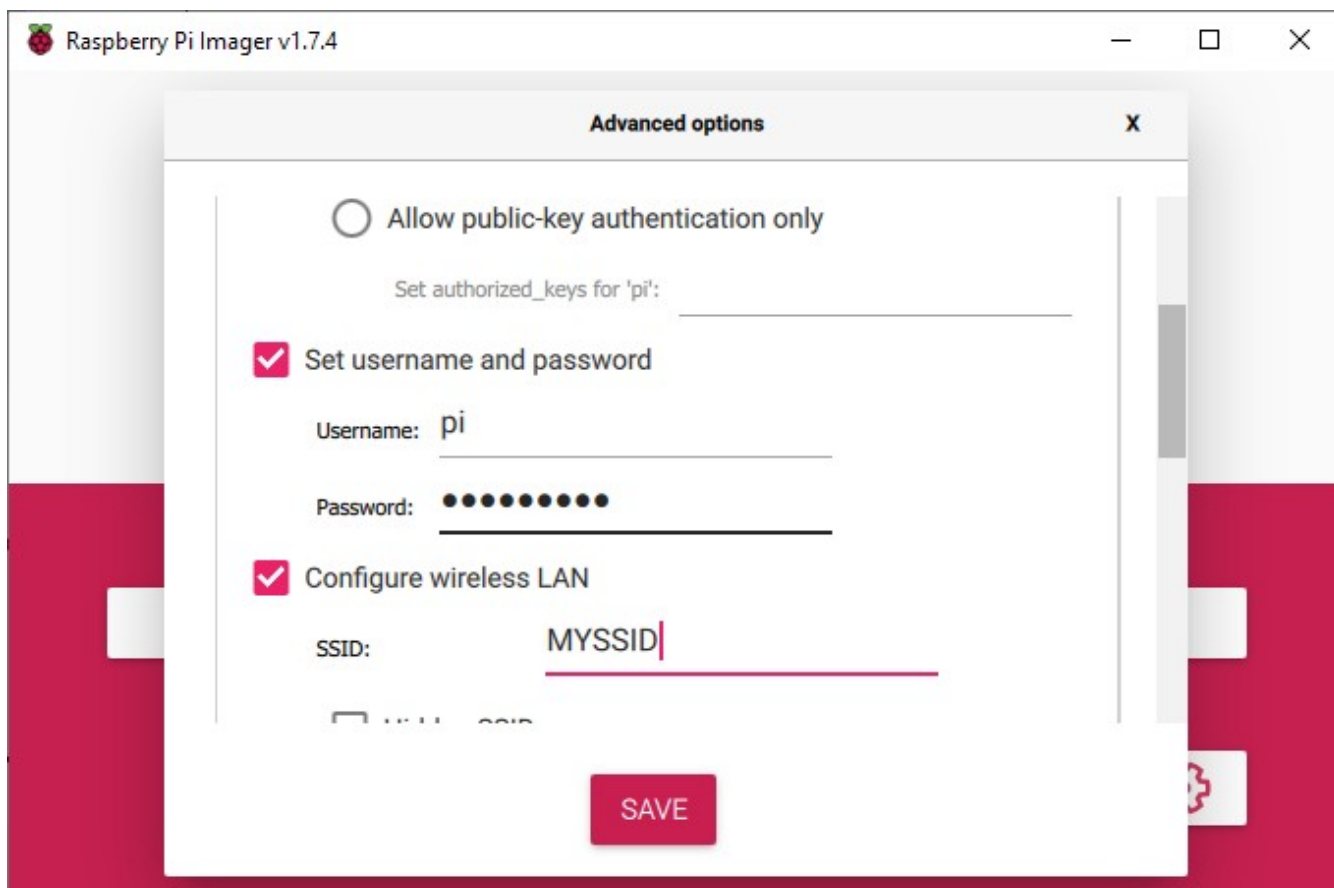
6th. Click on the **Gear button** to configure the options for remote access in the Raspberry Pi OS via computer

7th. Check **Set hostname**

8th. Also check the option **Enable SSH**



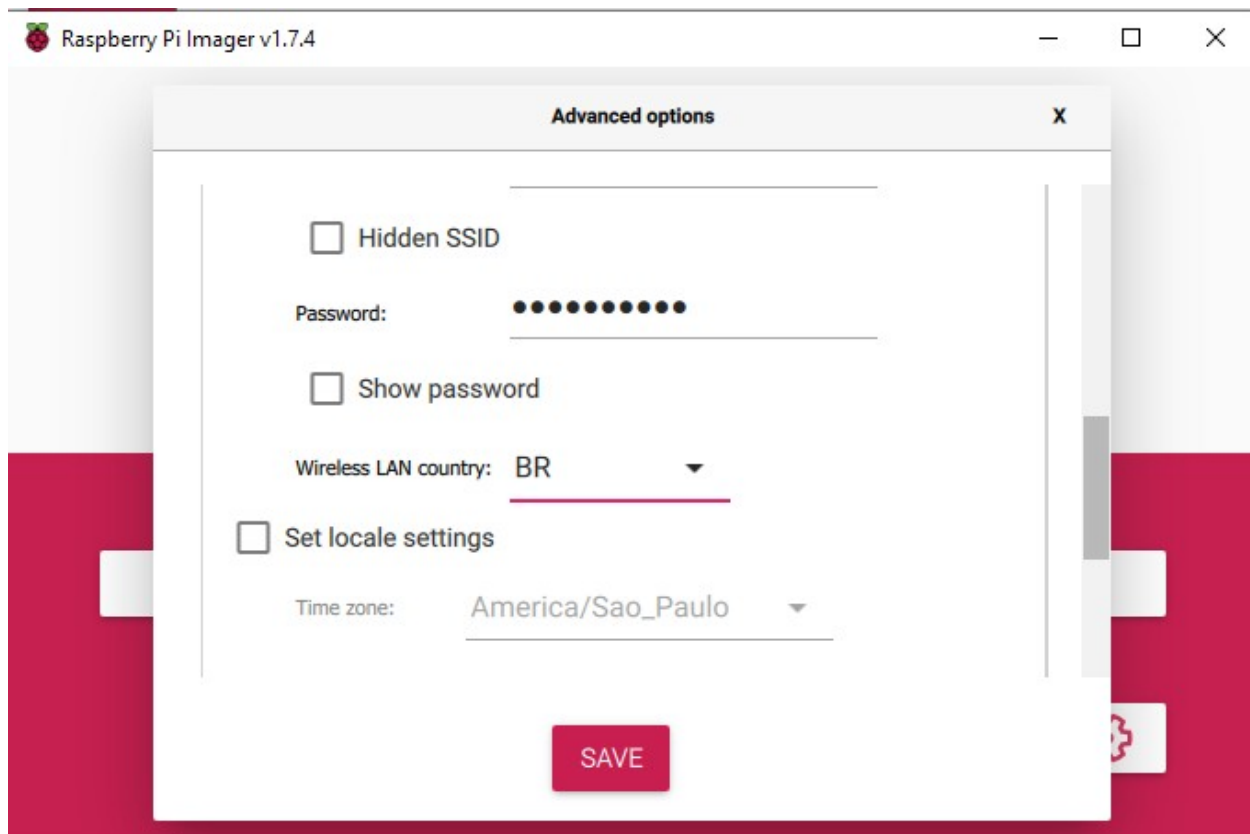
9th. Put the **user** and **password** to access the system (suggestion user: pi and password: raspberry)



10th. Also configure your WIFI network, putting the **SSID** (name of your network) and the **Password**

11th. Also choose your region (in my case **BR** de Brazil)

12th. Okay, that's enough for what we need. Click **SAVE**.



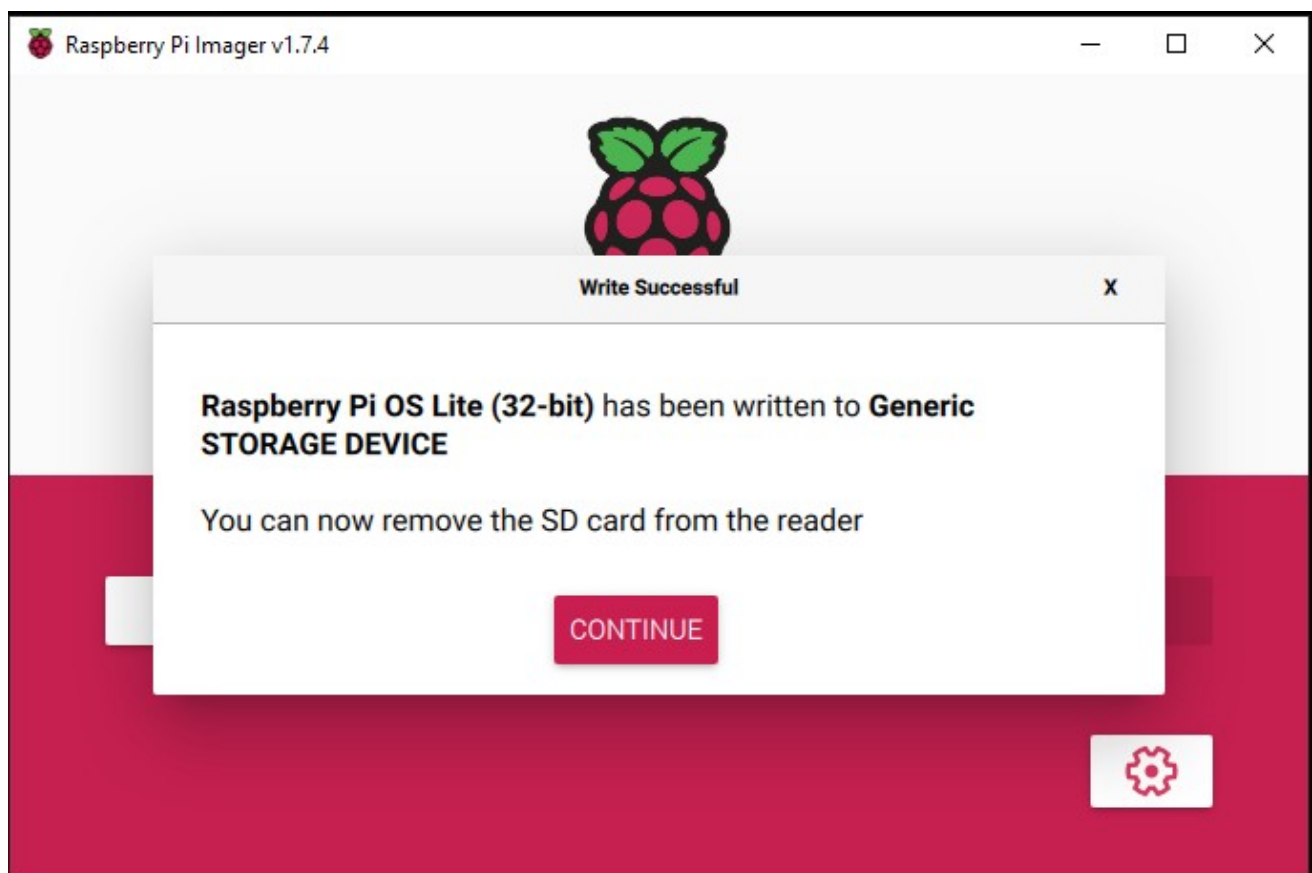
14th. And finally, click **WRITE** to install Raspberry Pi OS on your Micro SD card.



15th. Wait for it to install on your Micro SD card



16th. When finished, remove the SD card from your computer



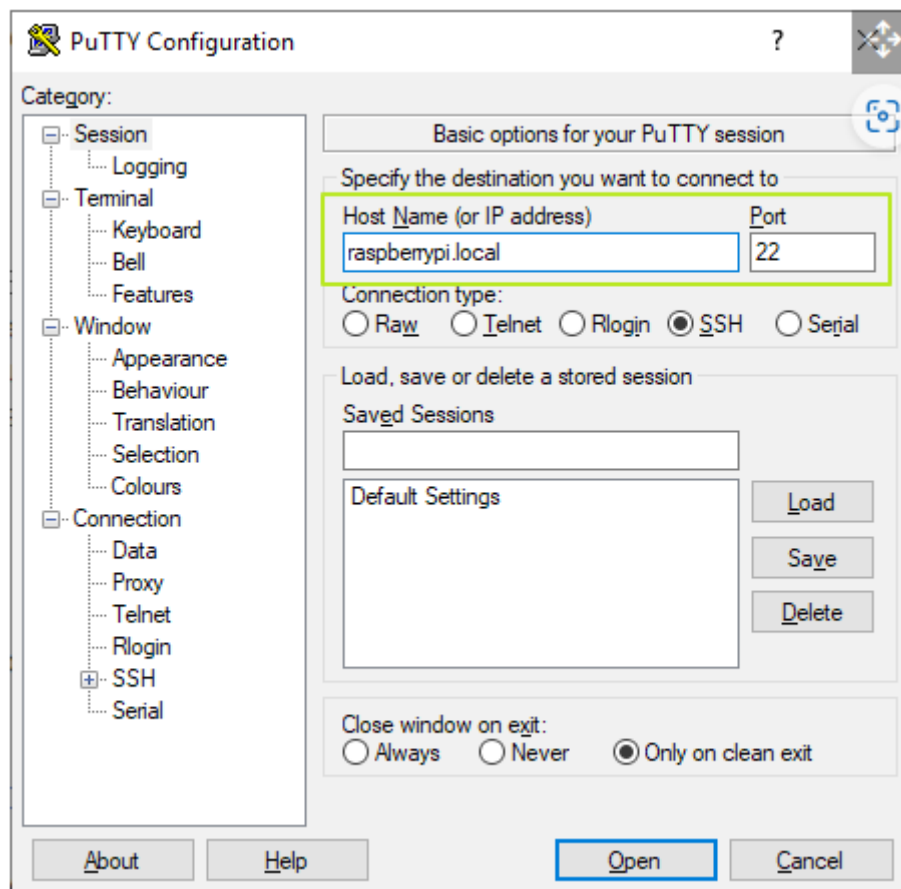
Connecting your MSXPi

Now, insert your Micro SD card into the MSXPi. Plug the MSXPi cartridge into your MSX and turn it on. Wait for all initialization to finish. At this point, MSXPi should be trying to connect to your WiFi network. After your MSXPi connects to your WiFi network (It takes a long time to connect to your network the first time, **about 5-10 minutes**). If you can, monitor your router by checking if the Raspberry has already connected or simply wait and test the connection through Putty.

When the SSH connection is already established, follow the next steps.

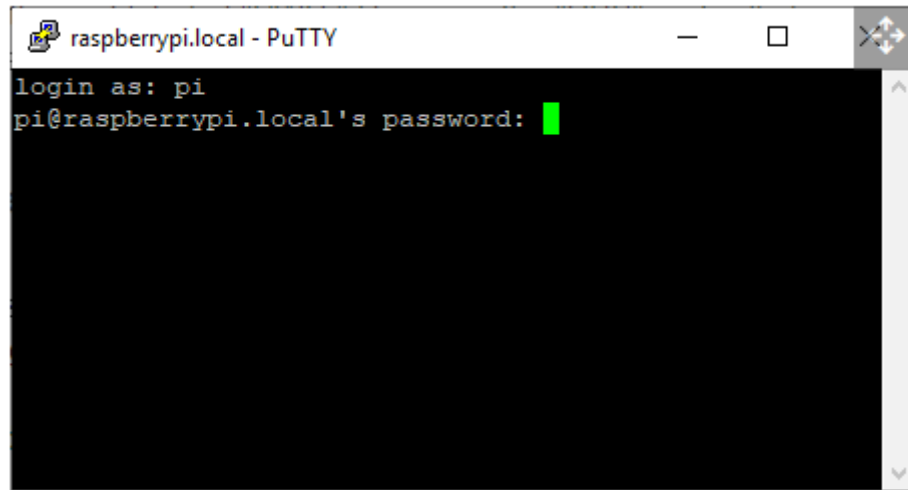
1st. Download ([Download PuTTY - a free SSH and telnet client for Windows](#)) and install the Putty application if you haven't already installed it on your computer. Putty is an SSH Client for Windows.

2nd. Run Putty, enter the **hostname** (default is raspberrypi or raspberrypi.local) and click the **Open button**.

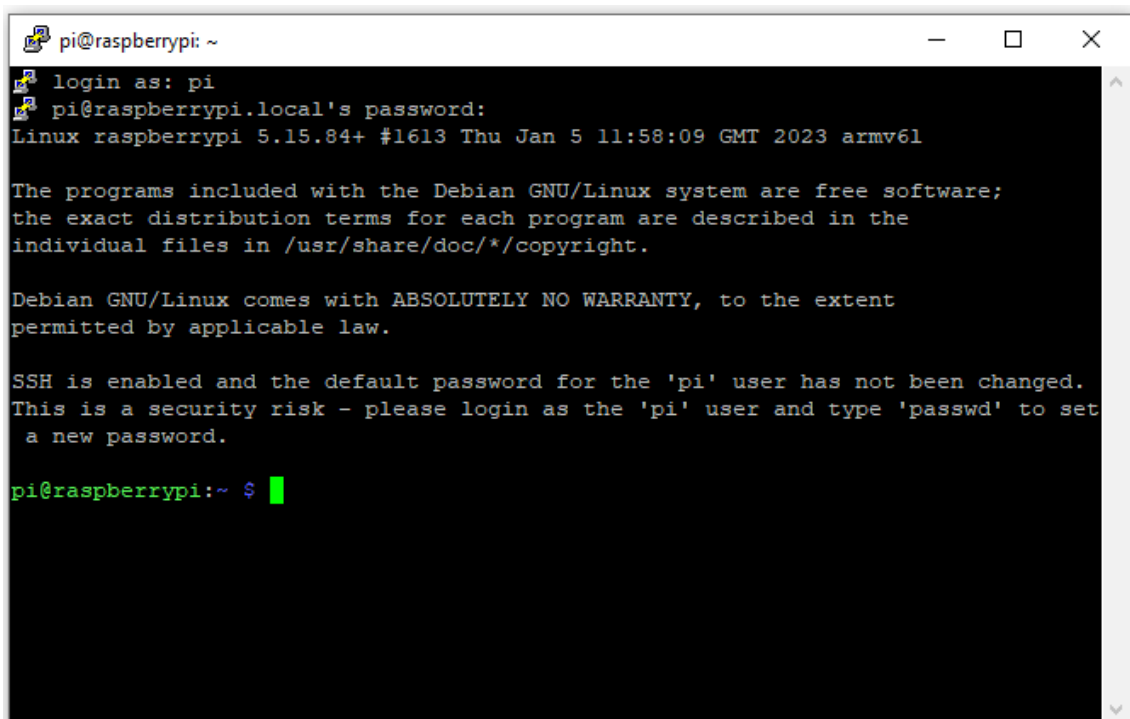


3rd. Click **Ok** or **Accept** if you have any security alerts. This is not a problem.

4th. Enter your **username** (pi) and **password** (raspberry).



Ready. You are now logged in and have access to the command prompt.

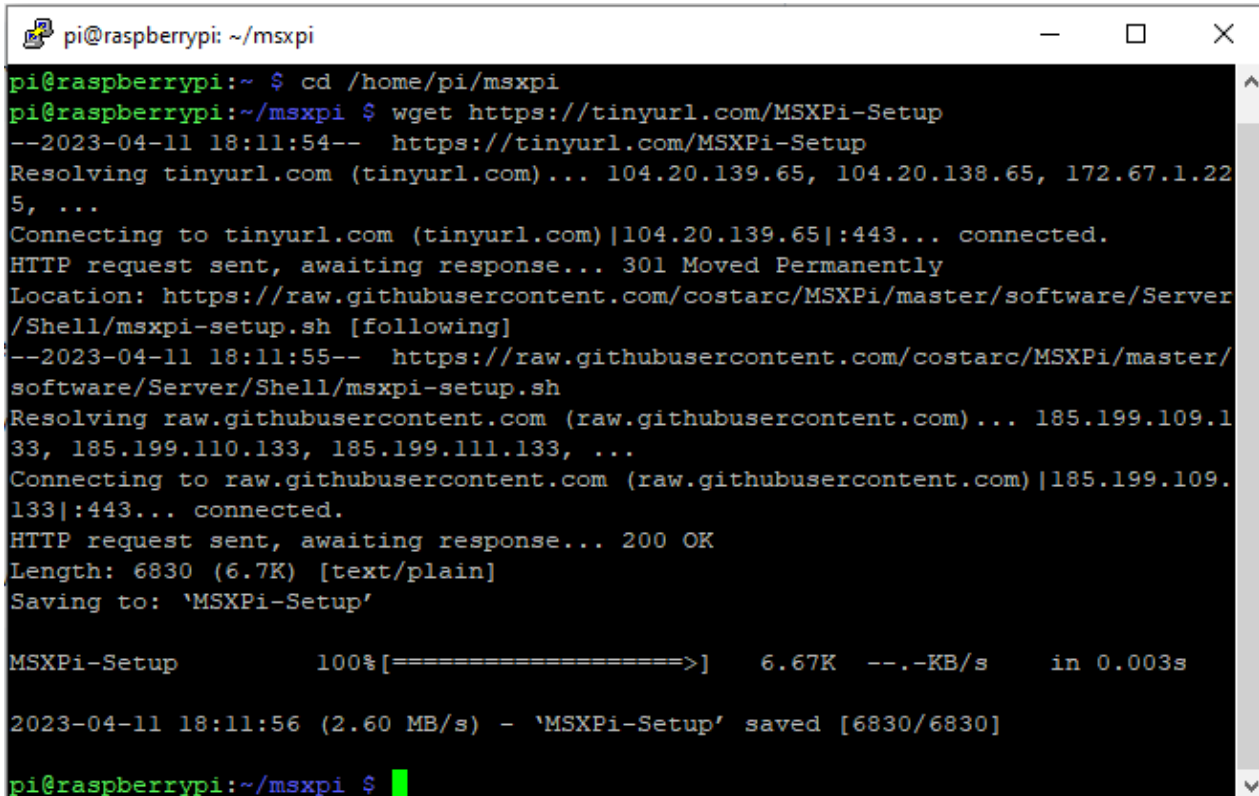


Installing Services for the MSXPi

1st. At the Putty terminal prompt enter the following sequence of commands:

- > mkdir /home/pi/msxpi
- > cd /home/pi/msxpi
- > wget https://tinyurl.com/MSXPi-Setup
- > chmod 755 MSXPi-Setup

> sudo ./MSXPi-Setup



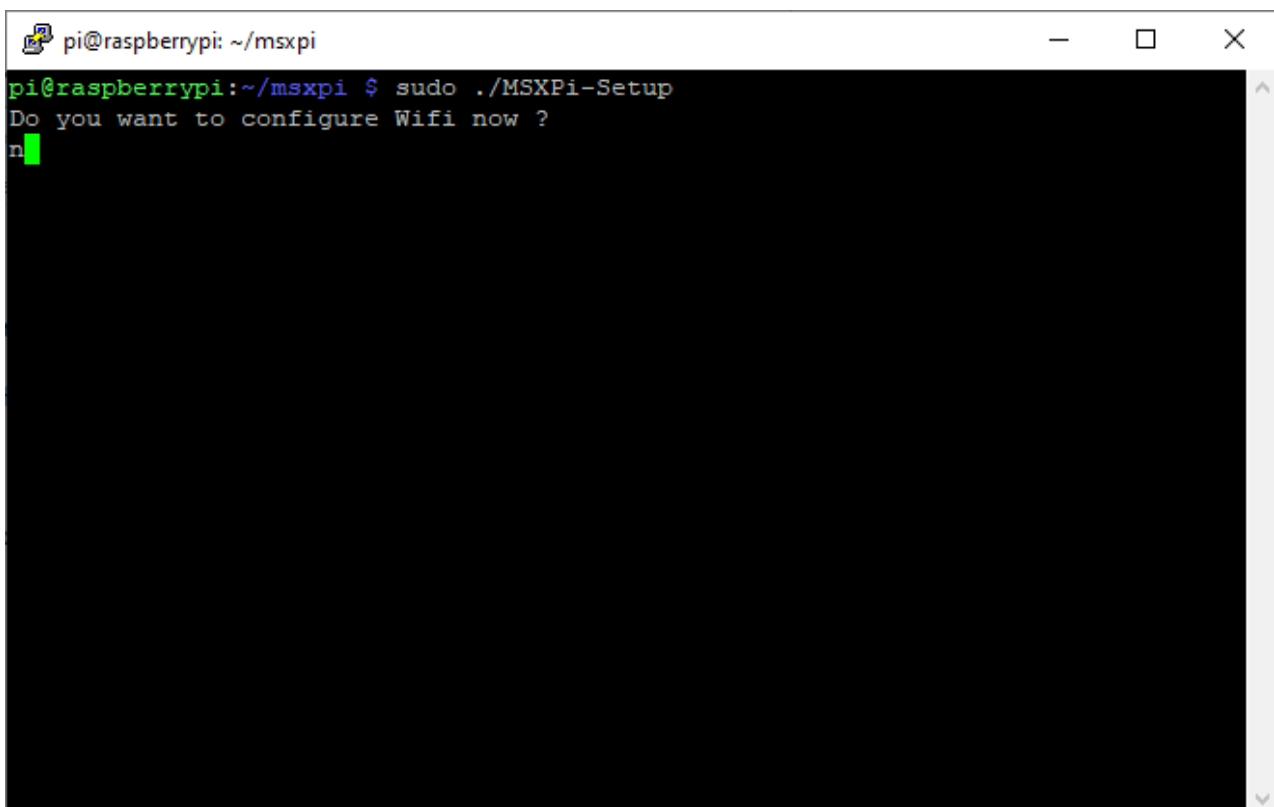
```
pi@raspberrypi: ~/msxpi
pi@raspberrypi:~ $ cd /home/pi/msxpi
pi@raspberrypi:~/msxpi $ wget https://tinyurl.com/MSXPi-Setup
--2023-04-11 18:11:54-- https://tinyurl.com/MSXPi-Setup
Resolving tinyurl.com (tinyurl.com)... 104.20.139.65, 104.20.138.65, 172.67.1.225, ...
Connecting to tinyurl.com (tinyurl.com)|104.20.139.65|:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://raw.githubusercontent.com/costarc/MSXPi/master/software/Server/Shell/msxpi-setup.sh [following]
--2023-04-11 18:11:55-- https://raw.githubusercontent.com/costarc/MSXPi/master/software/Server/Shell/msxpi-setup.sh
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.109.133, 185.199.110.133, 185.199.111.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.109.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 6830 (6.7K) [text/plain]
Saving to: 'MSXPi-Setup'

MSXPi-Setup      100%[=====>]    6.67K  --.-KB/s    in 0.003s

2023-04-11 18:11:56 (2.60 MB/s) - 'MSXPi-Setup' saved [6830/6830]

pi@raspberrypi:~/msxpi $
```

2nd. When asked to configure WIFI, answer with **n**, as we've done this before and it won't be needed again in this step.



```
pi@raspberrypi: ~/msxpi
pi@raspberrypi:~/msxpi $ sudo ./MSXPi-Setup
Do you want to configure Wifi now ?
n
```

3rd. If all goes well, as shown on the screen below, you will have your MSXPi fully installed and functional.

```
pi@raspberrypi: ~/msxpi
2023-04-11 18:33:26 (2.66 MB/s) - 'msxpiboot.dsk' saved [737280/737280]

--2023-04-11 18:33:26--  https://github.com/costarc/MSXPi/raw/master/software/target/disks/tools.dsk
Resolving github.com (github.com)... 20.201.28.151
Connecting to github.com (github.com)|20.201.28.151|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://raw.githubusercontent.com/costarc/MSXPi/master/software/target/disks/tools.dsk [following]
--2023-04-11 18:33:27--  https://raw.githubusercontent.com/costarc/MSXPi/master/software/target/disks/tools.dsk
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.108.133, 185.199.109.133, 185.199.110.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.108.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 737280 (720K) [application/octet-stream]
Saving to: 'tools.dsk'

tools.dsk          100%[=====>] 720.00K  2.64MB/s   in 0.3s

2023-04-11 18:33:27 (2.64 MB/s) - 'tools.dsk' saved [737280/737280]

pi@raspberrypi:~/msxpi $
```

References:

- Ton's Harwares - [How to Set Up a Headless Raspberry Pi, No Monitor Needed | Tom's Hardware \(tomshardware.com\)](https://tomshardware.com/how-to/set-up-a-headless-raspberry-pi-no-monitor-needed/)
- Raspberry Pi - [Raspberry Pi OS – Raspberry Pi](#)
- Putty - [a free SSH and telnet client for Windows](#)

This document is part of the MSXPi project – by Ronivon Costa ([GitHub - costarc/MSXPi: Interface for MSX to Connect and use Raspberry Pi resources](https://github.com/costarc/MSXPi))

