

If you don't want to enter commands to install any library files in the system, you can directly write the image file we provided into SD card.

RGB Cooling HAT has been activated by default in our image.

For Yahboom\_RGB\_cooling\_HAT image

User name: pi

Password: yahboom

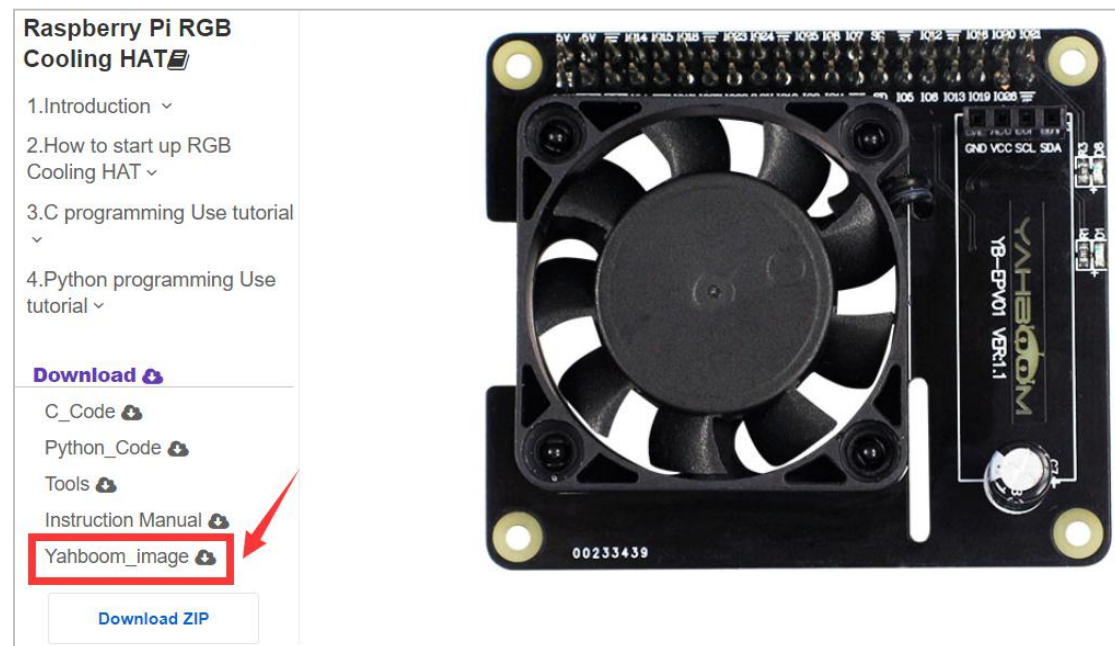
The path of program we provide:

WiringPi code: /home/pi/RGB\_cooling\_HAT/

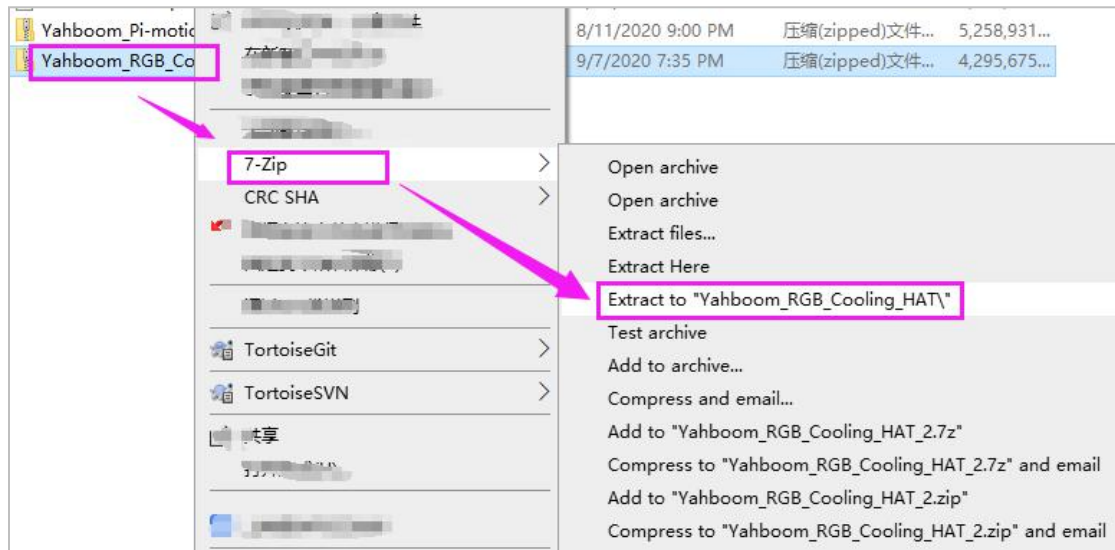
Python code: /home/pi/RGB\_cooling\_HAT\_Python/

## Part1-Download and write image file

1.1 Click the location as shown in the figure below, and download image we provided.



1.2 After download is complete, you will get a **Yahboom\_RGB\_Cooling\_HAT.zip** file. You need to extract this zip file by software, such as **7z software**.

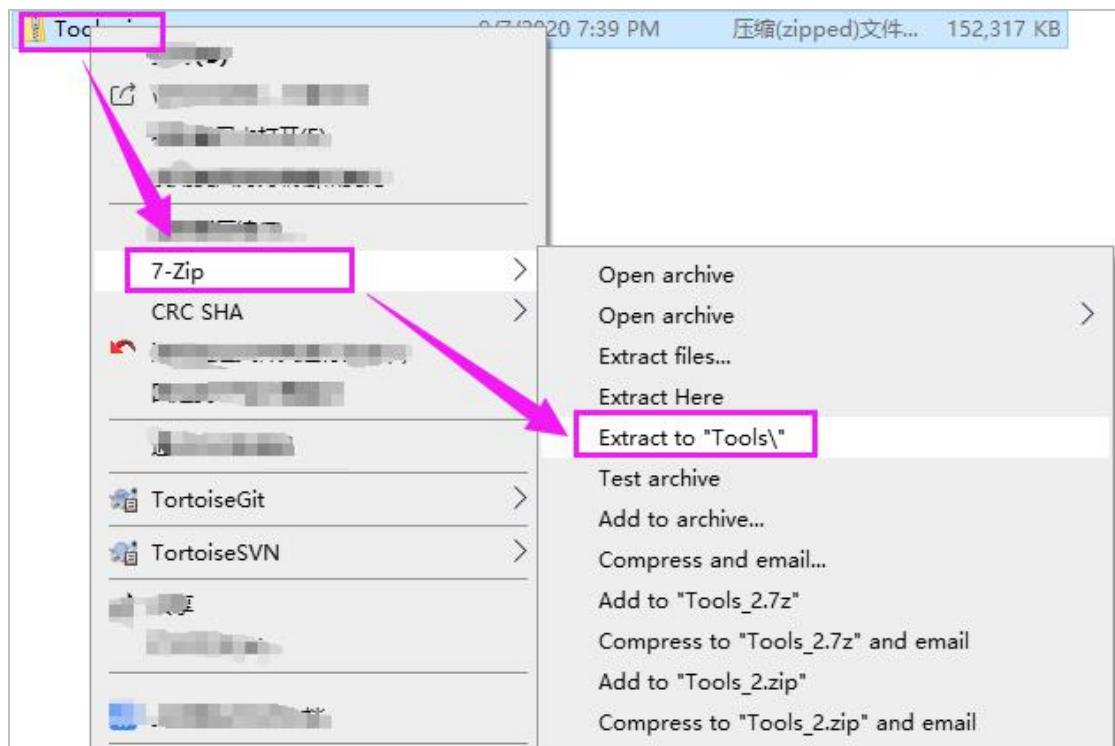


1.3 Then, you will get **Yahboom\_RGB\_Cooling\_HAT.img** file. You need to write this .img file into SD card.

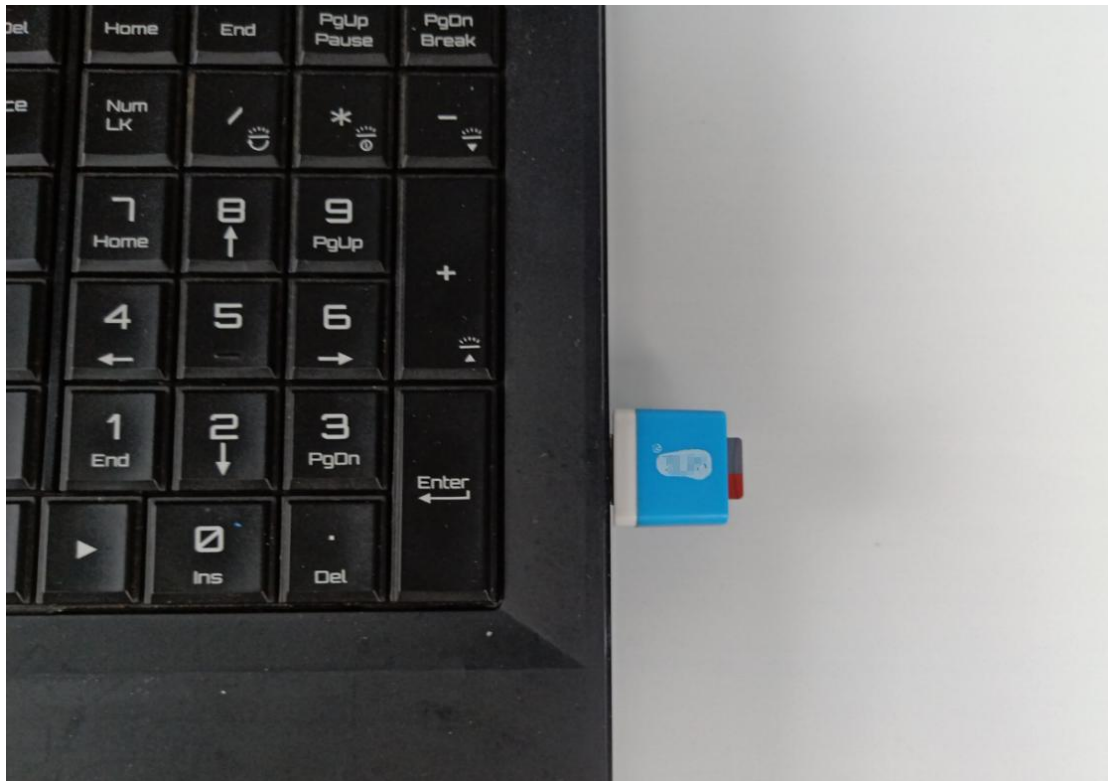


1.4 Before writing image file, you need to format SD card.

Click [Tools] to download tools we need. And extract this Tools.zip file.



1.5 Insert SD card into computer by card reader.












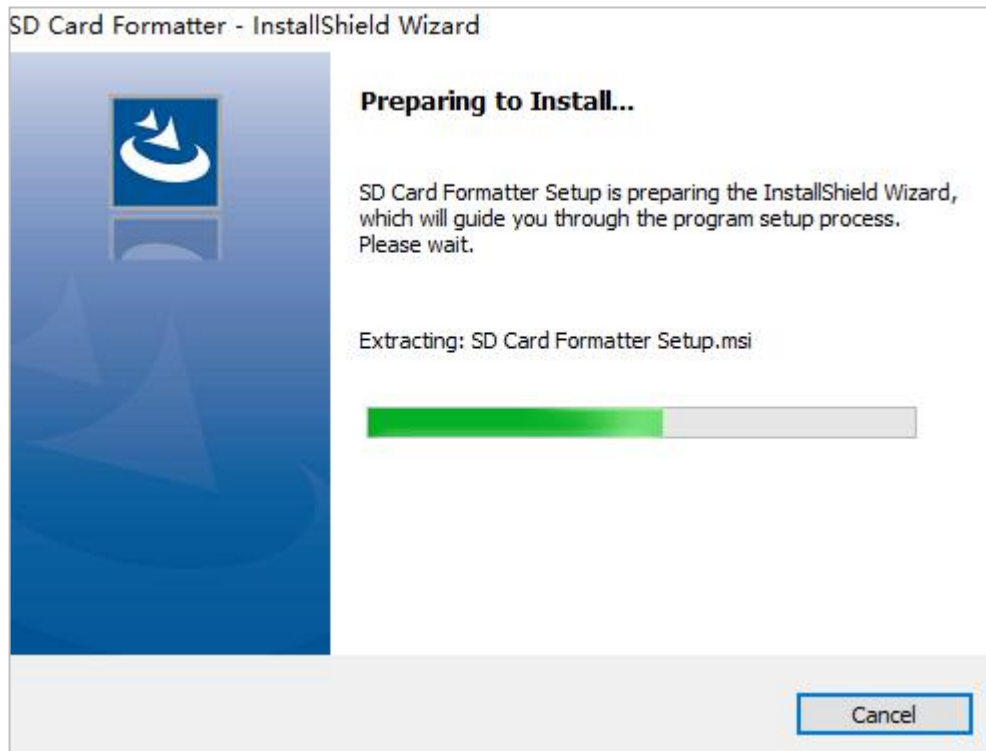
#### For MAC

You can directly format the SD card using the tool that comes with the computer. After the format is completed, we can see the real memory of the SD card is displayed on the computer.

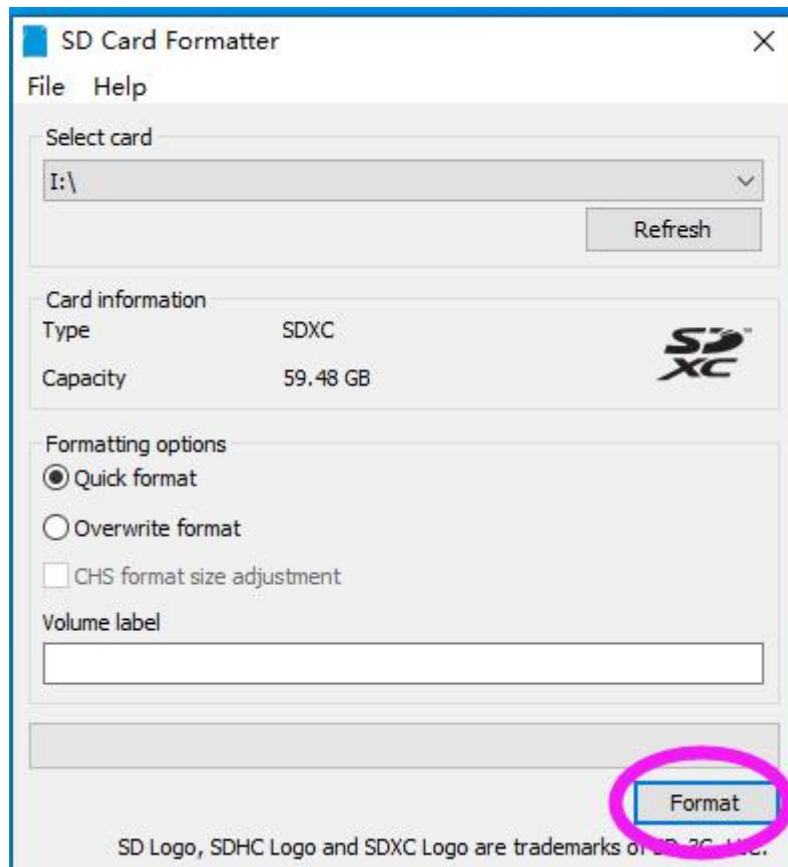
#### For Windows

Double click “Formatter.exe” to install format tools.

 balenaEtcher-Portable-1.5.56.exe	9/4/2019 3:02 PM
 ipscan22.exe	10/25/2017 3:07 PM
 NetAssist.exe	9/13/2014 11:40 PM
 PuTTY_0.67.0.0.exe	10/25/2017 3:07 PM
 SD Card Formatter 5.0.1 Setup.exe	11/21/2018 5:34 PM
 UartAssist.exe	10/25/2017 3:07 PM
 VNC-Viewer-5.0.3-Windows-32bit.exe	3/28/2018 4:04 PM
 Win32DiskImager-0.9.5-install.exe	10/25/2017 3:07 PM
 winscp556_setup.1416364912.exe	7/8/2019 2:55 PM












Format SD card by this software.



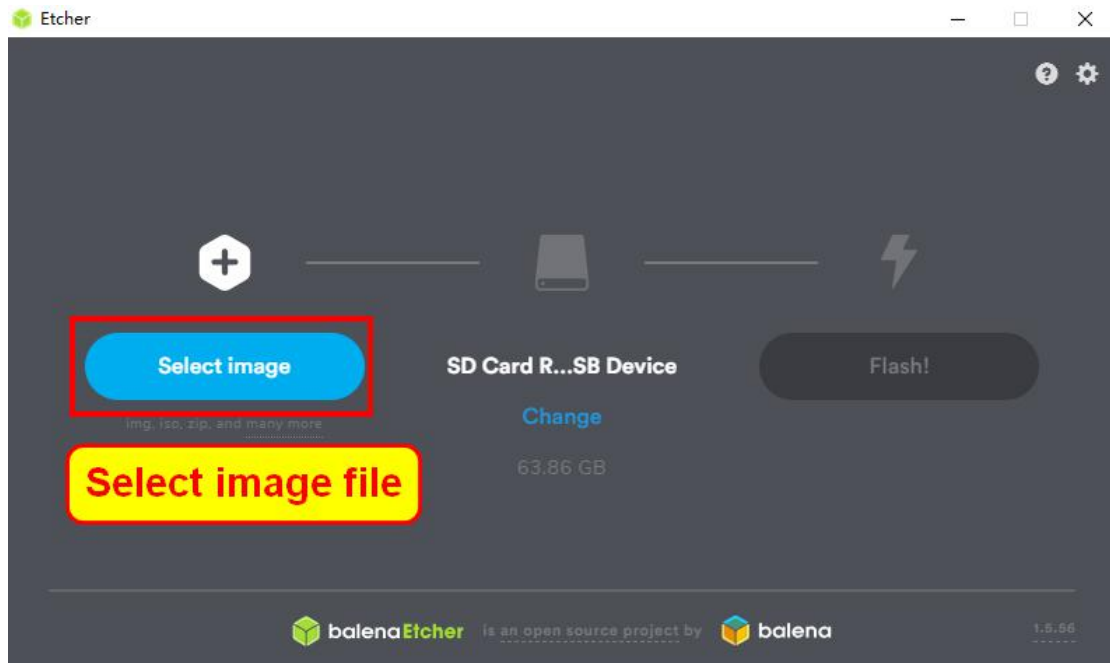
1.6 Write image file into SD card by balenaEtcher software.

### For Windows

1) Double click “balenaEtcher .exe” to open it.

 balenaEtcher-Portable-1.5.56.exe	9/4/2019 3:02 PM
 ipscan22.exe	10/25/2017 3:07 PM
 NetAssist.exe	9/13/2014 11:40 PM
 PuTTY_0.67.0.0.exe	10/25/2017 3:07 PM
 SD Card Formatter 5.0.1 Setup.exe	11/21/2018 5:34 PM
 UartAssist.exe	10/25/2017 3:07 PM
 VNC-Viewer-5.0.3-Windows-32bit.exe	3/28/2018 4:04 PM
 Win32DiskImager-0.9.5-install.exe	10/25/2017 3:07 PM
 winscp556_setup.1416364912.exe	7/8/2019 2:55 PM

2) Select image file and click “Flash”.



3) After the Etcher is complete. If Windows prompts you to use the following dialog, please click "Cancel" (according to this description).



### For MAC

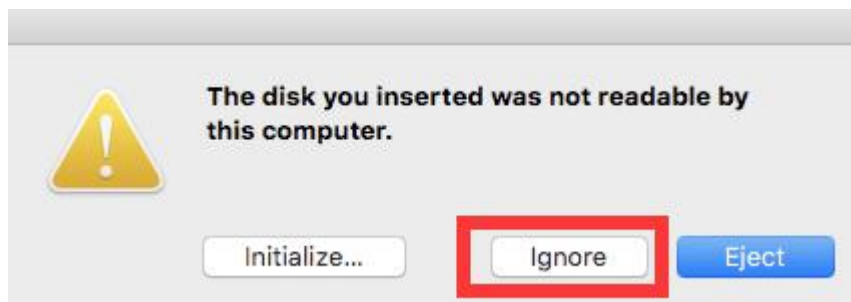
- 1) Do not insert a SD card on your MAC.
- 2) Download and install and start the Etcher software on your PC.



3) Click "Select Image" and select the compressed image file you downloaded earlier.



4) Insert the SD card. If your Mac displays this window, click "Ignore".



5) If you are not connected to another external drive, Etcher will automatically select the SD card as the target device. Otherwise, click "Select Drive" and select the correct device.

6) Click on "Flash!" Your Mac may prompt you for a user name and password before allowing Etcher to continue.



7) After the Etcher is finished, if Mac prompts you to use the following dialog, please click "Ignore" (according to this description).

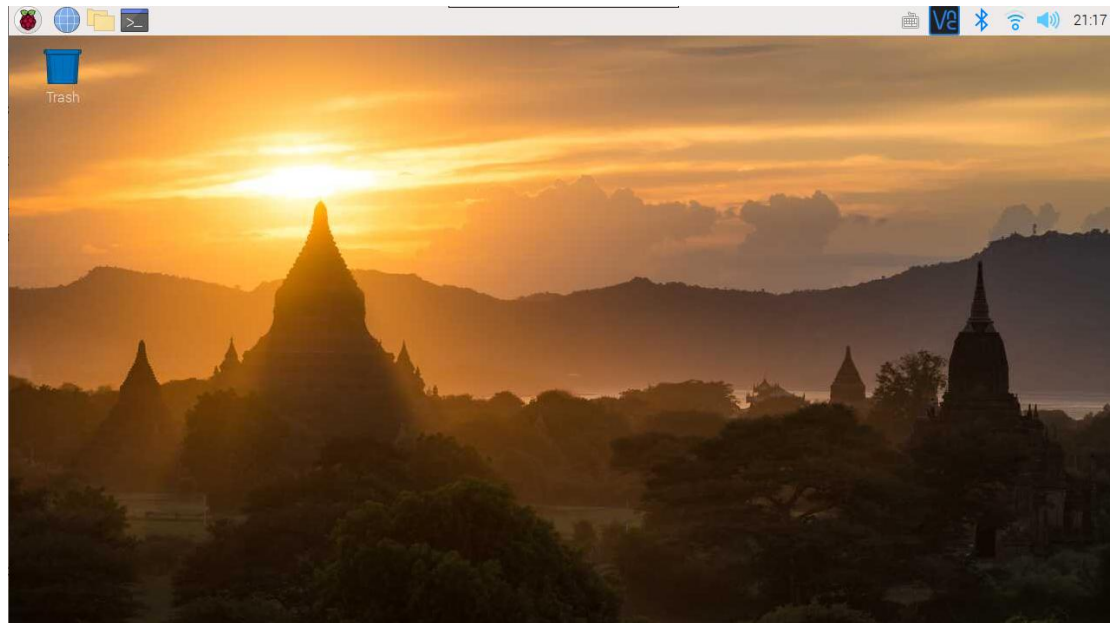


8) Physically remove the micro SD card from the computer.

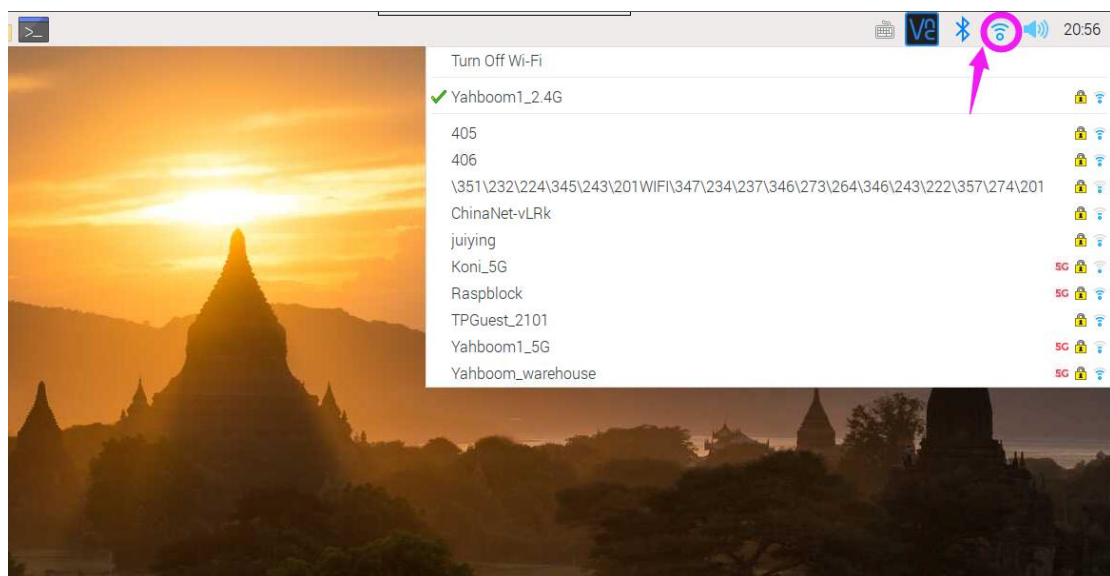
Part 2- Make your Raspberry Pi connect to WIFI.

1) Connect the keyboard, mouse, and display to the Raspberry Pi.

2) After waiting for the system to start successfully, you will see the interface as shown below on the display screen.

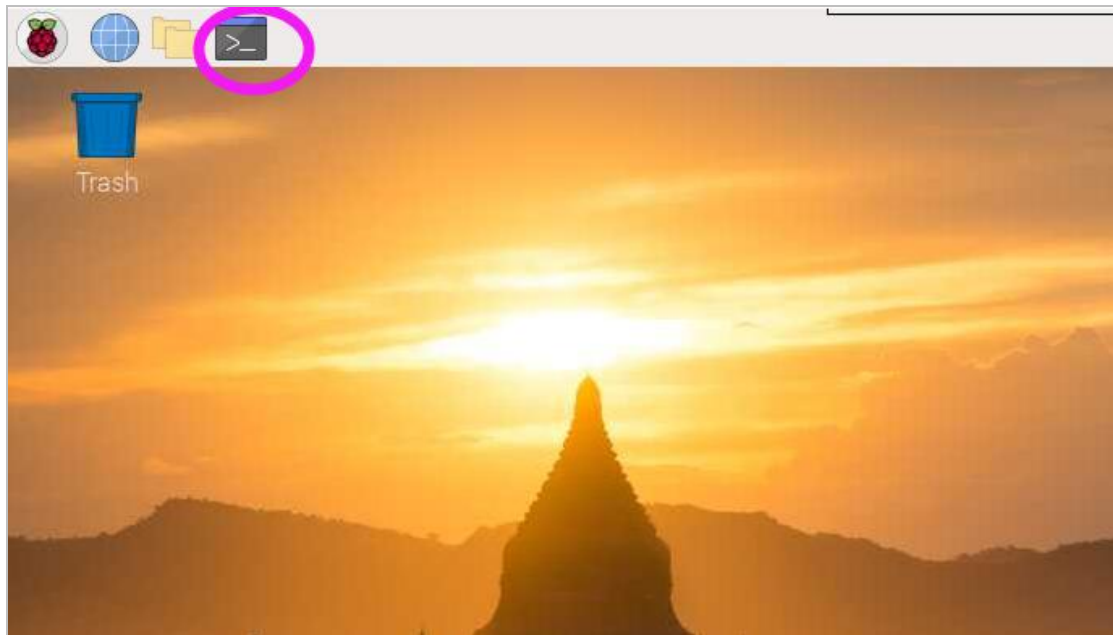


3) Click on the upper right corner to connect to WIFI or insert a network cable.



4) Click the place shown below to open the command terminal.





5) Input following command to check your IP address.

**ifconfig**

```
pi@raspberrypi: ~  
File Edit Tabs Help  
pi@raspberrypi:~ $ ifconfig  
eth0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500  
    ether dc:a6:32:b1:f1:d8 txqueuelen 1000 (Ethernet)  
    RX packets 0 bytes 0 (0.0 B)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 0 bytes 0 (0.0 B)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    inet6 ::1 prefixlen 128 scopeid 0x10<host>  
    loop txqueuelen 1000 (Local Loopback)  
    RX packets 25 bytes 1484 (1.4 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 25 bytes 1484 (1.4 KiB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 192.168.1.115 netmask 255.255.255.0 broadcast 192.168.1.255  
    inet6 fe80::534e:2f8b:5145:a171 prefixlen 64 scopeid 0x20<link>  
    ether dc:a6:32:b1:f1:d9 txqueuelen 1000 (Ethernet)  
    RX packets 2584 bytes 209578 (204.6 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 1497 bytes 674284 (658.4 KiB)
```

If your Raspberry Pi connect to wired network, you should see information described by the "eth0" option.

If your Raspberry Pi connect to wireless network, you should see information described by the "wlan0" option.

For example, as shown in above, the IP address of "wlan0" is "192.168.1.115".

4.6 You need to record this IP address and restart Raspberry Pi.

```
pi@raspberrypi:~ $ sudo reboot
```

4.7 After restart is complete, you will see IP address on OLED of RGB\_Cooling\_HAT. It will start work normally. As shown below.

