OS Installation Procedure

For this step we need following things:

- microSD card recommended size 32GB and above
- microSD card Reader
- Raspberry Imager software

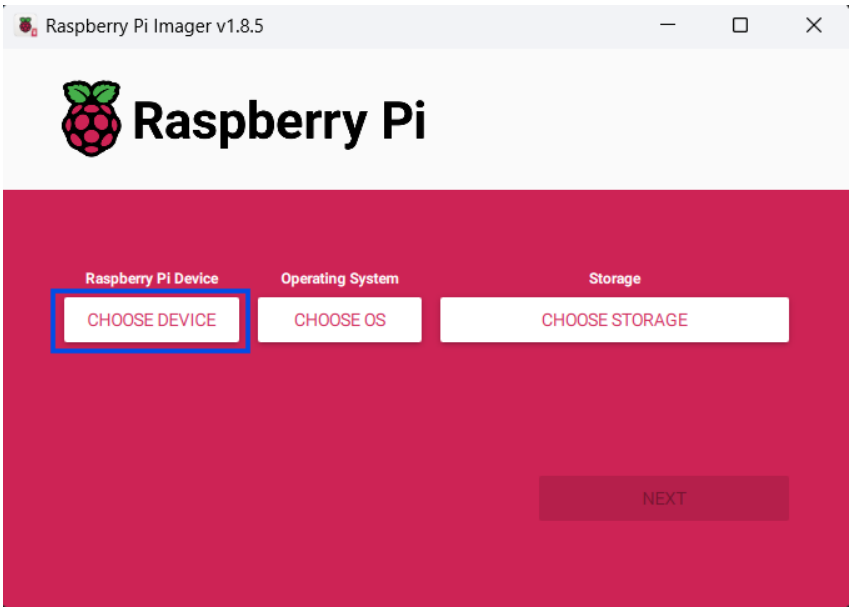
Insert card reader along with sdcard to PC/Laptop

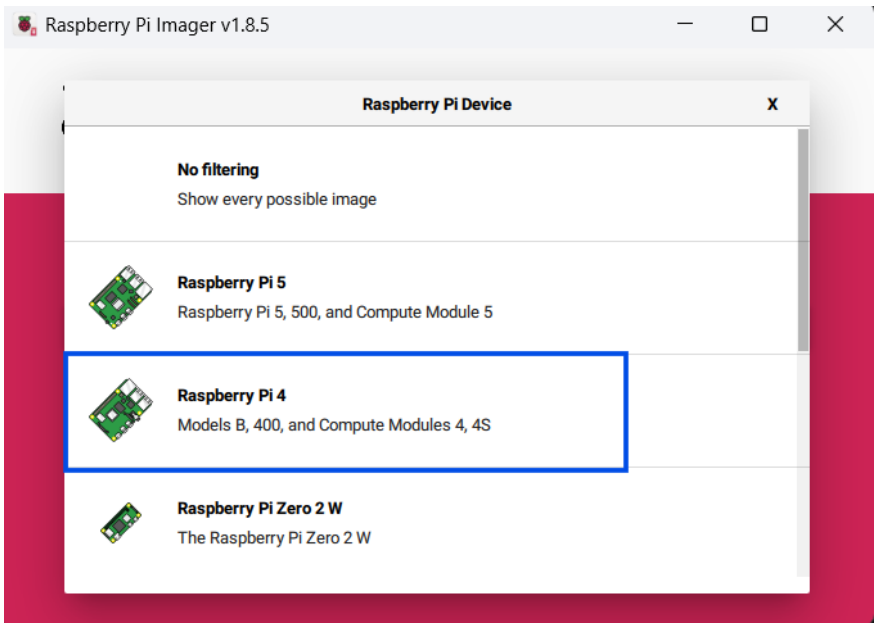
Step 1: Download and install Raspberry Pi Imager from official link =>

https://www.raspberrypi.com/software/

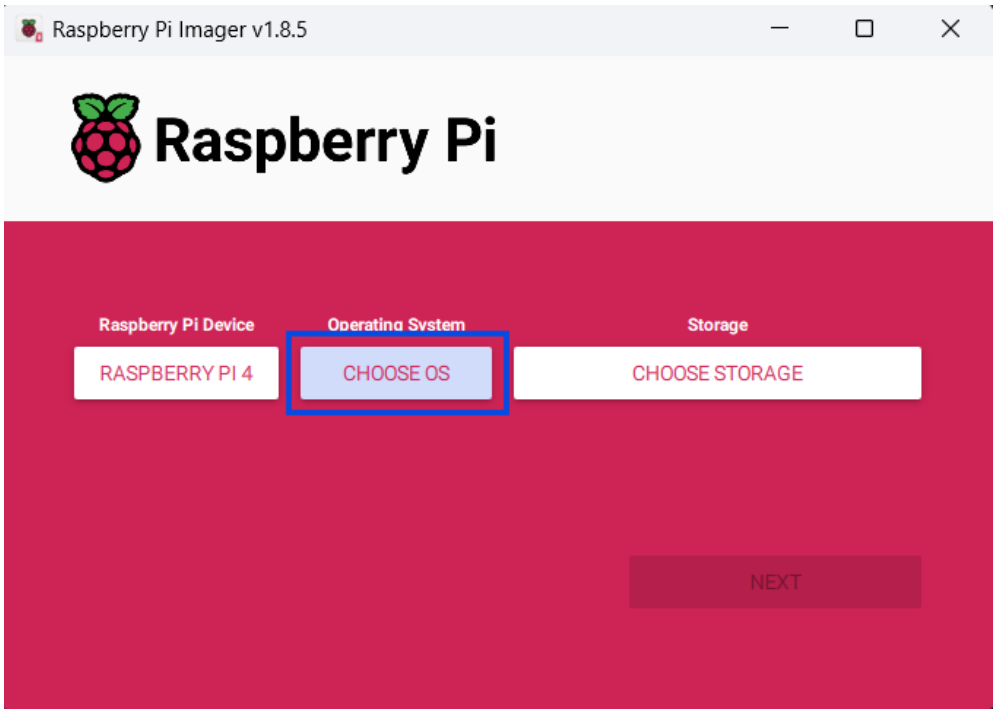
Once installed then open Raspberry Pi Imager software

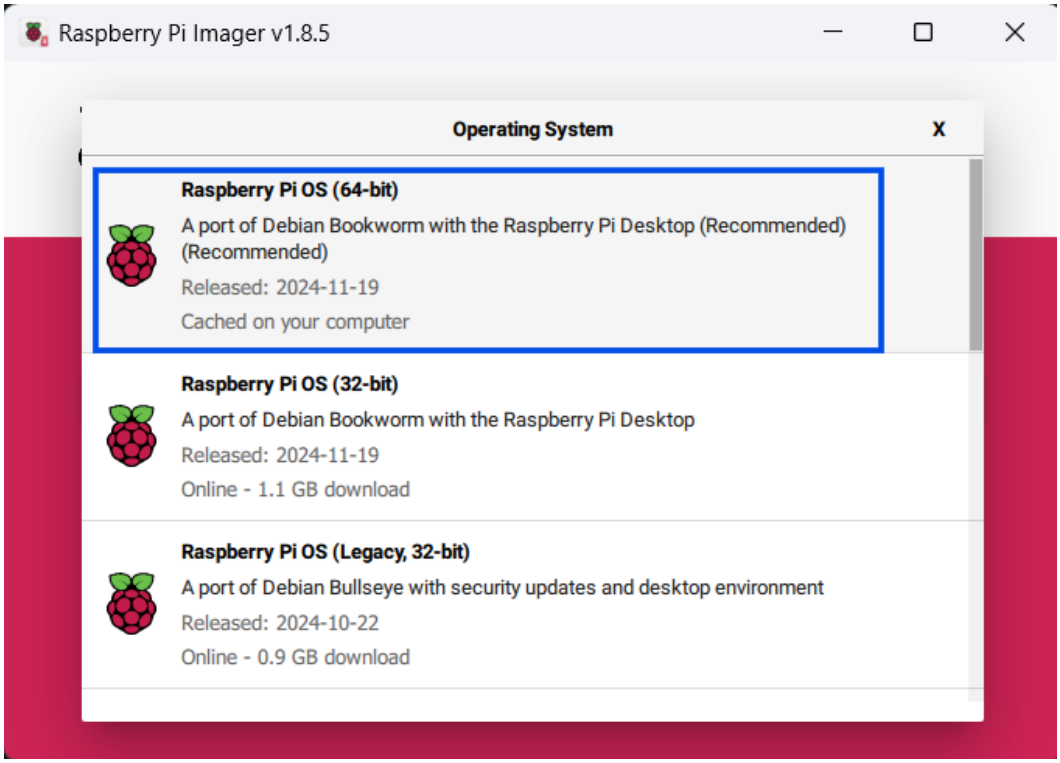
Step 2: You will have to select the correct Raspberry Pi device to use OS with, for example if using Raspberry Pi 4 then select.



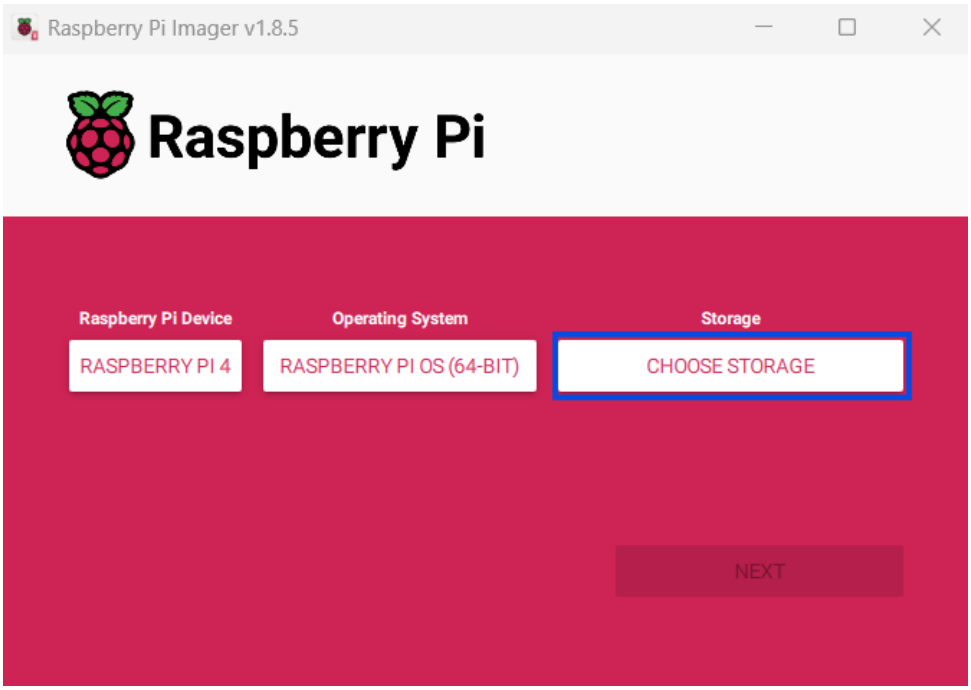


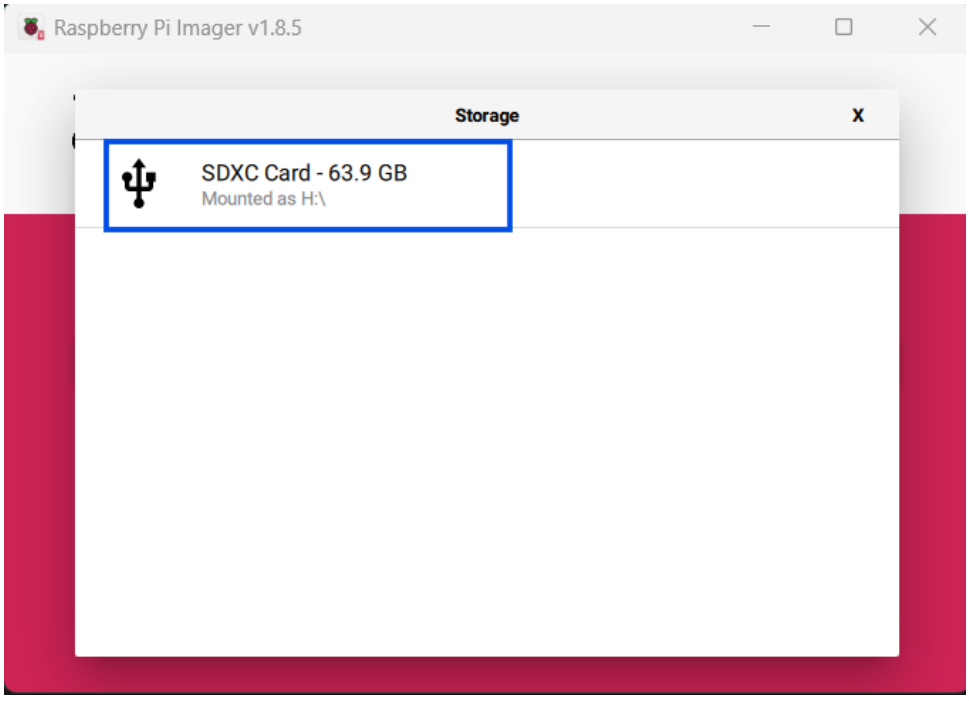
Step 3: Now choose OS





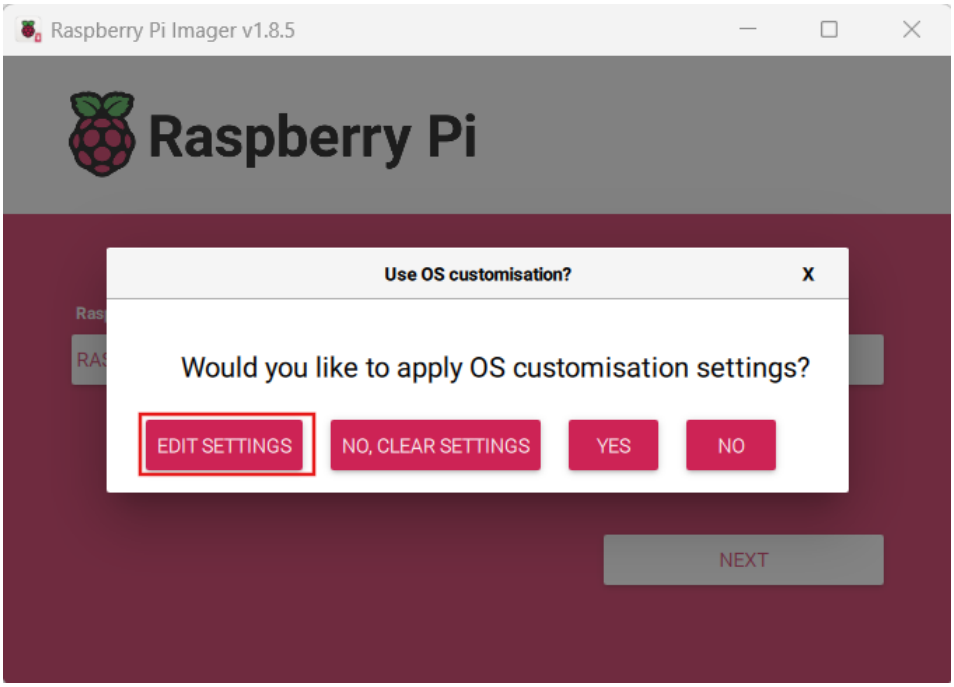
Step 4: Choose storage device, then click next





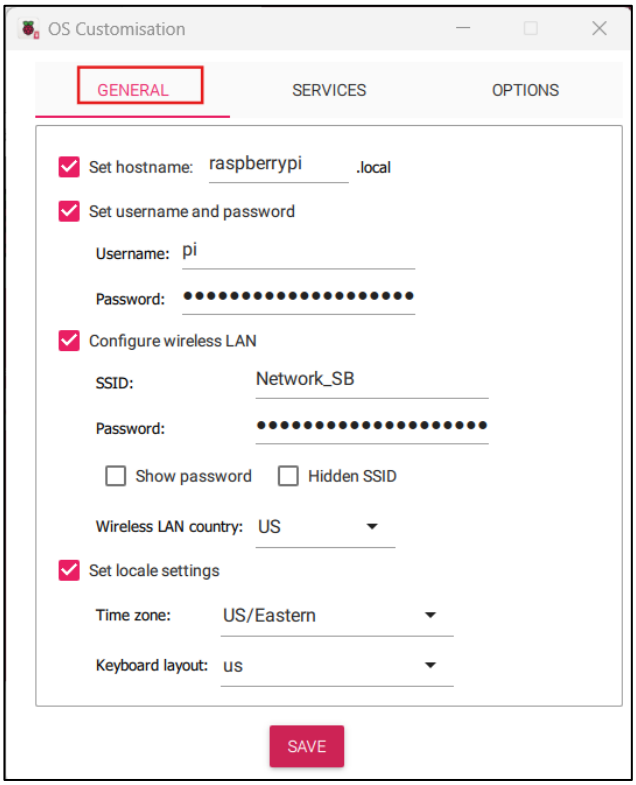
Step 5: Customization setting for login and remote access to Raspberry Pi.

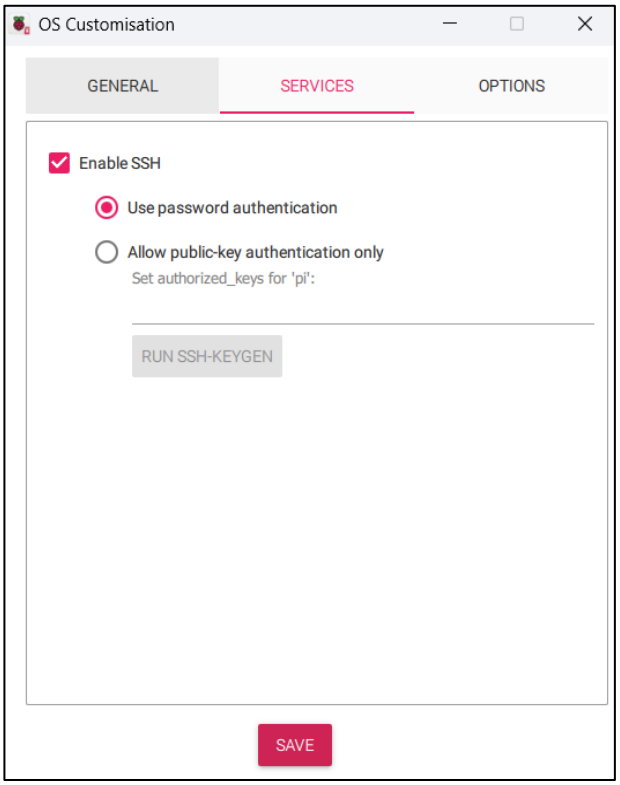
Choose edit setting option to update or add various parameters,



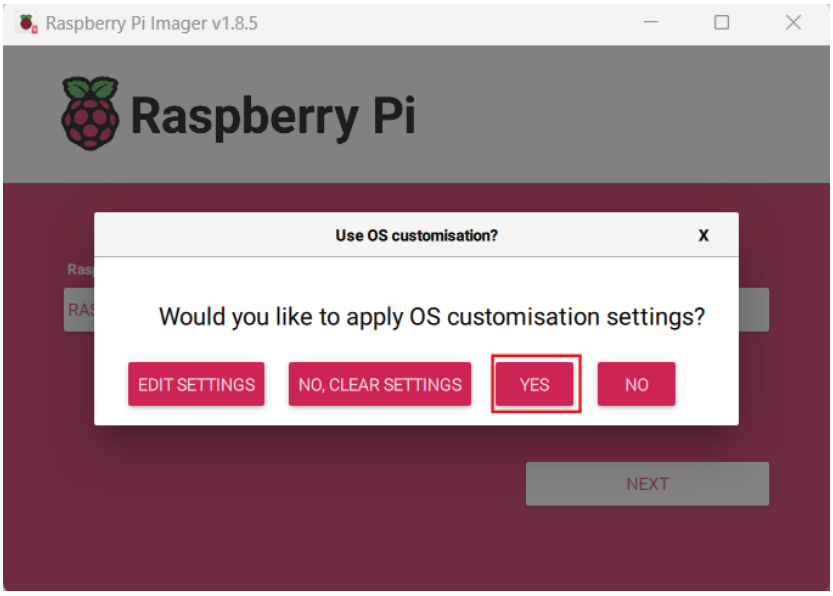
Setup **username** and **password** for raspberry pi login (default value is user – pi, password – raspberry). Add your network **SSID** and **password**, also set locale as per your region and save.

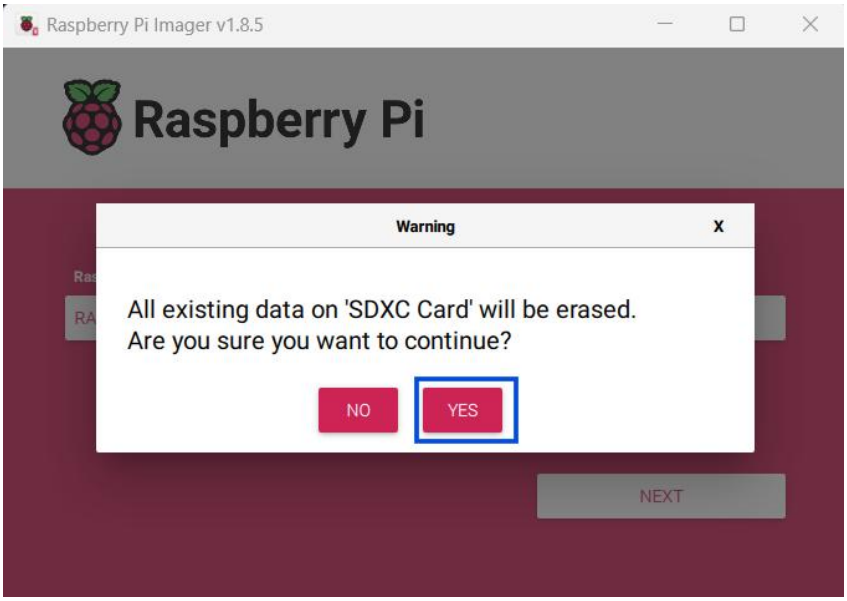
In service section enable SSH and save which is useful for remote access through PuTTy or VNC tools.

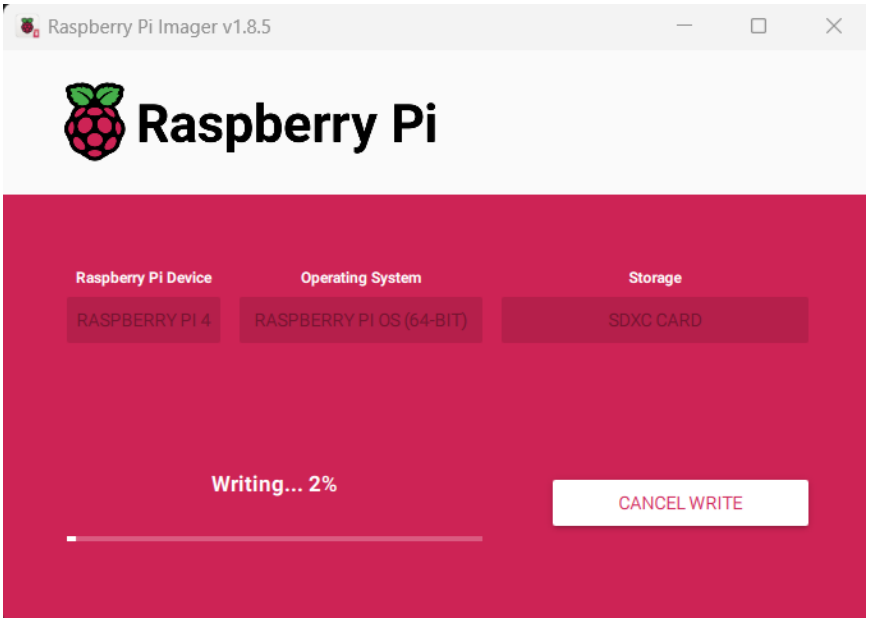


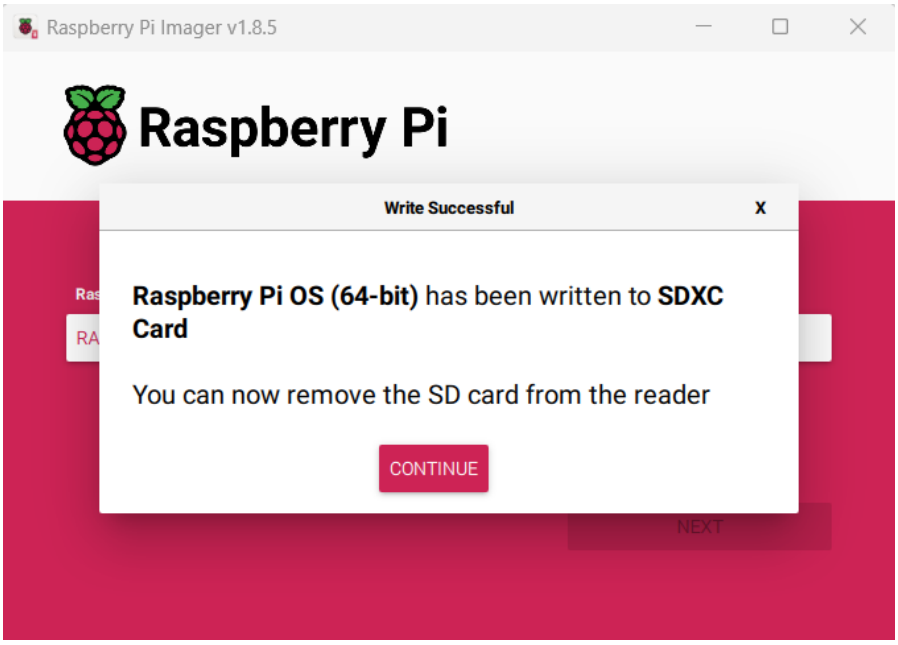


Once editing done apply setting with YES,

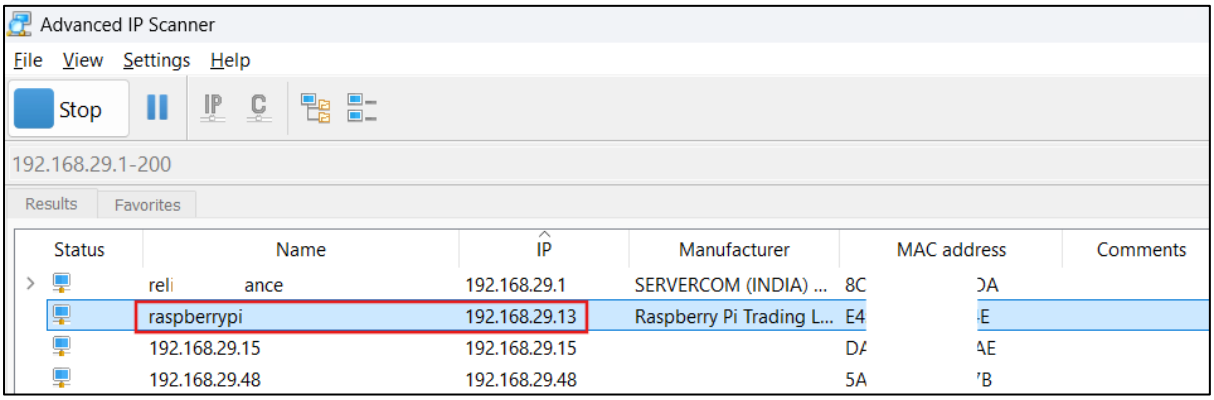




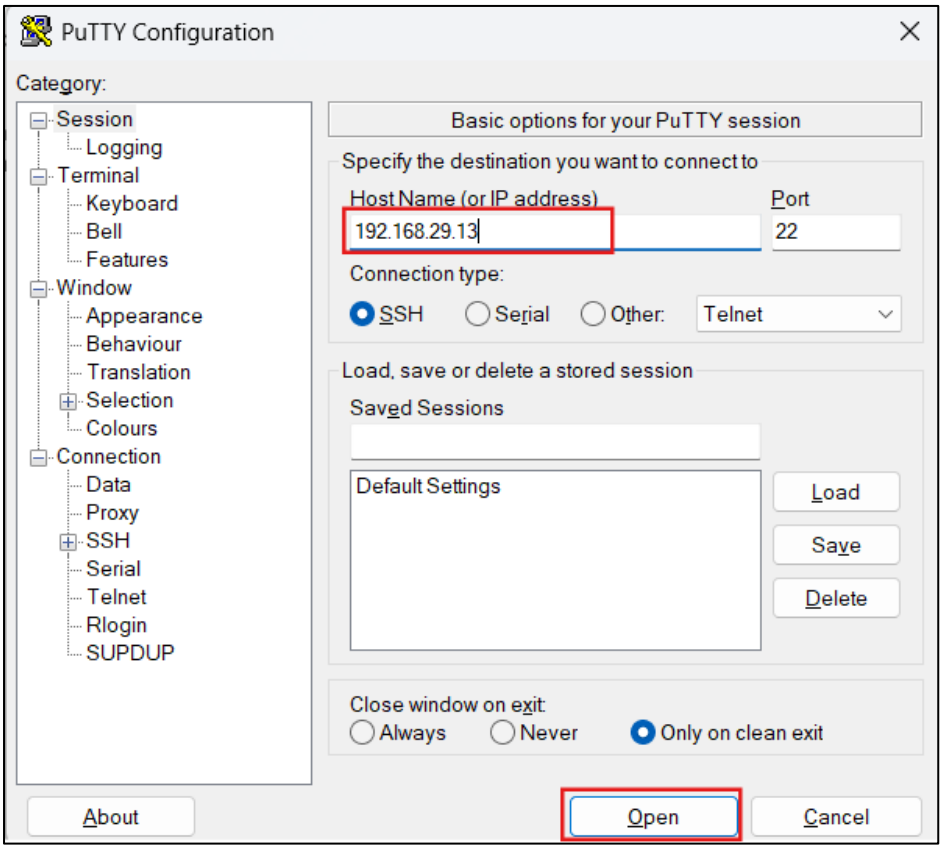


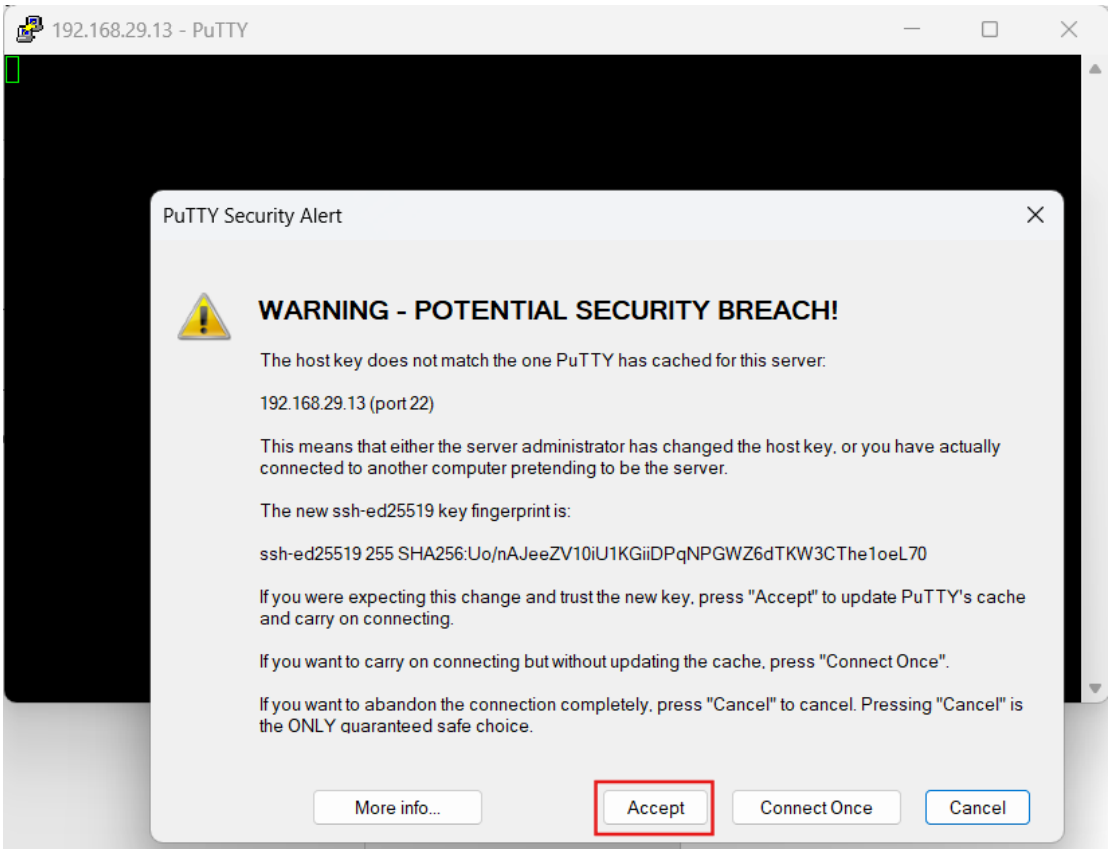


Now, when you power up raspberry it will automatically connect to your WiFi network and you can use any IP scanner software (like Advance IP scanner, angry IP scanner, etc.) to get IP address of raspberry pi.



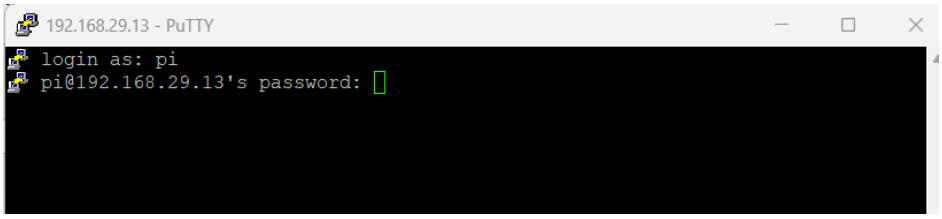
Remote access using PuTTY software

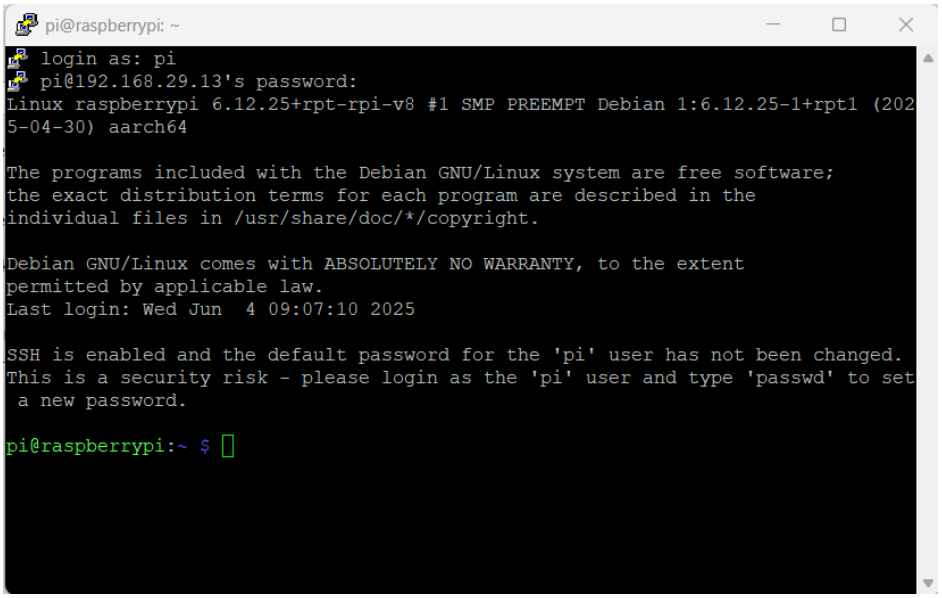




Default Login: **pi,** Password**: raspberry**

or use your login name and password if you set different

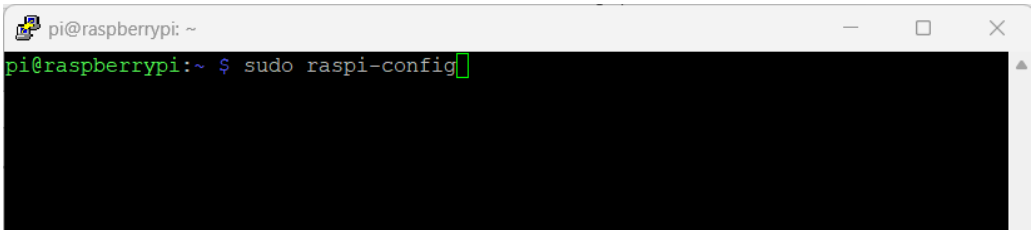


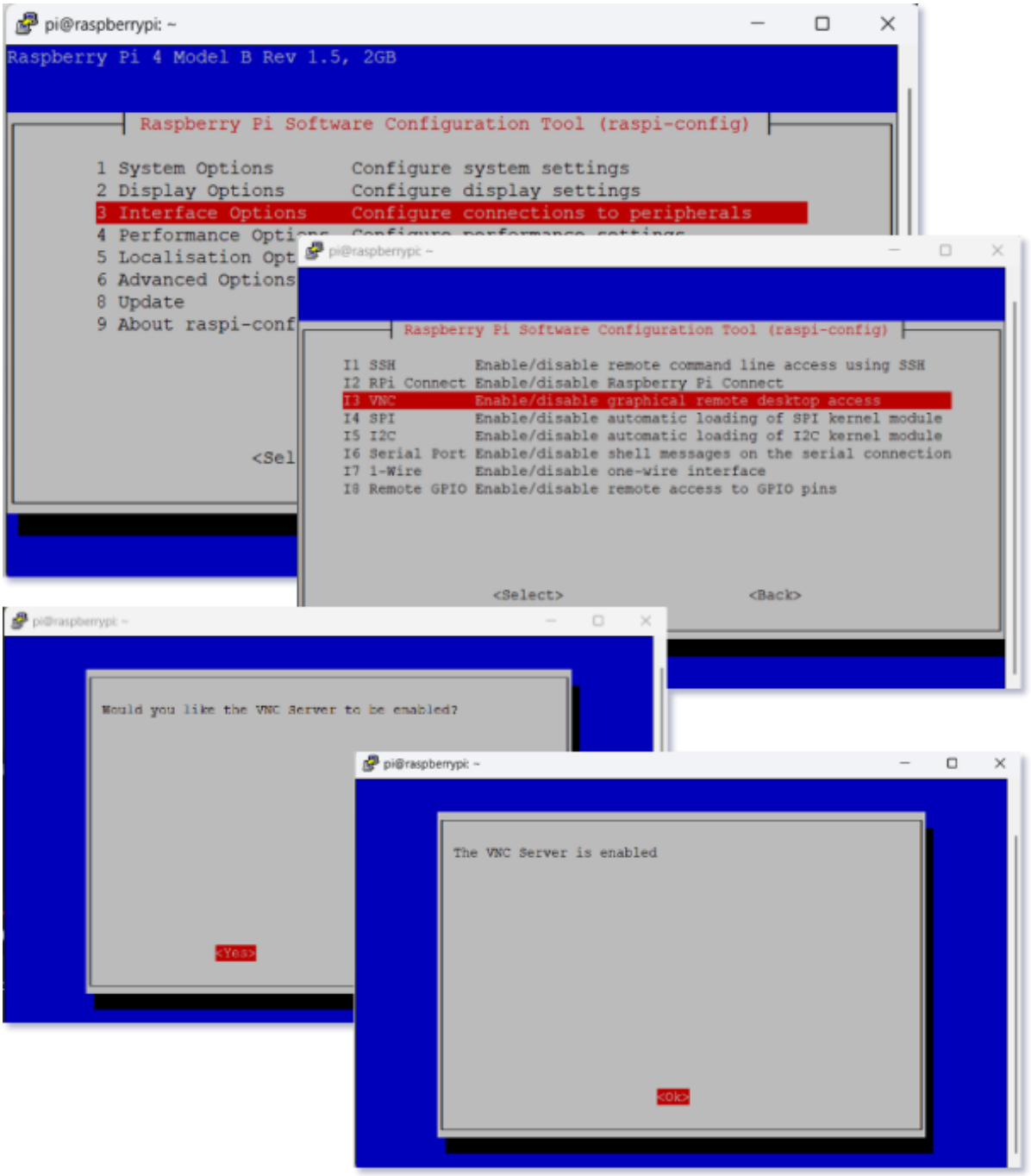


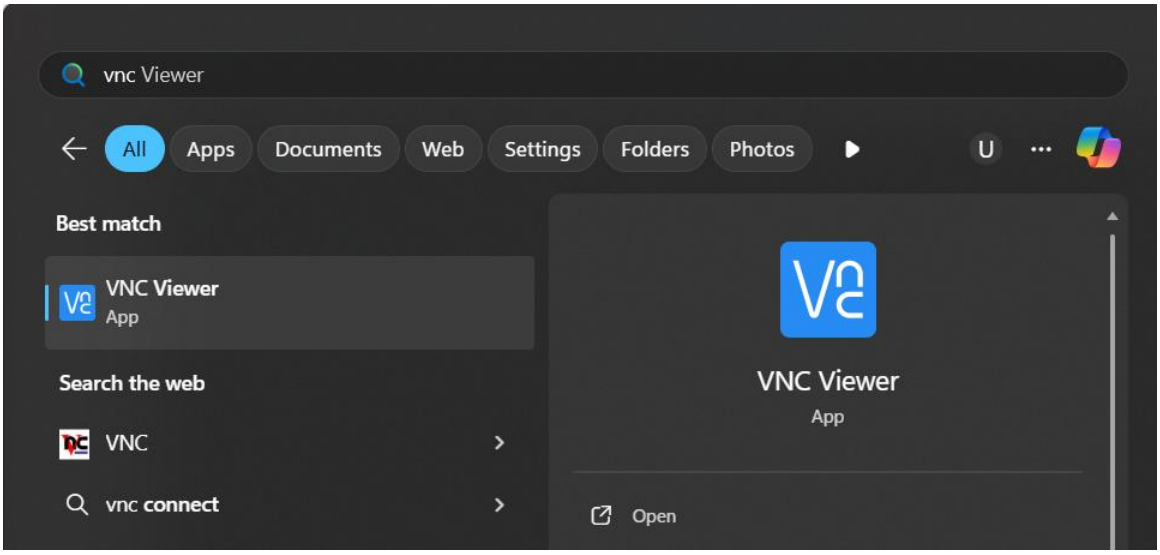
This allow you to access raspberry pi headless without need of keyboard mouse or screen from remote PC/Laptop. But only terminal access if you need GUI based follow next steps.

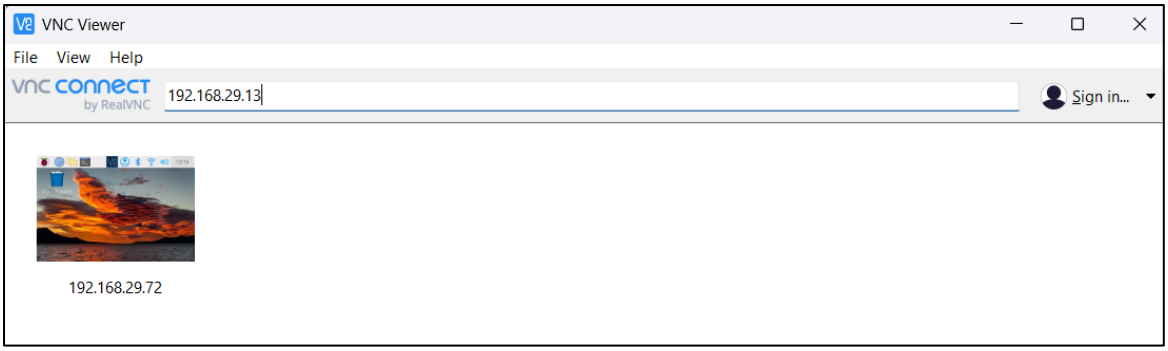
GUI Based Remote Access

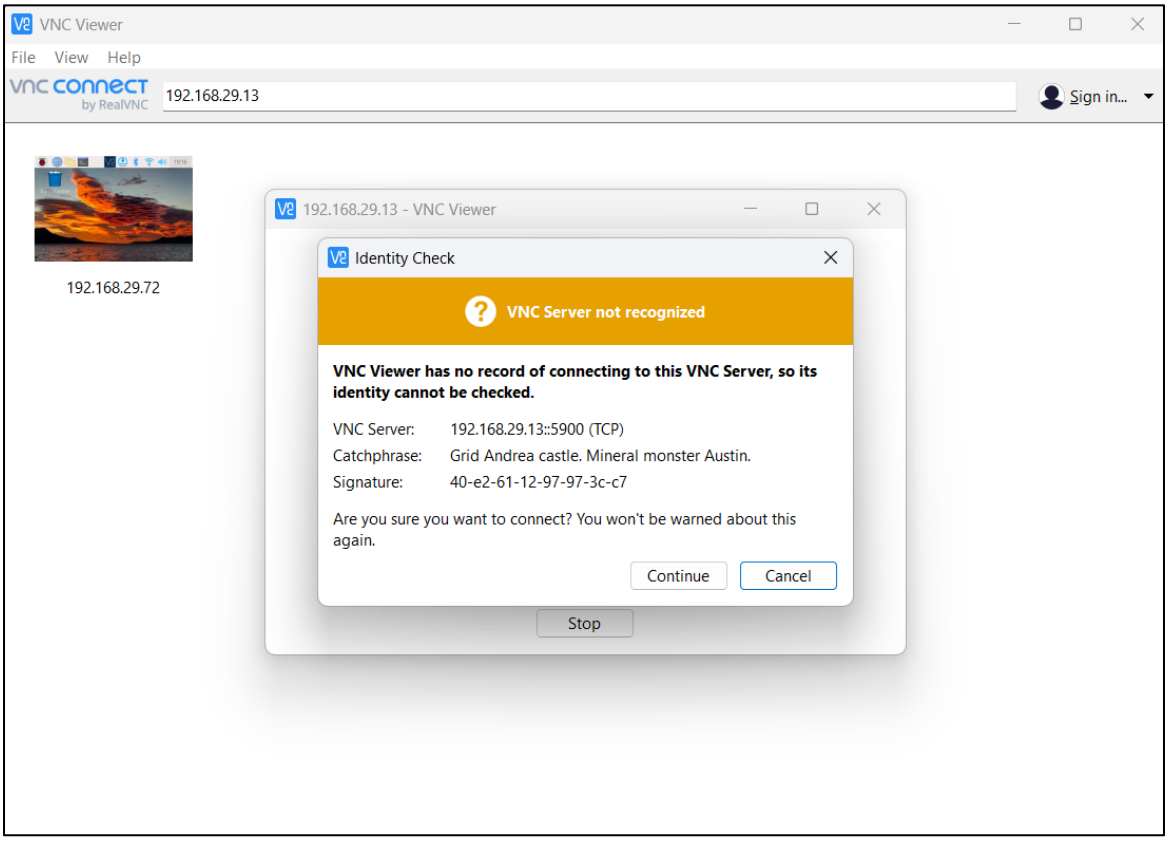
To access GUI based control you can use VNC viewer on PC/laptop, but first you need to enable VNC server on Raspberry pi as shown below ->
$ sudo raspi-config

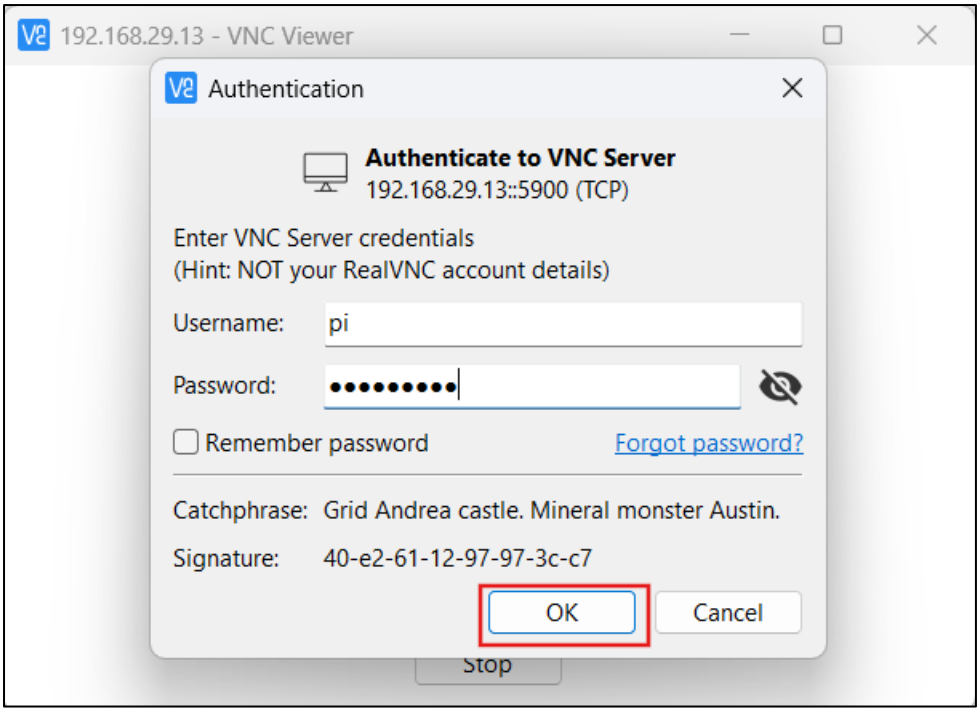


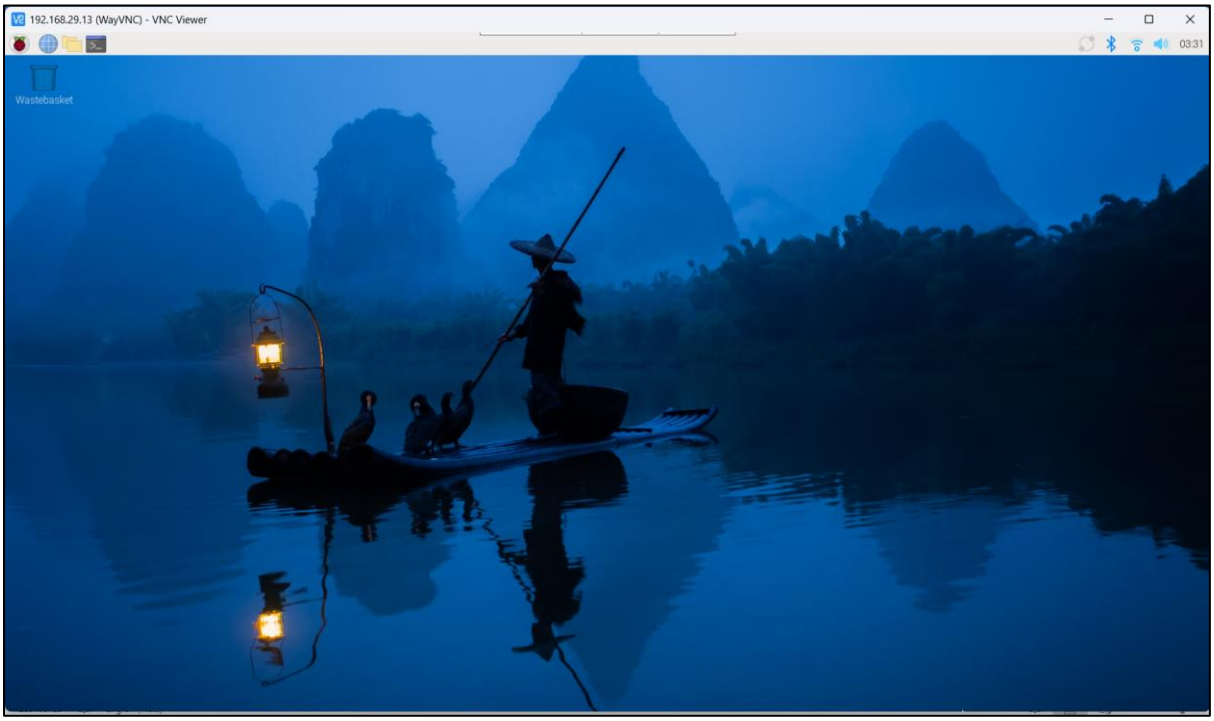



vnc Viewer
All
Apps
Documents
Web
Settings
Folders
Photos
Best match
VNC Viewer
App
Search the web
VNC
vnc connect
VNC Viewer
App
Open


VNC Viewer
File View Help
vnc connect
by RealVNC
192.168.29.13
Sign in...
192.168.29.72


VNC Viewer
File View Help
vnc connect
by RealVNC
192.168.29.13
Sign in...
192.168.29.72
192.168.29.13 - VNC Viewer
Identity Check
VNC Server not recognized
VNC Viewer has no record of connecting to this VNC Server, so its identity cannot be checked.
VNC Server: 192.168.29.13::5900 (TCP)
Catchphrase: Grid Andrea castle. Mineral monster Austin.
Signature: 40-e2-61-12-97-97-3c-c7
Are you sure you want to connect? You won't be warned about this again.
Continue
Cancel
Stop





So, this way you can easily access Raspberry Pi from your remote PC/laptop without need of keyboard or screen for your RPi.