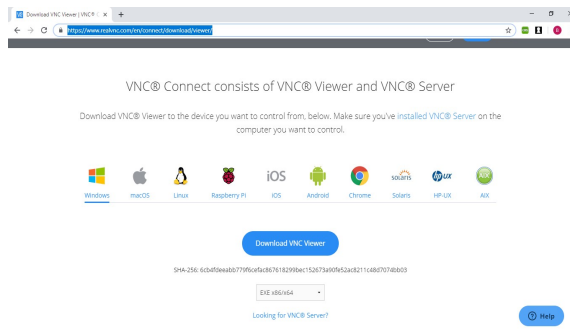


Persiapan untuk bekerja dengan Raspberry pi menggunakan Remote Desktop dan atau SSH

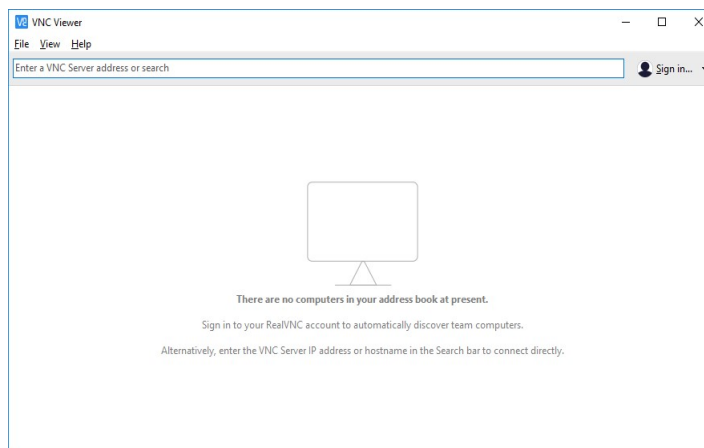
## 1. Instalasi VNC Viewer:

Download VNC Viewer dari link berikut:

<https://www.realvnc.com/en/connect/download/viewer/>



jalankan VNCViewer dari Laptop (PC):



Mengidentifikasi IP Address Raspberry pi:

Setup Raspberry pi dengan menggunakan Monitor, Keyboard & Mouse lokal:

(user | password default : **pi** | **raspberrypi**)

Buka Terminal Raspberry pi, jalankan perintah "ifconfig eth0"

cari ip address pada **eth0** , contoh **10.8.8.27**

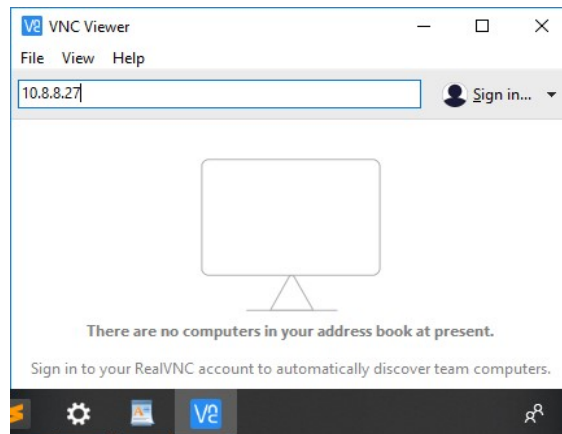
Mengaktifkan VNC-Server pada raspberry:

**Klik gambar raspberry (Pojok Kiri atas) > Preferensi > Konfigurasi Raspberry pi**

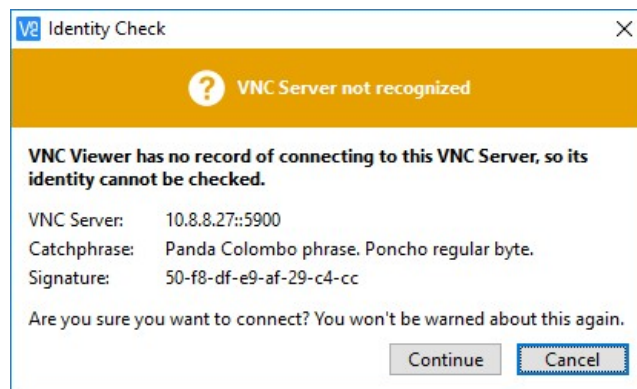
Klik tab "Antarmuka" (interface) : Cari label VNC kemudian klik opsi Aktif (default Non Aktif), lakukan hal yang sama untuk Label SSH & Reote GPIO, setelah itu klik OK. Pastikan pada layar kanan atas tampil icon VNC-server, yang menunjukkan bahwa raspberry sudah siap untuk menerima koneksi dengan VNC Client.

Menghubungkan VNC-Client (Laptop) dengan VNC Server (raspberry-pi)

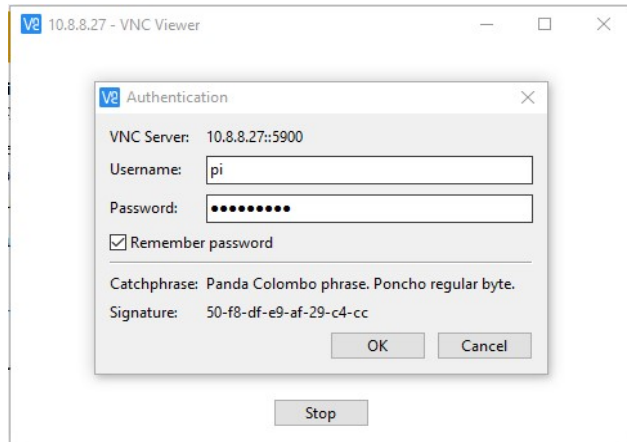
Tuliskan IP Address raspberry-pi pada kolom yang tersedia di VNC-viewer, kemudian tekan tombol ENTER pada keyboard:



Jika muncul tampilan seperti berikut:



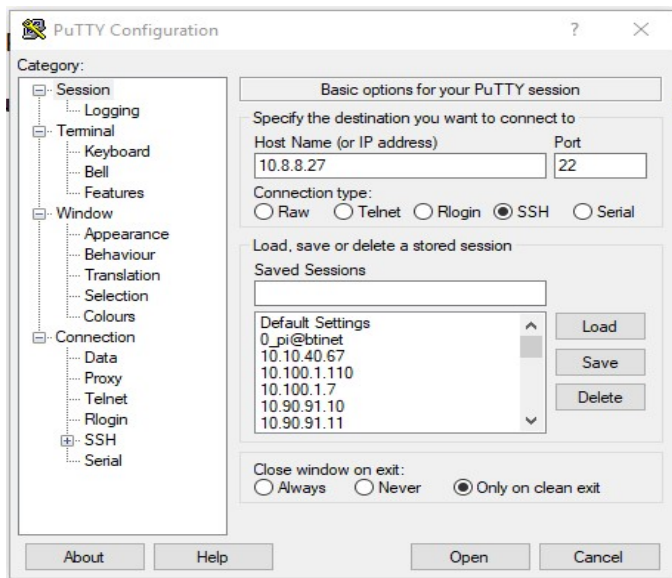
klik button "Continue", selanjutnya masukan user & password raspberry (lihat di atas) dan klik OK.



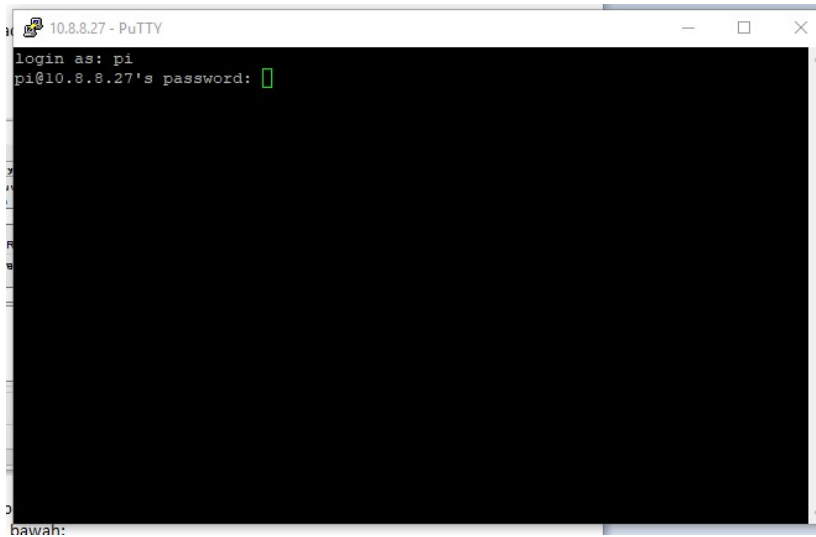
## 2. Setup SSH Client menggunakan Putty

Download software Putty dari link berikut: <https://www.putty.org/>

jalankan program putty, seperti pada gambar di bawah, kemudian masukan IP Address dan tekan button OPEN;

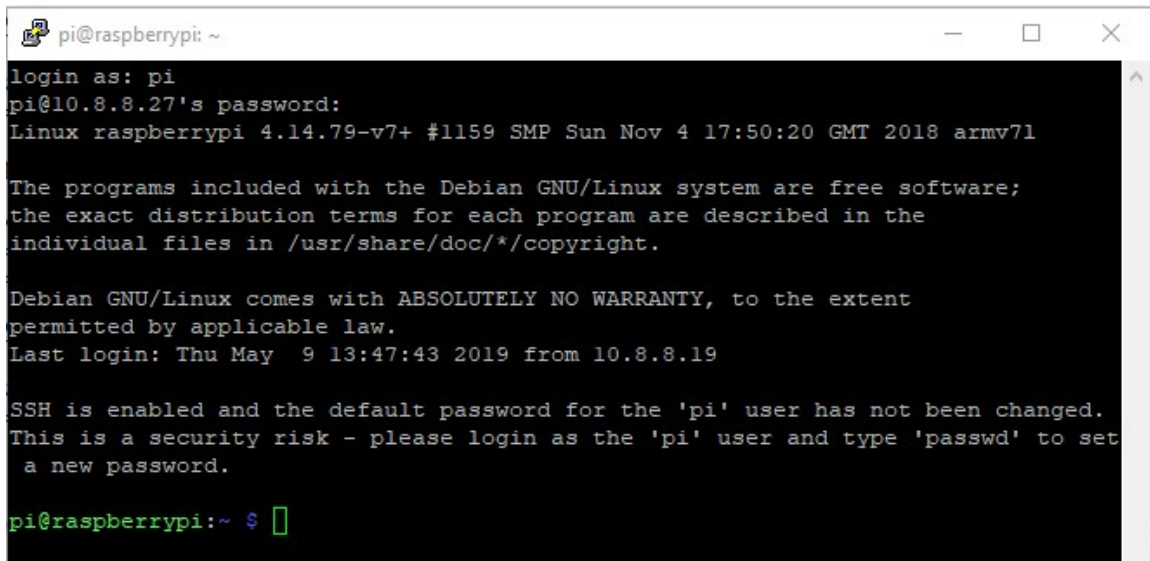


tekan tombol "YES" jika muncul popup, selanjutnya masukan user "pi" dan password "raspberry" seperti pada gambar di bawah:

A terminal window titled "10.8.8.27 - PuTTY" with a black background and white text. The text shows a login prompt "login as: pi", followed by "pi@10.8.8.27's password:" and a green cursor. The window has standard OS controls (minimize, maximize, close) in the top right corner.

```
10.8.8.27 - PuTTY
login as: pi
pi@10.8.8.27's password: 
```

Jalankan perintah "pinout" untuk menampilkan IO mapping raspberry

A terminal window titled "pi@raspberrypi: ~" with a black background and white text. It shows the output of a system boot, including the kernel version, date, and time. It also displays the Debian GNU/Linux welcome message, which includes information about the system's warranty and security. The prompt "pi@raspberrypi:~ \$" is shown at the bottom with a green cursor.

```
pi@raspberrypi: ~
login as: pi
pi@10.8.8.27's password:
Linux raspberrypi 4.14.79-v7+ #1159 SMP Sun Nov 4 17:50:20 GMT 2018 armv7l

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Thu May  9 13:47:43 2019 from 10.8.8.19

SSH is enabled and the default password for the 'pi' user has not been changed.
This is a security risk - please login as the 'pi' user and type 'passwd' to set
a new password.

pi@raspberrypi:~ $ 
```

```
pi@raspberrypi: ~  
RAM : 1024Mb  
Storage : MicroSD  
USB ports : 4 (excluding power)  
Ethernet ports : 1  
Wi-fi : True  
Bluetooth : True  
Camera ports (CSI) : 1  
Display ports (DSI) : 1  
  
J8:  
  3V3 (1) (2) 5V  
  GPIO2 (3) (4) 5V  
  GPIO3 (5) (6) GND  
  GPIO4 (7) (8) GPIO14  
  GND (9) (10) GPIO15  
  GPIO17 (11) (12) GPIO18  
  GPIO27 (13) (14) GND  
  GPIO22 (15) (16) GPIO23  
  3V3 (17) (18) GPIO24  
  GPIO10 (19) (20) GND  
  GPIO9 (21) (22) GPIO25  
  GPIO11 (23) (24) GPIO8  
  GND (25) (26) GPIO7  
  GPIO0 (27) (28) GPIO1  
  GPIO5 (29) (30) GND  
  GPIO6 (31) (32) GPIO12  
  GPIO13 (33) (34) GND  
  GPIO19 (35) (36) GPIO16  
  GPIO26 (37) (38) GPIO20  
  GND (39) (40) GPIO21  
  
For further information, please refer to https://pinout.xyz/  
pi@raspberrypi:~ $
```

