

Raspberry Pi

- 설치 및 설정 -



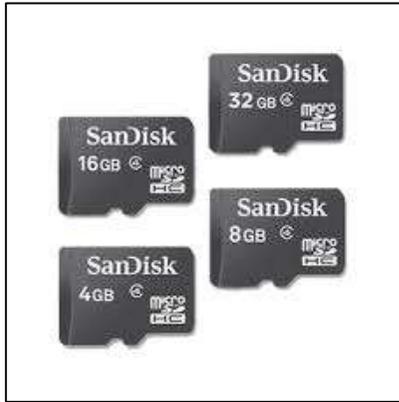
실습환경

Practice environment

	호스트(Host) 환경	타겟(Target) 환경
Model	LG Gram Notebook	RaspberryPi4 B
CPU	Intel x86	Cortex-A72 (BCM2711)
OS	Ubuntu on VMware	Raspbian Buster

라즈비안 다운로드

Download Raspbian



SD카드



SD카드 리더기
USB형

두개 중 하나
준비



SD카드 리더기
내장형



Raspberry Pi 4B

라즈베리파이 보드

✓ 필수 준비물

라즈비안 다운로드

Download Raspbian

<https://www.raspberrypi.org>

Blog Downloads Community Help Forums Education

Raspberry Pi

A small and affordable computer that you can use to learn programming

[Buy a Raspberry Pi](#)

[Buy for business](#) >

Our mission is to put the **power of computing** and digital making into the **hands of people** all over the world.

[About us](#)

People are doing incredible things with Raspberry Pi every day.
Here's the latest from our blog:

✓ URL : <https://www.raspberrypi.org/> → Downloads TAB Click

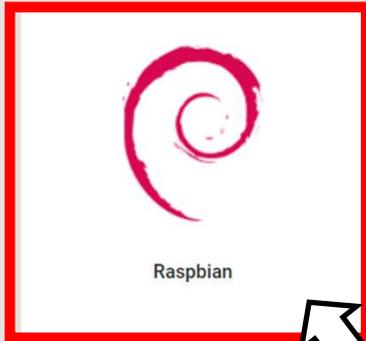


Downloads

Raspbian is our official operating system for **all** models of the Raspberry Pi.
Download it here, or use **NOOBS**, our easy installer for Raspbian and more.



NOOBS

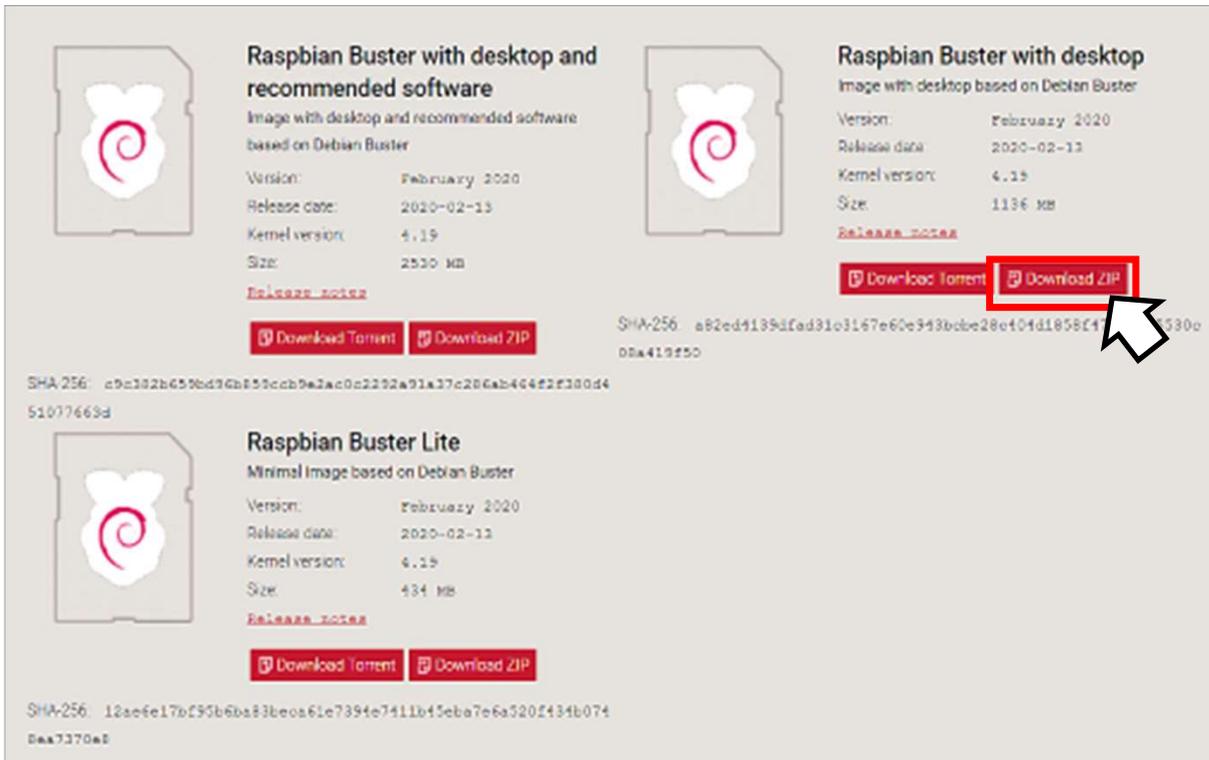


Raspbian

✓ Raspbian Click

라즈비안 다운로드

Download Raspbian



The screenshot shows the Raspbian download page with three main sections:

- Raspbian Buster with desktop and recommended software**: Image with desktop and recommended software based on Debian Buster. Version: February 2020, Release date: 2020-02-13, Kernel version: 4.19, Size: 2530 MB. Includes 'Download Torrent' and 'Download ZIP' buttons.
- Raspbian Buster with desktop**: Image with desktop based on Debian Buster. Version: February 2020, Release date: 2020-02-13, Kernel version: 4.19, Size: 1136 MB. Includes 'Download Torrent' and 'Download ZIP' buttons. The 'Download ZIP' button is highlighted with a red box and a mouse cursor.
- Raspbian Buster Lite**: Minimal image based on Debian Buster. Version: February 2020, Release date: 2020-02-13, Kernel version: 4.19, Size: 434 MB. Includes 'Download Torrent' and 'Download ZIP' buttons.

SHA-256 hashes are provided for each version. A red box highlights the 'Download ZIP' button for the 'with desktop' version, with a mouse cursor pointing to it.

✓ ... with desktop and recommended software

: 오피스나 프로그래밍 관련 소프트웨어가 포함된 버전

✓ ... with desktop

: 기존의 오피스나 프로그래밍 관련 소프트웨어가 포함되었던 버전이었지만 큰 용량으로 인해 해당 소프트웨어들이 삭제되어 경량화된 버전

✓ ... Lite

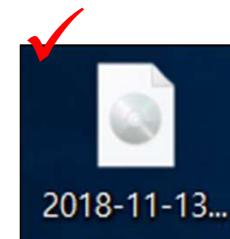
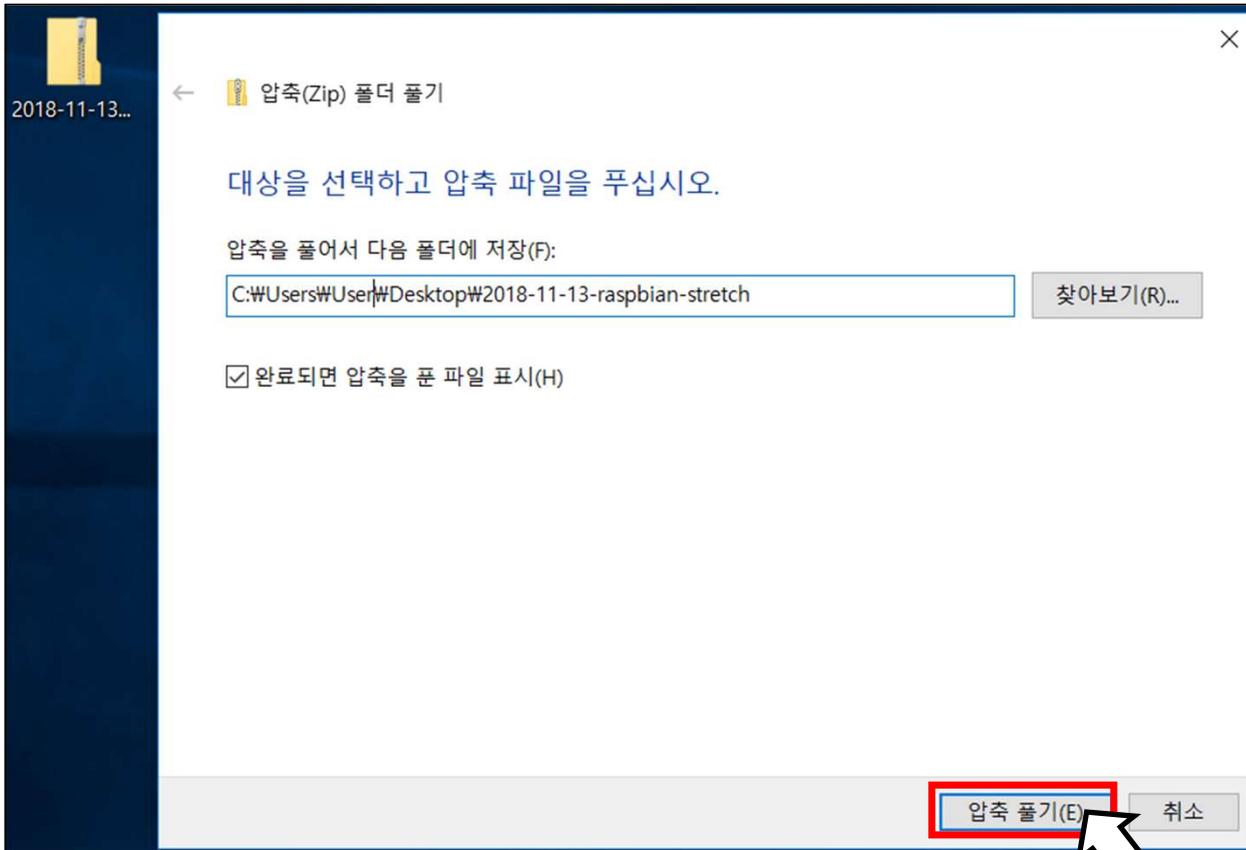
: GUI를 지원하지 않는 버전, CLI(text command)기반으로 동작가능하여, 주로 ZERO모델에 사용.

❖ 2019.06.24이후부터는 Raspbian Stretch버전이 아닌 Buster버전으로 공식사이트에서 받을 수 있다. 그러나 Buster버전은 Raspberry Pi 4 이상 모델을 위해 나온 버전으로 4 미만 버전들의 모델은 Stretch버전으로 받는 것을 추천한다.

✓ [Stretch버전 다운로드](#) -> 2019.04.09이하부터 Stretch버전

라즈비안 다운로드

Download Raspbian



✓ Raspbian.zip의 압축을 풀어서 이미지파일을 추출

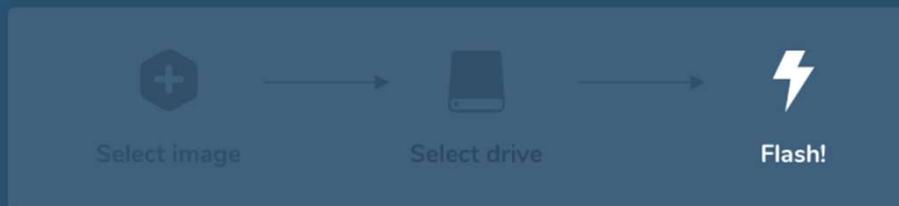


Etcher Tool 다운로드

Download Etcher

Flash. Flawless.

Flash OS images to SD cards & USB drives, safely and easily.



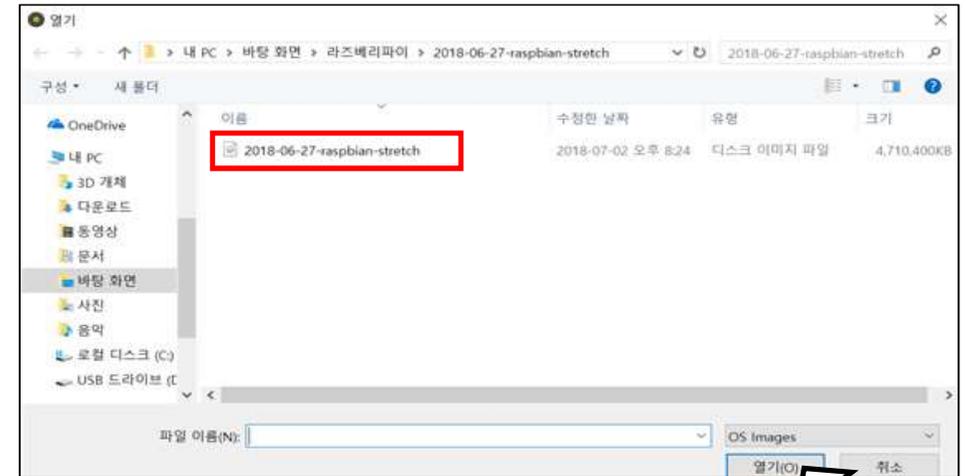
Download for Windows (x86|x64)

v1.5.79 [See what's new](#)

✓ URL : <https://www.balena.io/etcher/> -> 자신의 운영체제 환경에 맞는 Etcher Tool 다운로드

SD카드에 라즈비안올리기

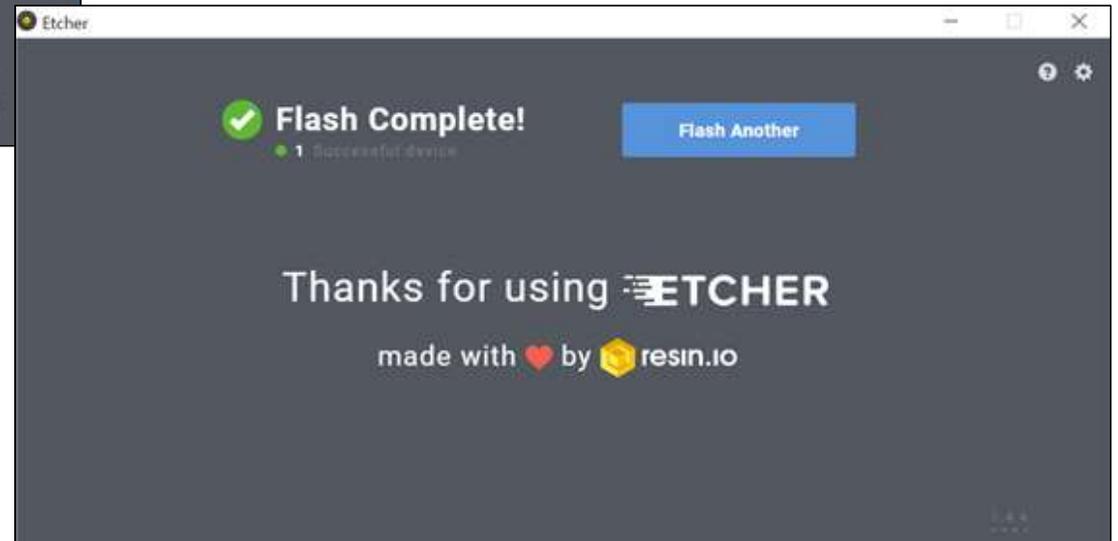
Writing Raspbian to SD card



✓ Etcher를 사용하여 SD카드에 Raspbian OS올리기

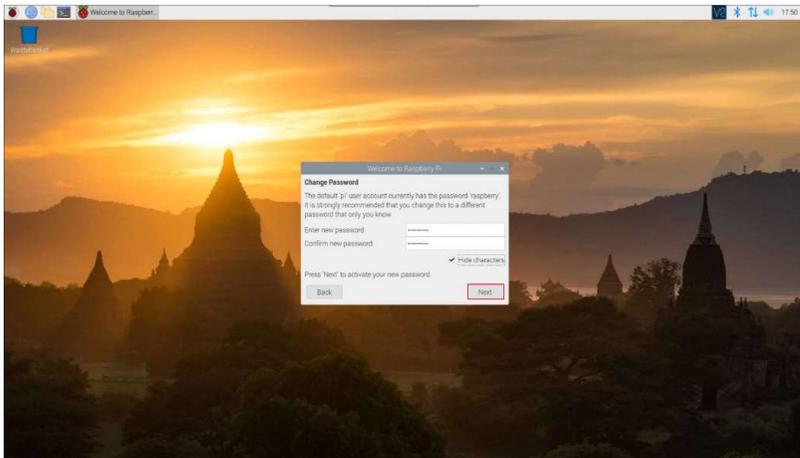
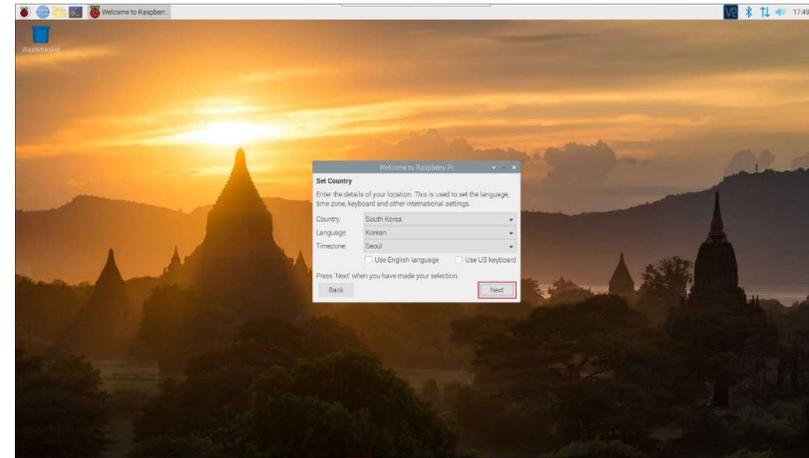
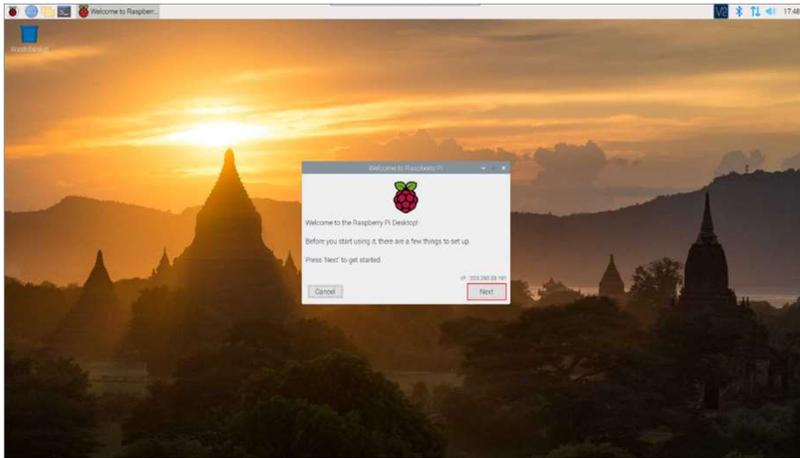
SD카드에 라즈비안올리기

Install Etcher



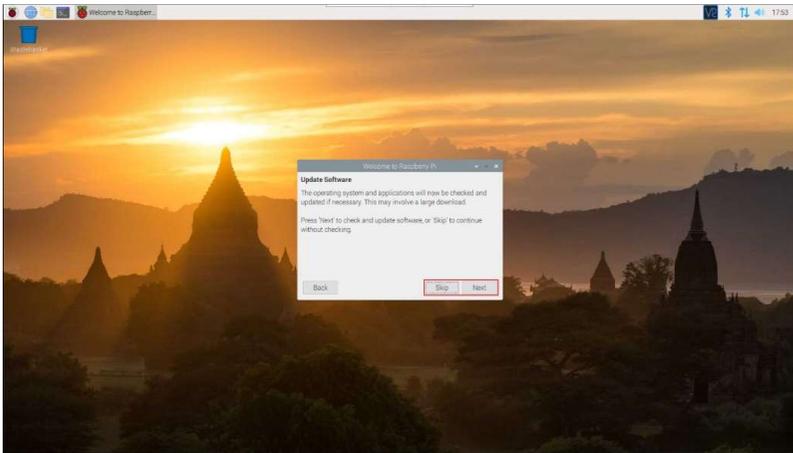
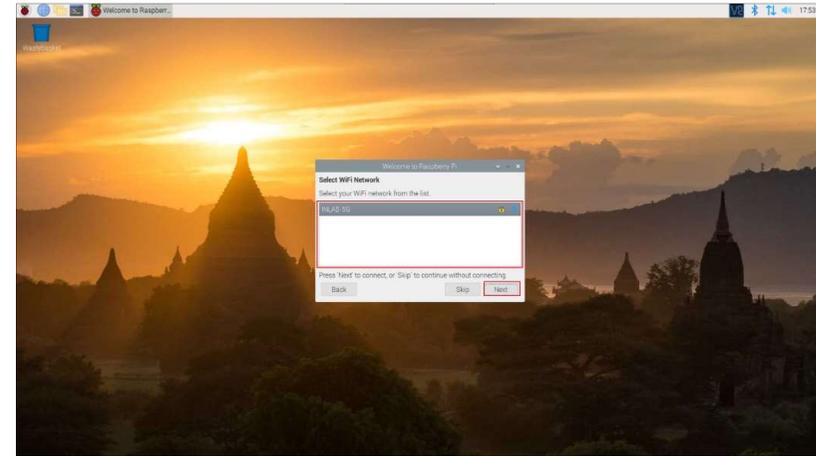
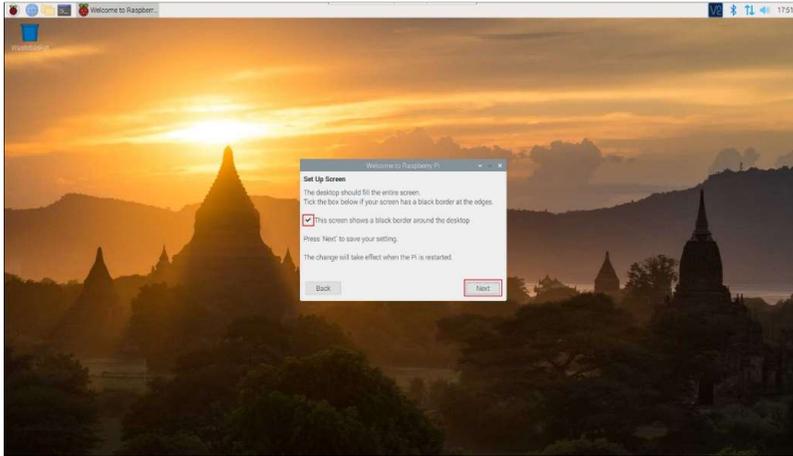
✓ Raspbian OS를 올린 뒤 Raspberry Pi 보드에 SD카드를 삽입

패스워드 설정 Password Setting



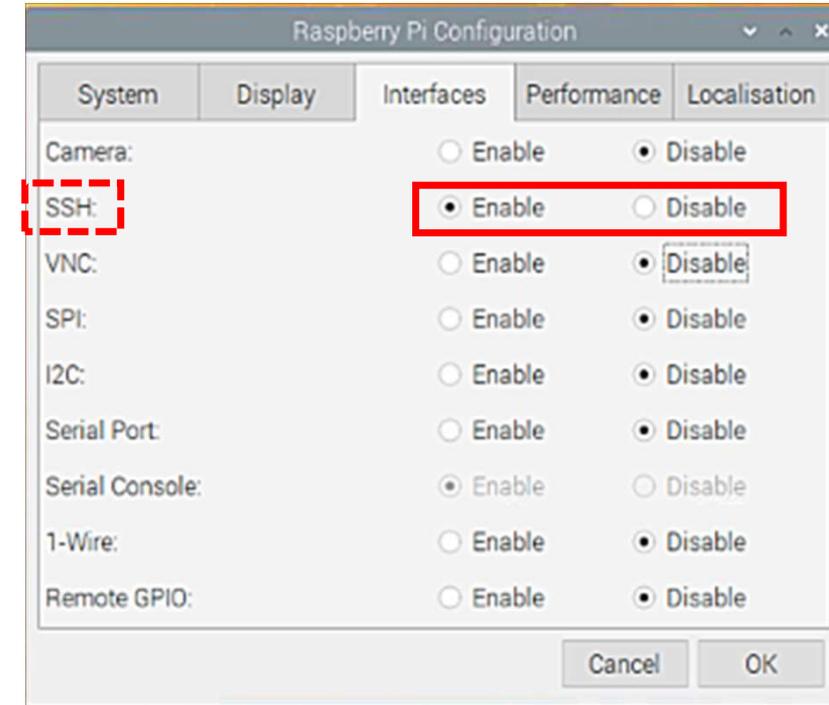
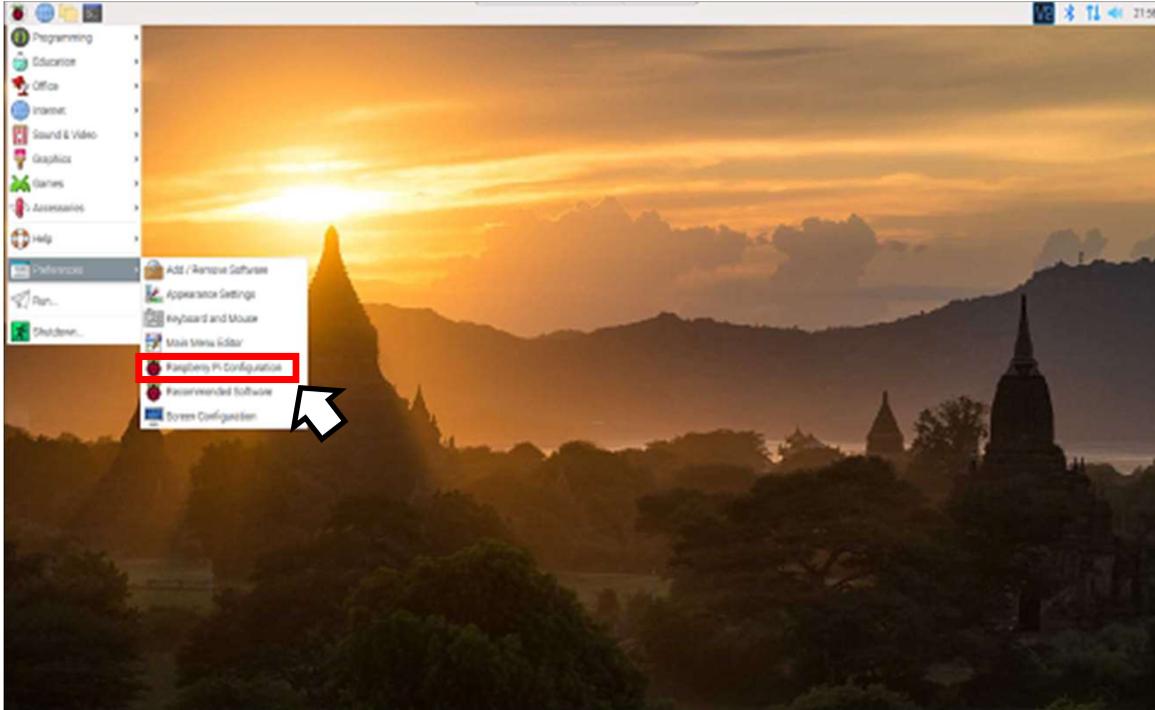
✓ Next → Next → Password 입력

라즈비안 업데이트 Rasbian Update



- ✓ 화면이 딱 차지 않는 경우 체크박스 체크
- ✓ 무선 LAN설정 (이더넷이 연결되어 있을 시 설정하지 않아도 가능)
- ✓ Check For Update에서 Next를 클릭시 자동업데이트 / Skip을 누를시 업데이트 스킵

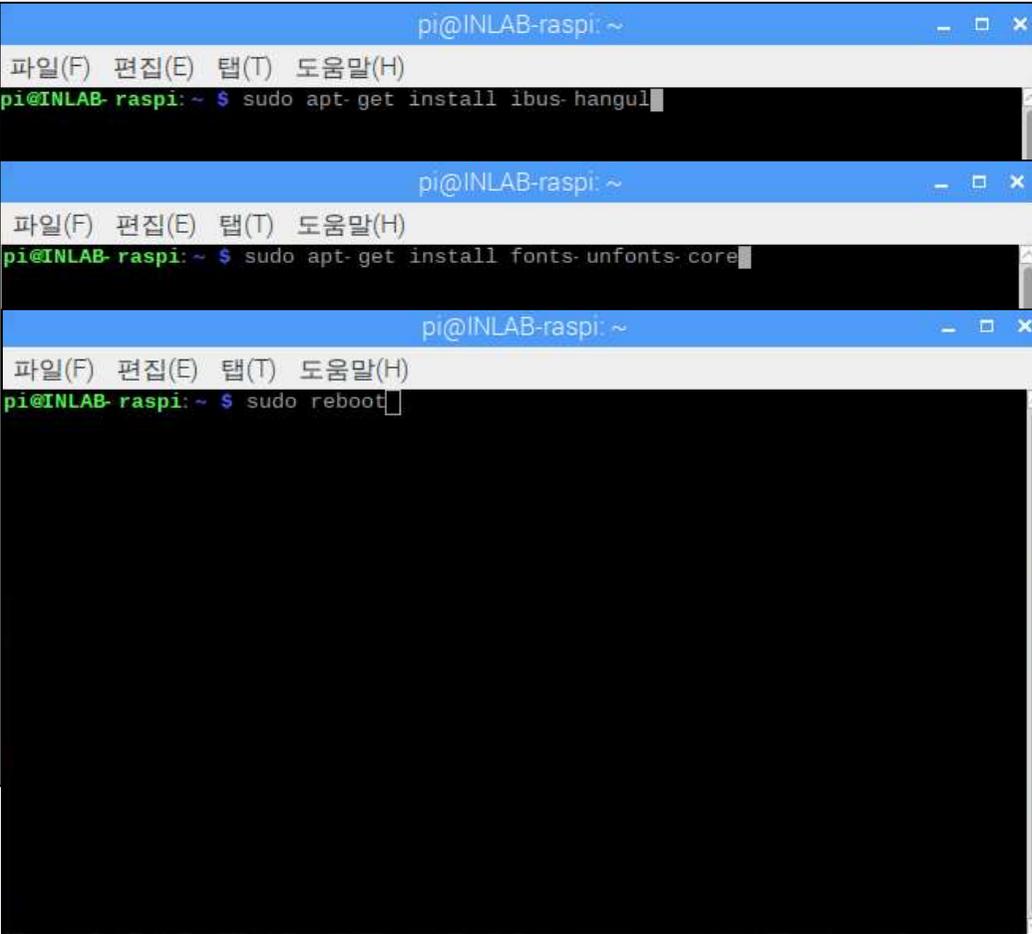
라즈베리파이 구성 설정 Setting Raspberry Pi Configuration



- ✓ 왼쪽상단의 라즈베리파이 로고 Click → Raspberry Pi Configuration Click
- ✓ Interfaces탭의 SSH 활성화

한글폰트 설치

Install Hangul font



```
pi@INLAB-raspi: ~  
파일(F) 편집(E) 탭(T) 도움말(H)  
pi@INLAB-raspi: ~ $ sudo apt-get install ibus-hangul  
  
pi@INLAB-raspi: ~  
파일(F) 편집(E) 탭(T) 도움말(H)  
pi@INLAB-raspi: ~ $ sudo apt-get install fonts-unfonts-core  
  
pi@INLAB-raspi: ~  
파일(F) 편집(E) 탭(T) 도움말(H)  
pi@INLAB-raspi: ~ $ sudo reboot
```

- \$ sudo apt-get install ibus-hangul
: 한글 키보드 입력기
 - \$ sudo apt-get install fonts-unfonts-core
: 한글 트루타입 폰트 (core -> extra는 더 많은 한글폰트 제공)
 - \$ sudo reboot
: 시스템 리부팅
-

Vim편집기 설치

Install Vim editor



```
pi@INLAB-raspi: ~  
파일(F) 편집(E) 탭(T) 도움말(H)  
pi@INLAB-raspi: ~ $ sudo apt-get install vim
```

\$ sudo apt-get install vim
: vim편집기 설치



E N D

