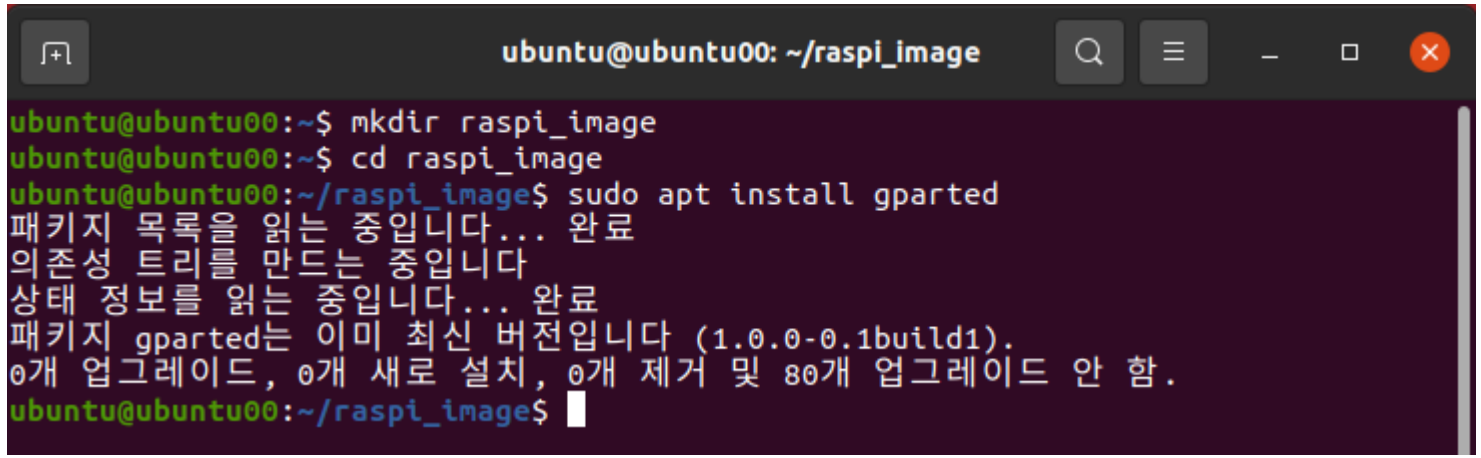
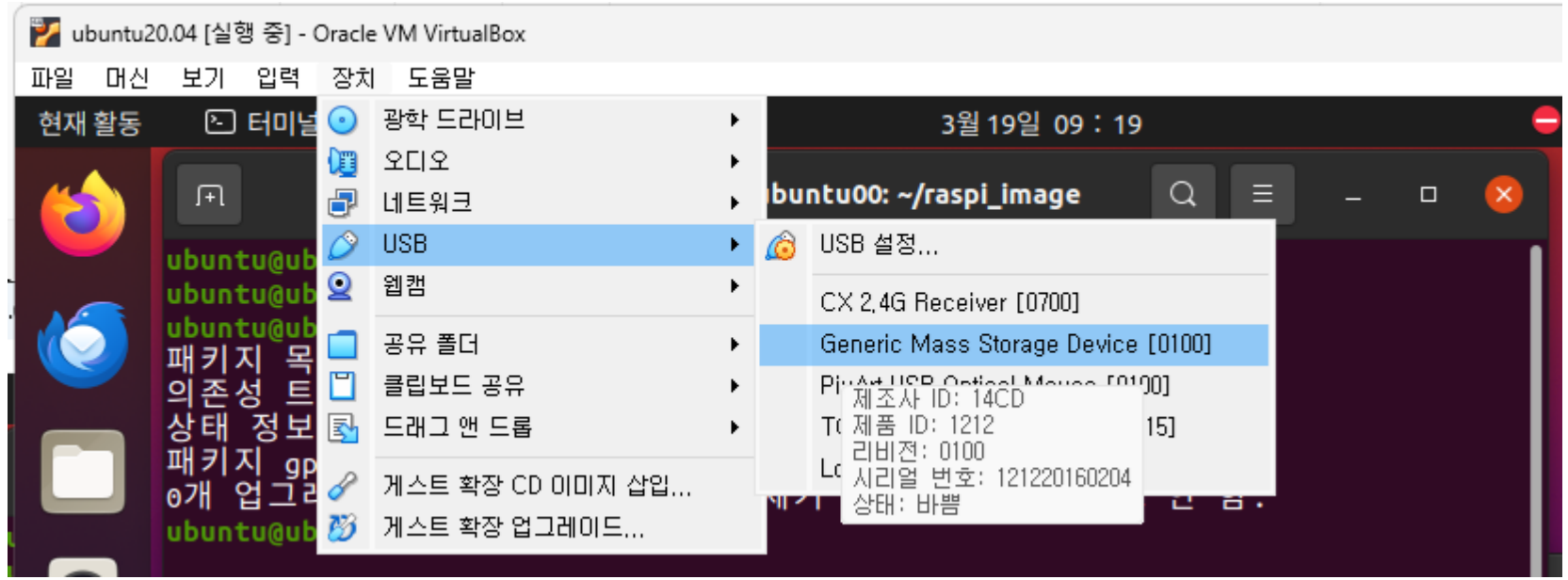
[Intel] 엣지 AI SW 아카데미

서울기술교육센터

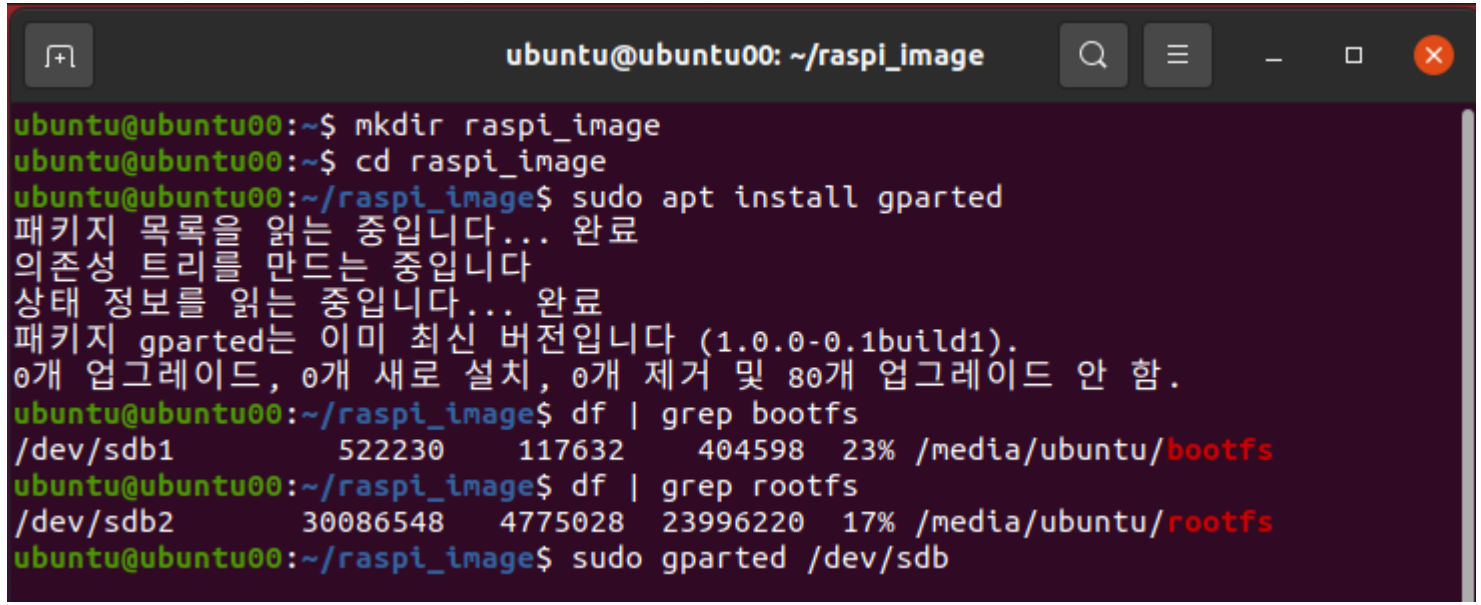
작업디렉토리 생성 및 gparted 패키지 설치



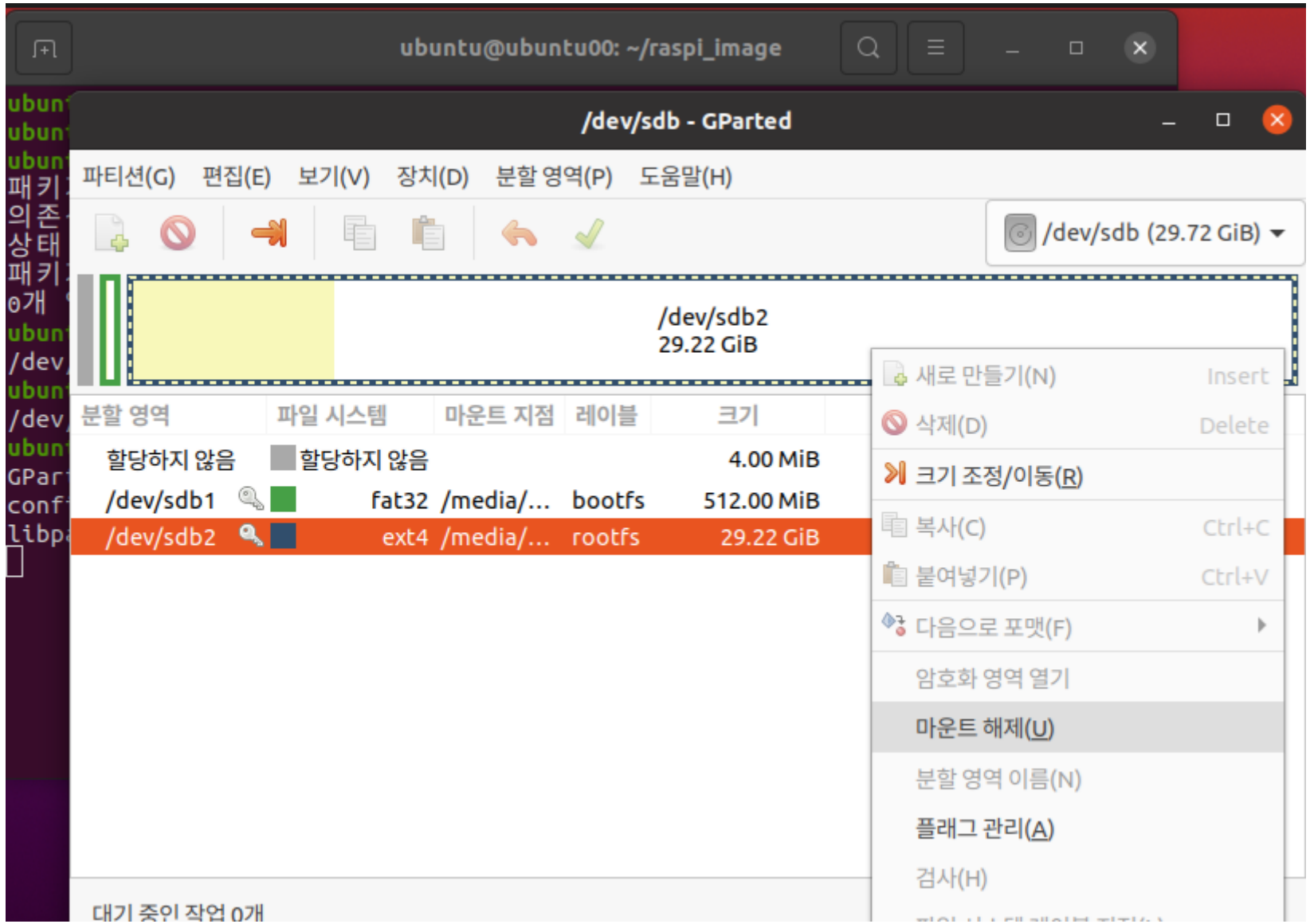
설치 완료된 SD카드를 우분투 연결



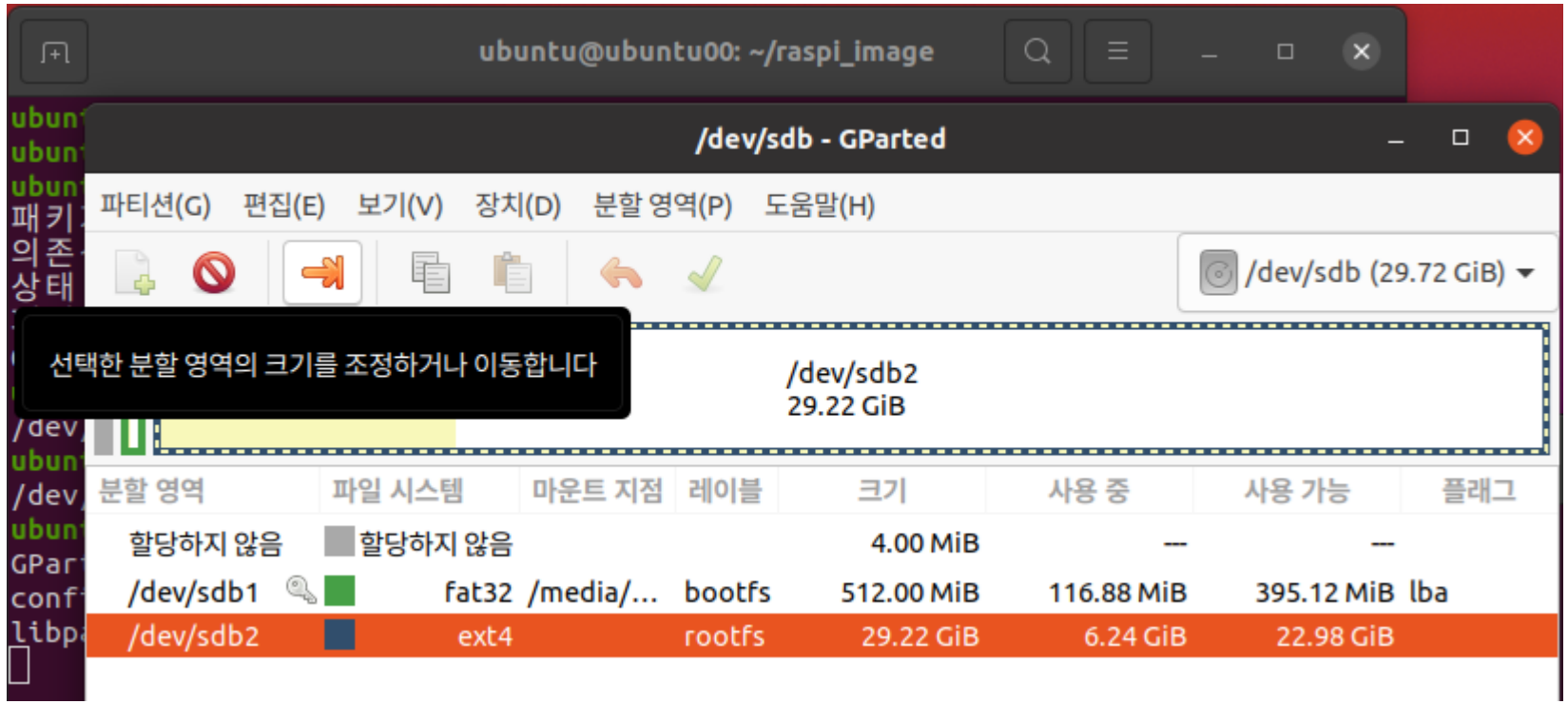
SD카드 마운트 확인 및 gparted 실행



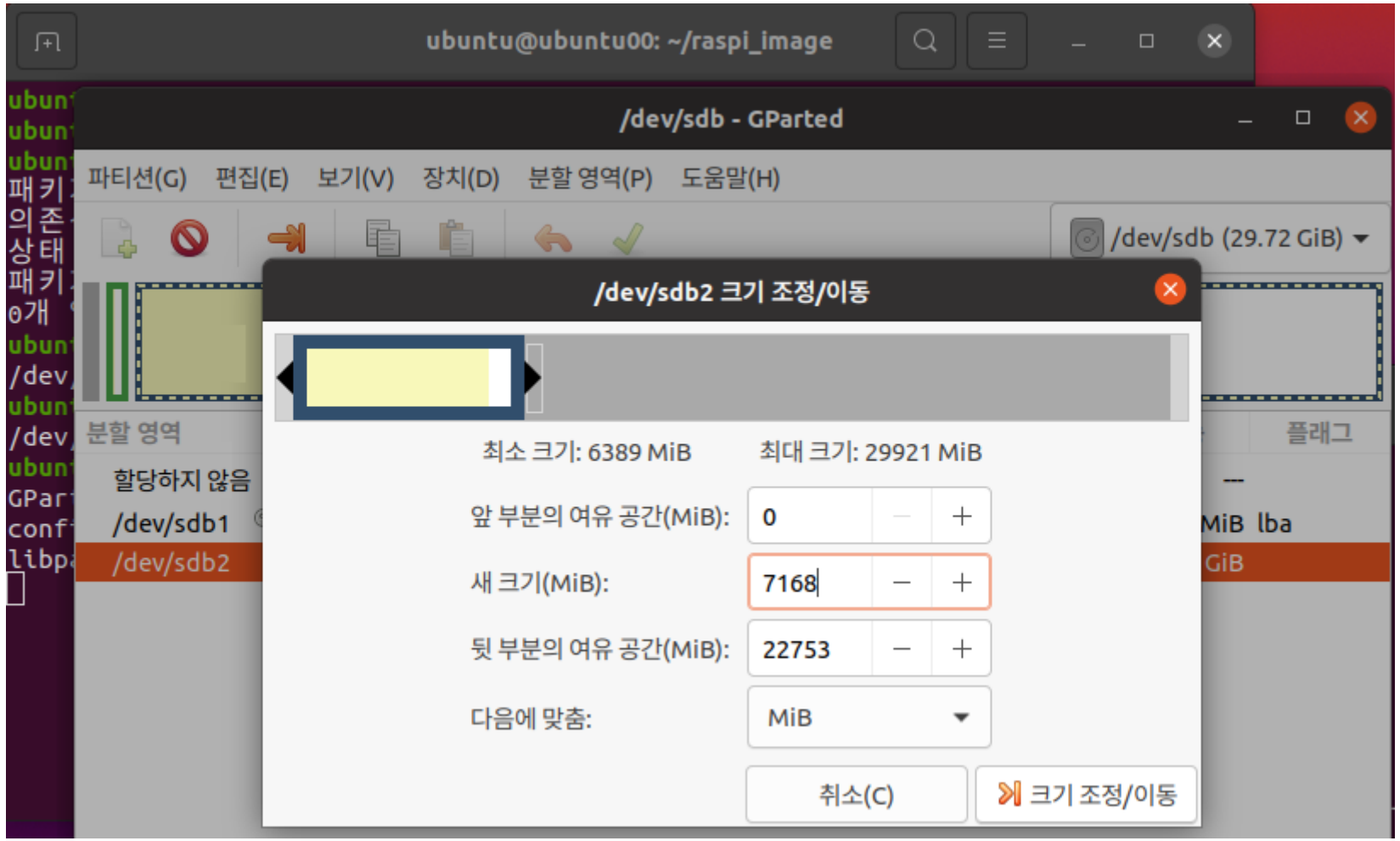
마운트 해제


ubuntu@ubuntu00: ~/raspi_image
/dev/sdb - GParted
파티션(G) 편집(E) 보기(V) 장치(D) 분할 영역(P) 도움말(H)
/dev/sdb (29.72 GiB)
/dev/sdb2
29.22 GiB
분할 영역 파일 시스템 마운트 지점 레이블 크기
할당하지 않음 할당하지 않음 4.00 MiB
/dev/sdb1 fat32 /media/... bootfs 512.00 MiB
/dev/sdb2 ext4 /media/... rootfs 29.22 GiB
새로 만들기(N) Insert
삭제(D) Delete
크기 조정/이동(R)
복사(C) Ctrl+C
붙여넣기(P) Ctrl+V
다음으로 포맷(F)
암호화 영역 열기
마운트 해제(U)
분할 영역 이름(N)
플래그 관리(A)
검사(H)
대기 중인 작업 0개

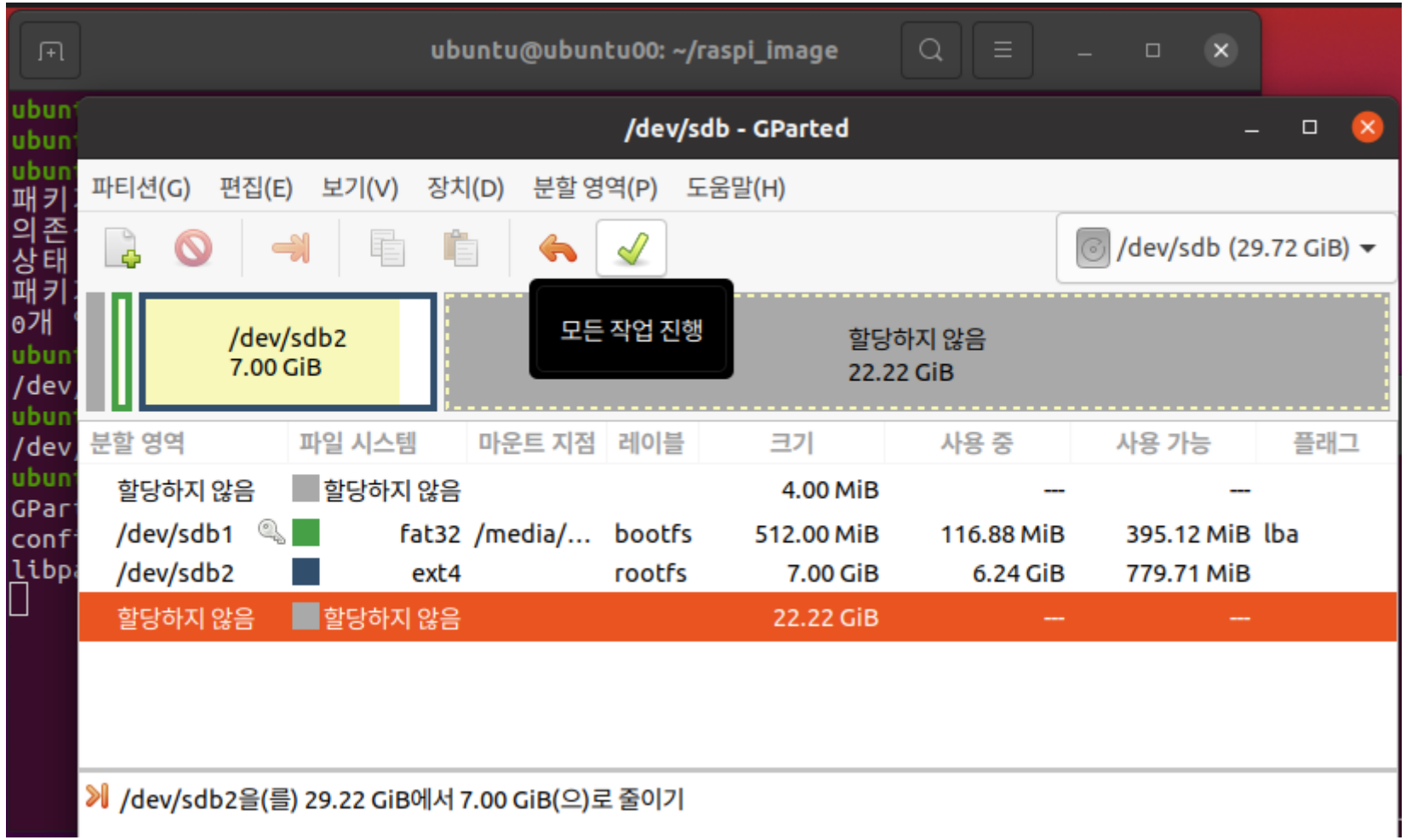
/dev/sdb2 파티션 선택 후 상단 아이콘 메뉴 크기 조정 선택



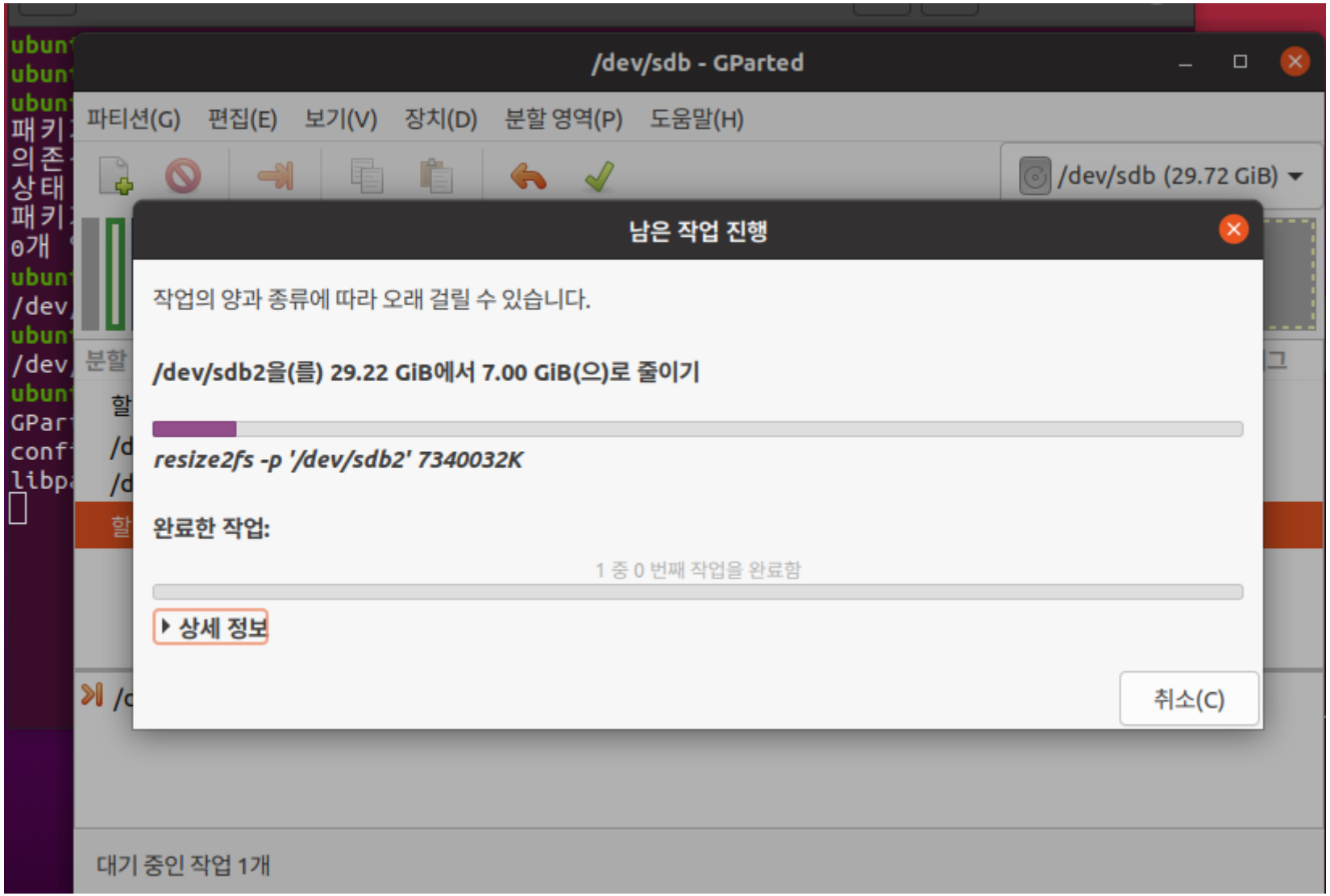
/dev/sdb2 파티션 최소크기에서 조금의 여유분 추가 후 크기 조정 선택



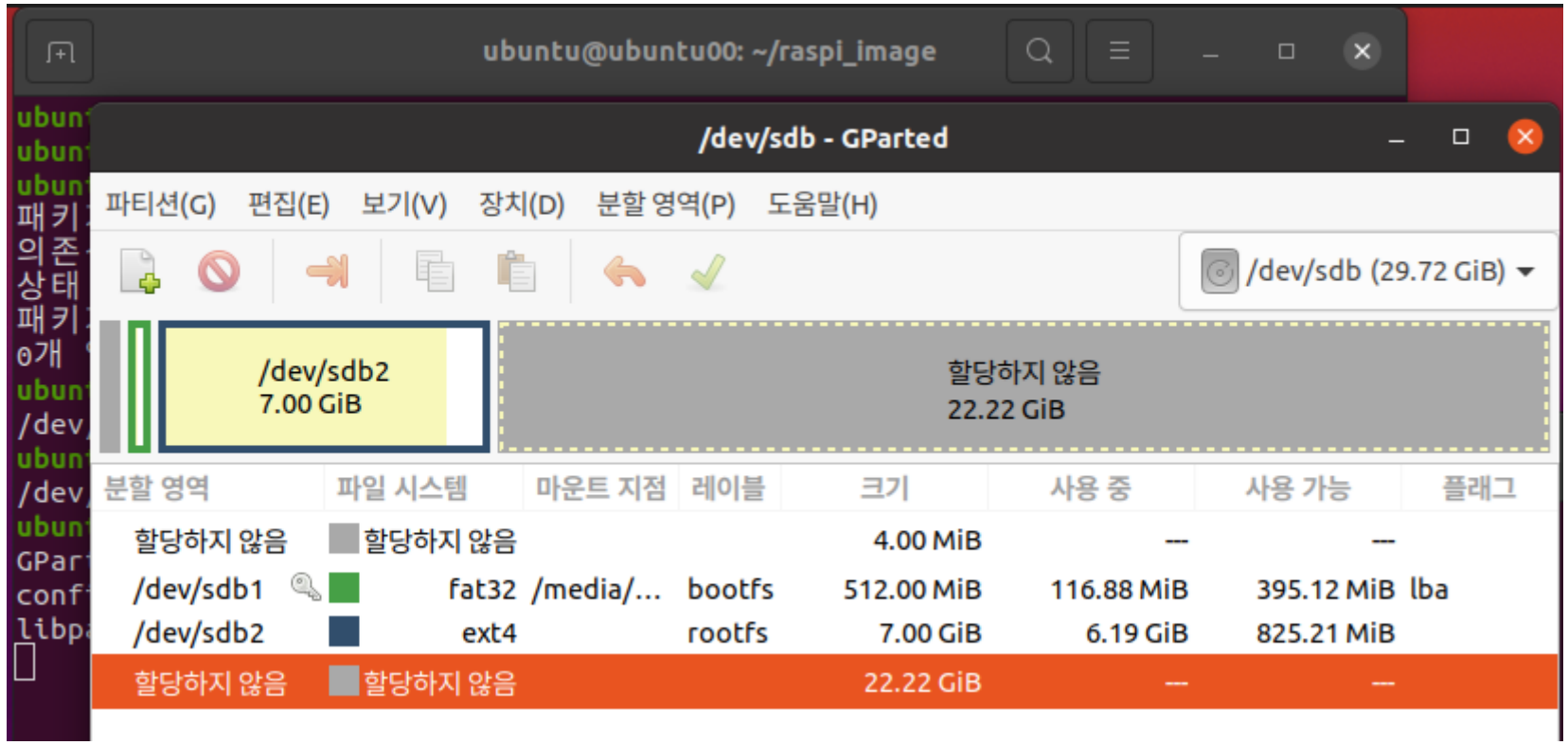
상단 아이콘 메뉴 모든 작업 진행 클릭



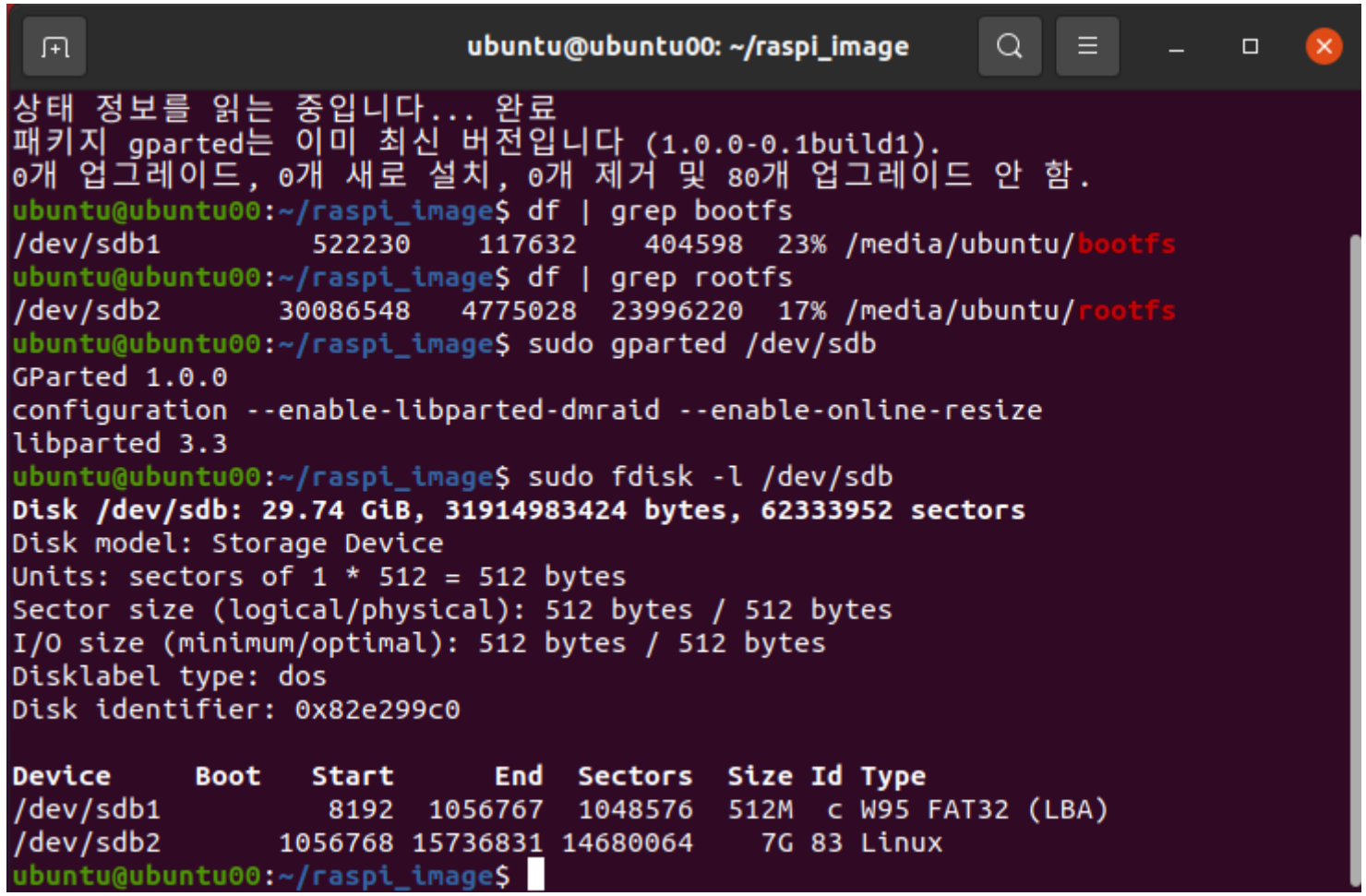
작업 진행 상태


/dev/sdb - GParted
파티션(G) 편집(E) 보기(V) 장치(D) 분할 영역(P) 도움말(H)
/dev/sdb (29.72 GiB)
남은 작업 진행
작업의 양과 종류에 따라 오래 걸릴 수 있습니다.
/dev/sdb2을(를) 29.22 GiB에서 7.00 GiB(으)로 줄이기
resize2fs -p '/dev/sdb2' 7340032K
완료한 작업:
1 중 0 번째 작업을 완료함
상세 정보
취소(C)
대기 중인 작업 1개

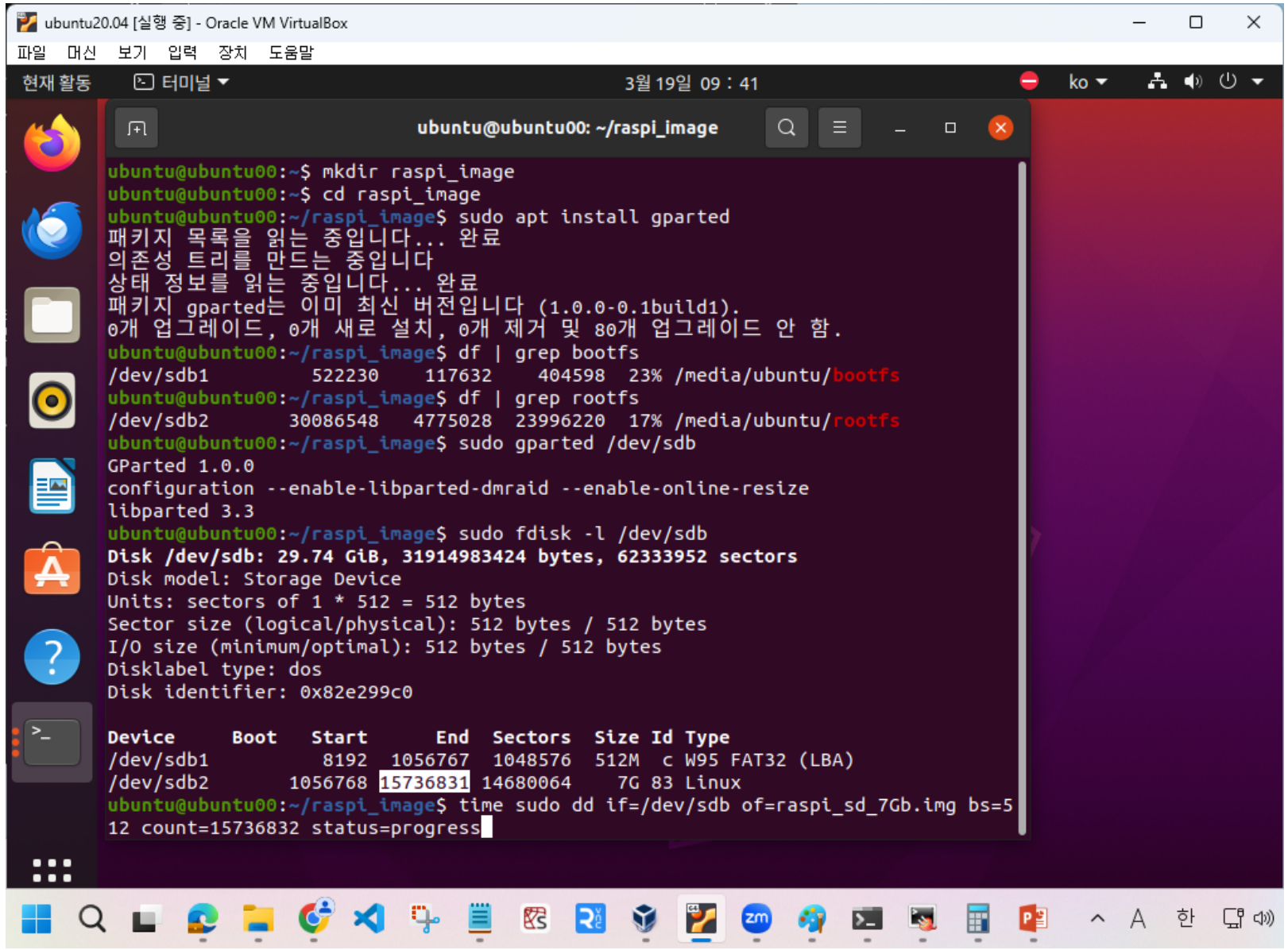
완료되면 앱 종료


ubuntu@ubuntu00: ~/raspi_image
/dev/sdb - GParted
파티션(G) 편집(E) 보기(V) 장치(D) 분할 영역(P) 도움말(H)
/dev/sdb (29.72 GiB)
/dev/sdb2
7.00 GiB
할당하지 않음
22.22 GiB
분할 영역 파일 시스템 마운트 지점 레이블 크기 사용 중 사용 가능 플래그
할당하지 않음 할당하지 않음 4.00 MiB --- ---
/dev/sdb1 fat32 /media/... bootfs 512.00 MiB 116.88 MiB 395.12 MiB lba
/dev/sdb2 ext4 rootfs 7.00 GiB 6.19 GiB 825.21 MiB
할당하지 않음 할당하지 않음 22.22 GiB --- ---

fdisk 파티션 정보 및 섹터 확인



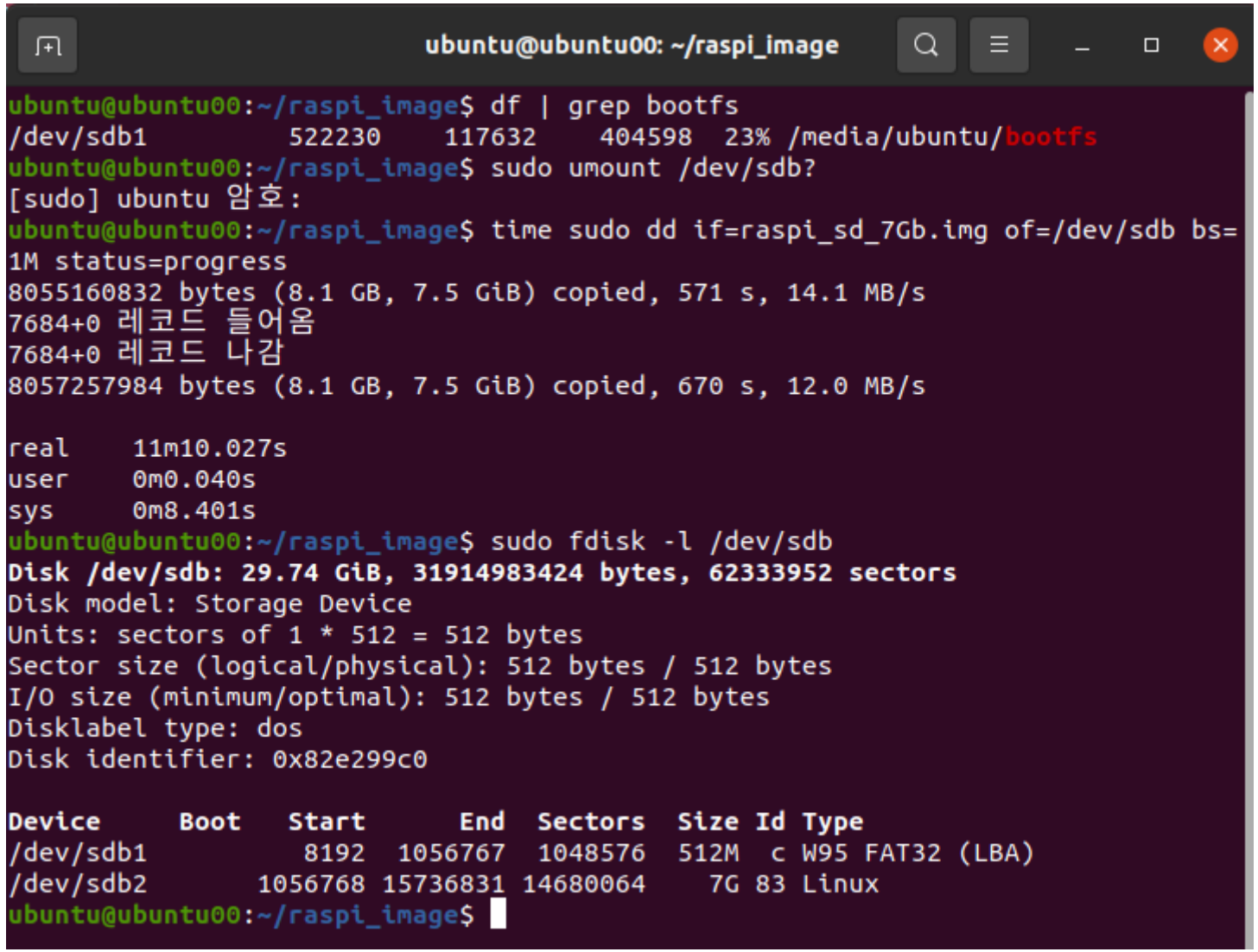
크기조정된 sd카드 이미지 복사



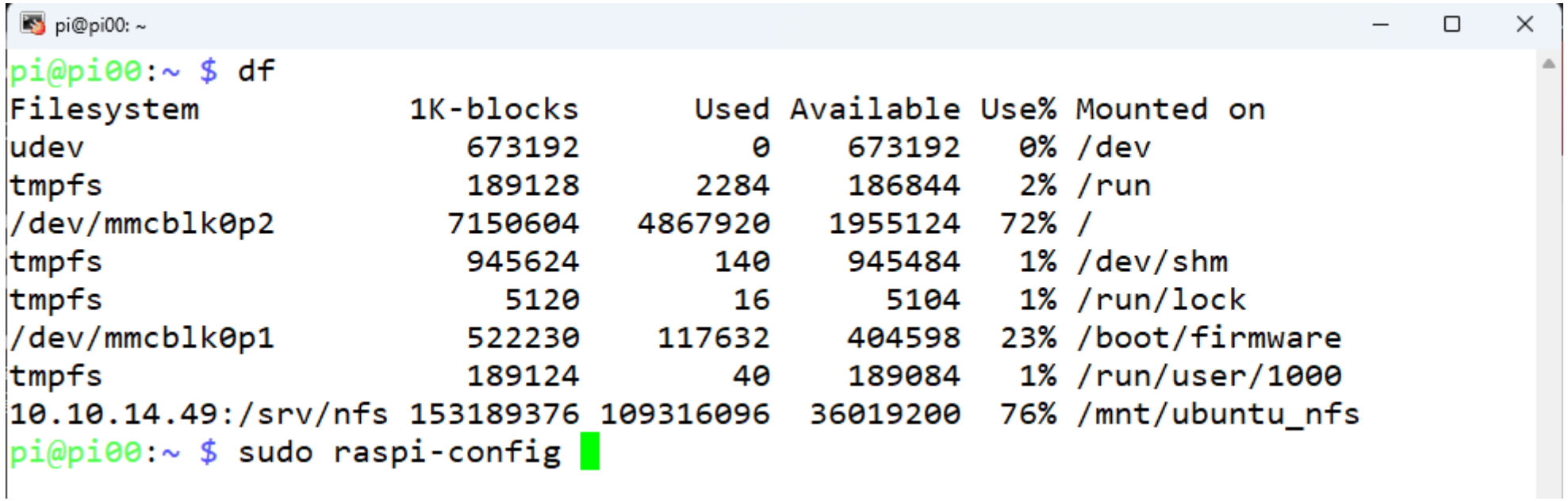
백업 파일 확인

```
ubuntu@ubuntu00:~/raspi_image$ sudo fdisk -l /dev/sdb
Disk /dev/sdb: 29.74 GiB, 31914983424 bytes, 62333952 sectors
Disk model: Storage Device
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x82e299c0

Device     Boot   Start      End  Sectors  Size Id Type
/dev/sdb1          8192  1056767  1048576  512M  c W95 FAT32 (LBA)
/dev/sdb2       1056768 15736831 14680064    7G 83 Linux
ubuntu@ubuntu00:~/raspi_image$ time sudo dd if=/dev/sdb of=raspi_sd_7Gb.img bs=5
12 count=15736832 status=progress
8056066560 bytes (8.1 GB, 7.5 GiB) copied, 592 s, 13.6 MB/s
15736832+0 레코드 들어옴
15736832+0 레코드 나감
8057257984 bytes (8.1 GB, 7.5 GiB) copied, 592.091 s, 13.6 MB/s

real    9m52.109s
user    0m2.691s
sys     0m30.643s
ubuntu@ubuntu00:~/raspi_image$ ls
raspi_sd_7Gb.img
ubuntu@ubuntu00:~/raspi_image$ ls -l
합계 7868420
-rw-r--r-- 1 root root 8057257984  3월 19 09:51 raspi_sd_7Gb.img
```

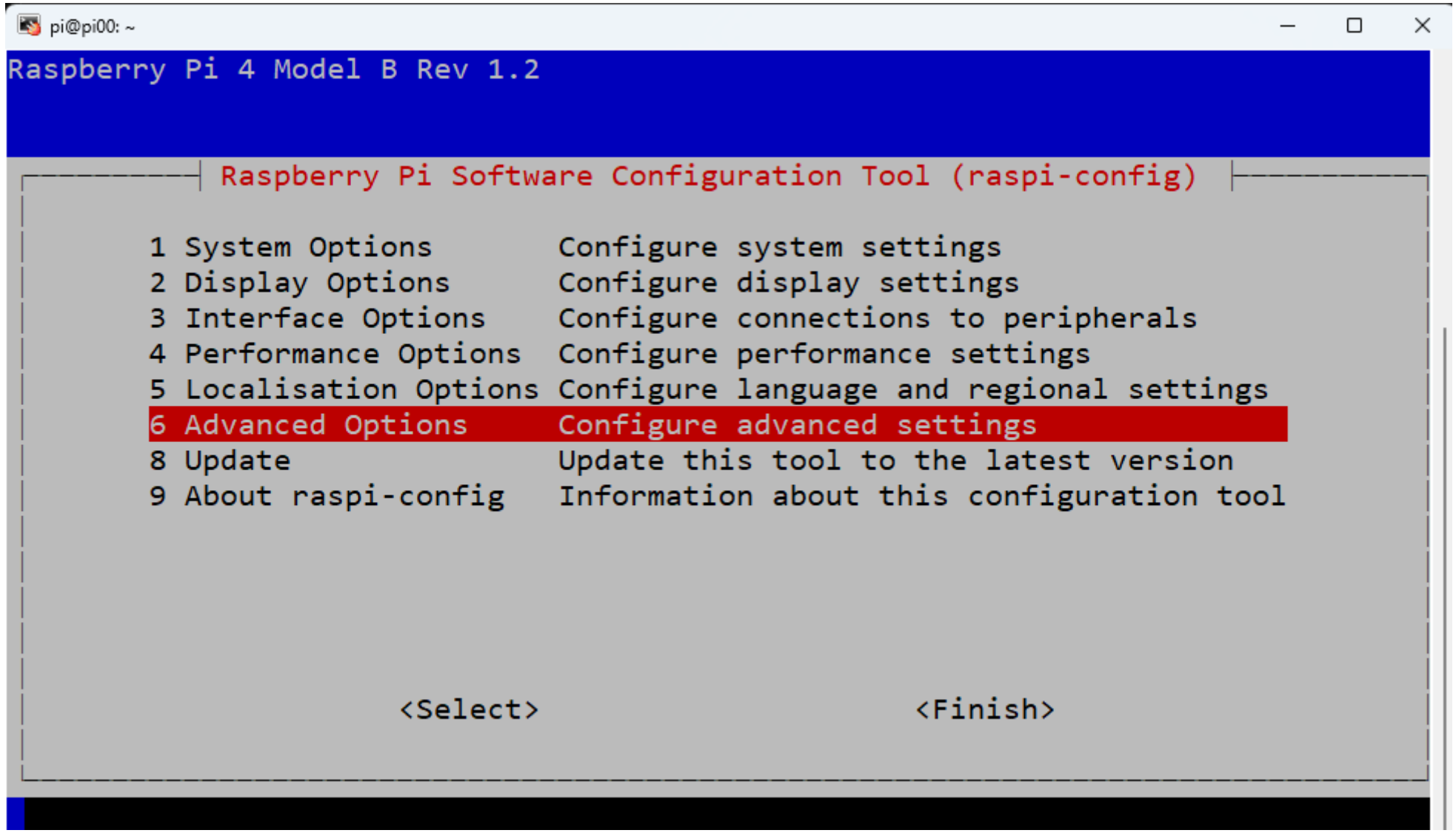
백업된 이미지를 sd 카드로 복사 및 확인



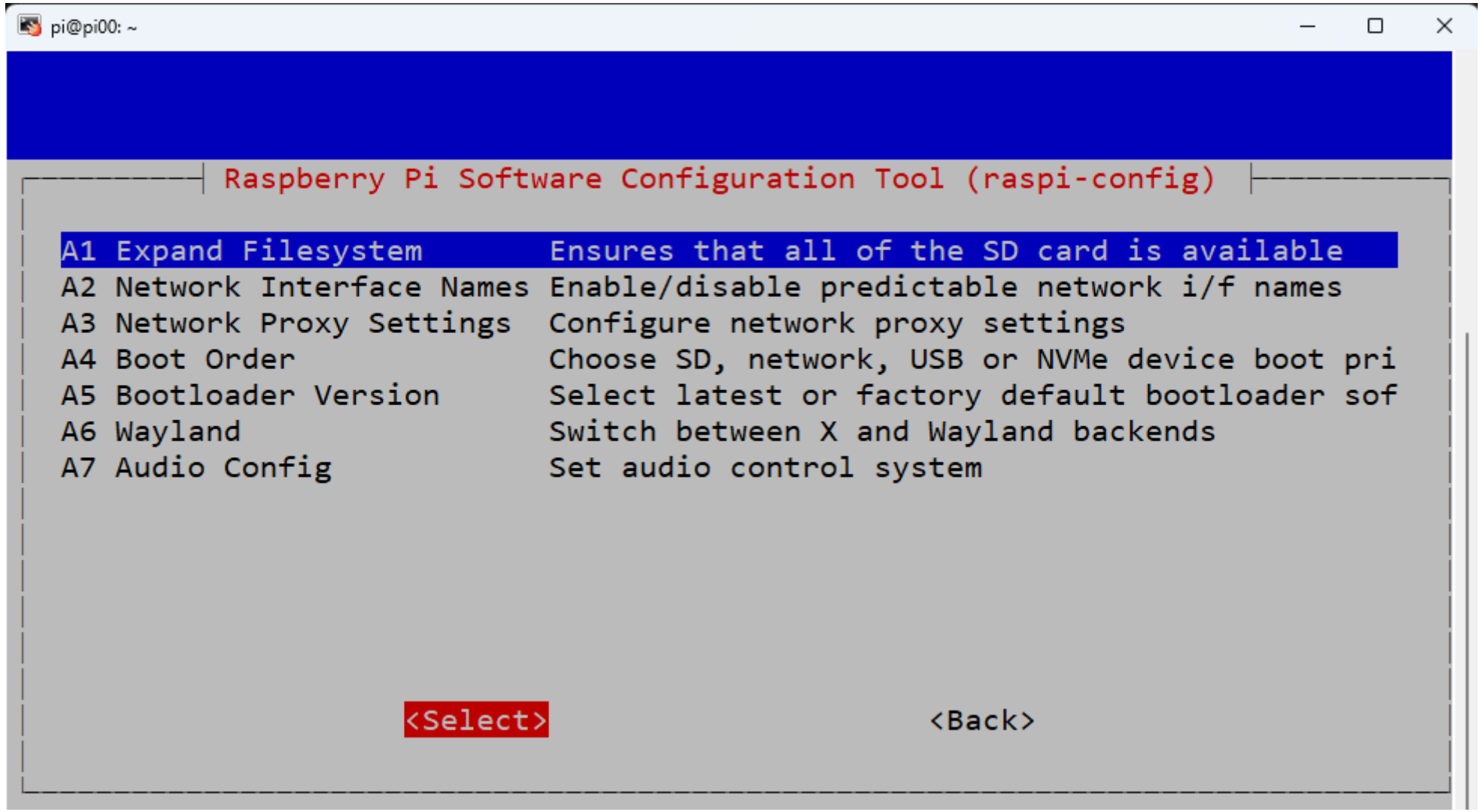
복사된 sd카드로 부팅 후 파일시스템 사이즈 확인 및 raspi-config 실행



파일시스템 확장1


pi@pi00: ~
Raspberry Pi 4 Model B Rev 1.2
Raspberry Pi Software Configuration Tool (raspi-config)
1 System Options Configure system settings
2 Display Options Configure display settings
3 Interface Options Configure connections to peripherals
4 Performance Options Configure performance settings
5 Localisation Options Configure language and regional settings
6 Advanced Options Configure advanced settings
8 Update Update this tool to the latest version
9 About raspi-config Information about this configuration tool
<Select>
<Finish>

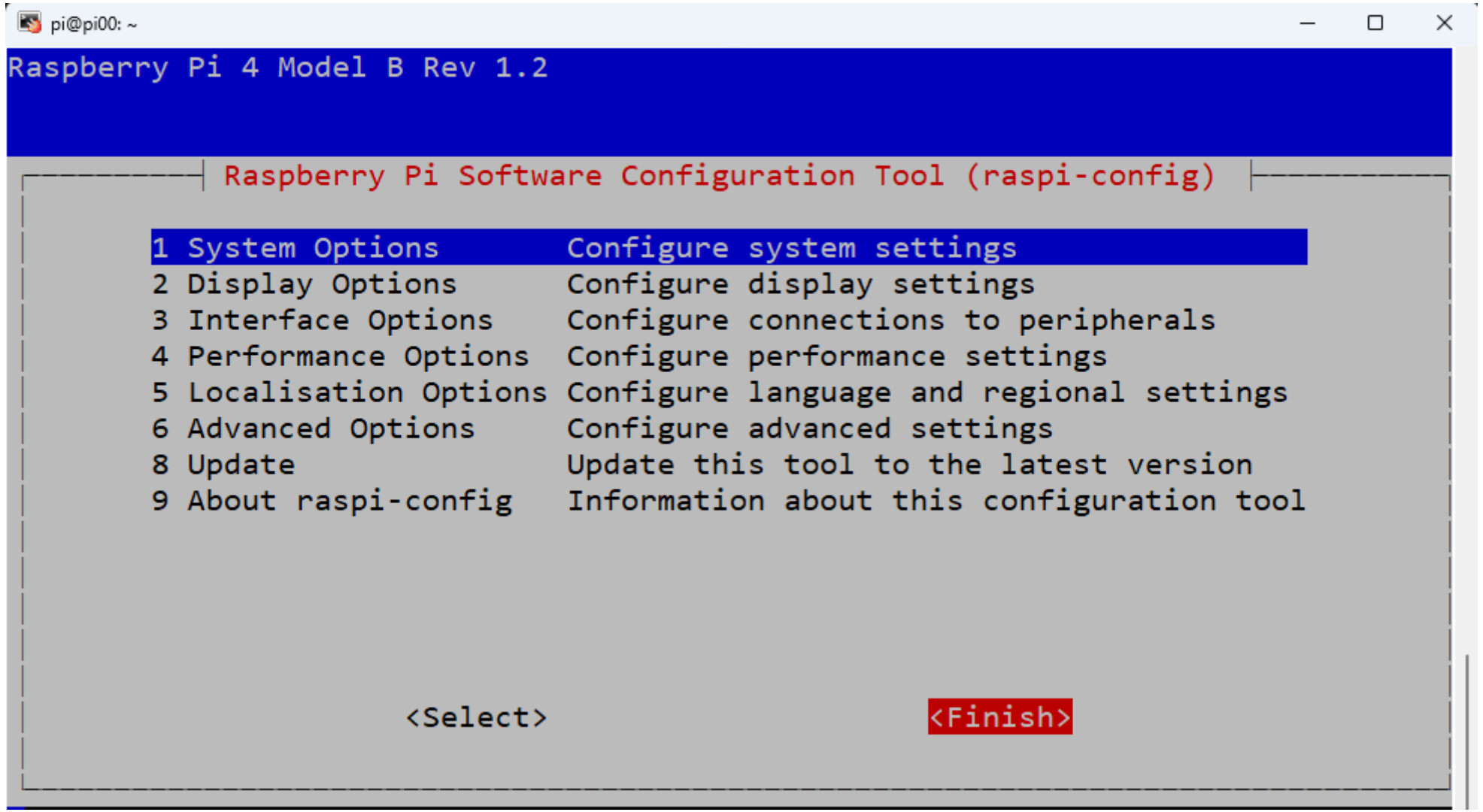
파일시스템 확장2


pi@pi00: ~
Raspberry Pi Software Configuration Tool (raspi-config)
A1 Expand Filesystem Ensures that all of the SD card is available
A2 Network Interface Names Enable/disable predictable network i/f names
A3 Network Proxy Settings Configure network proxy settings
A4 Boot Order Choose SD, network, USB or NVMe device boot pri
A5 Bootloader Version Select latest or factory default bootloader sof
A6 Wayland Switch between X and Wayland backends
A7 Audio Config Set audio control system
<Select>
<Back>

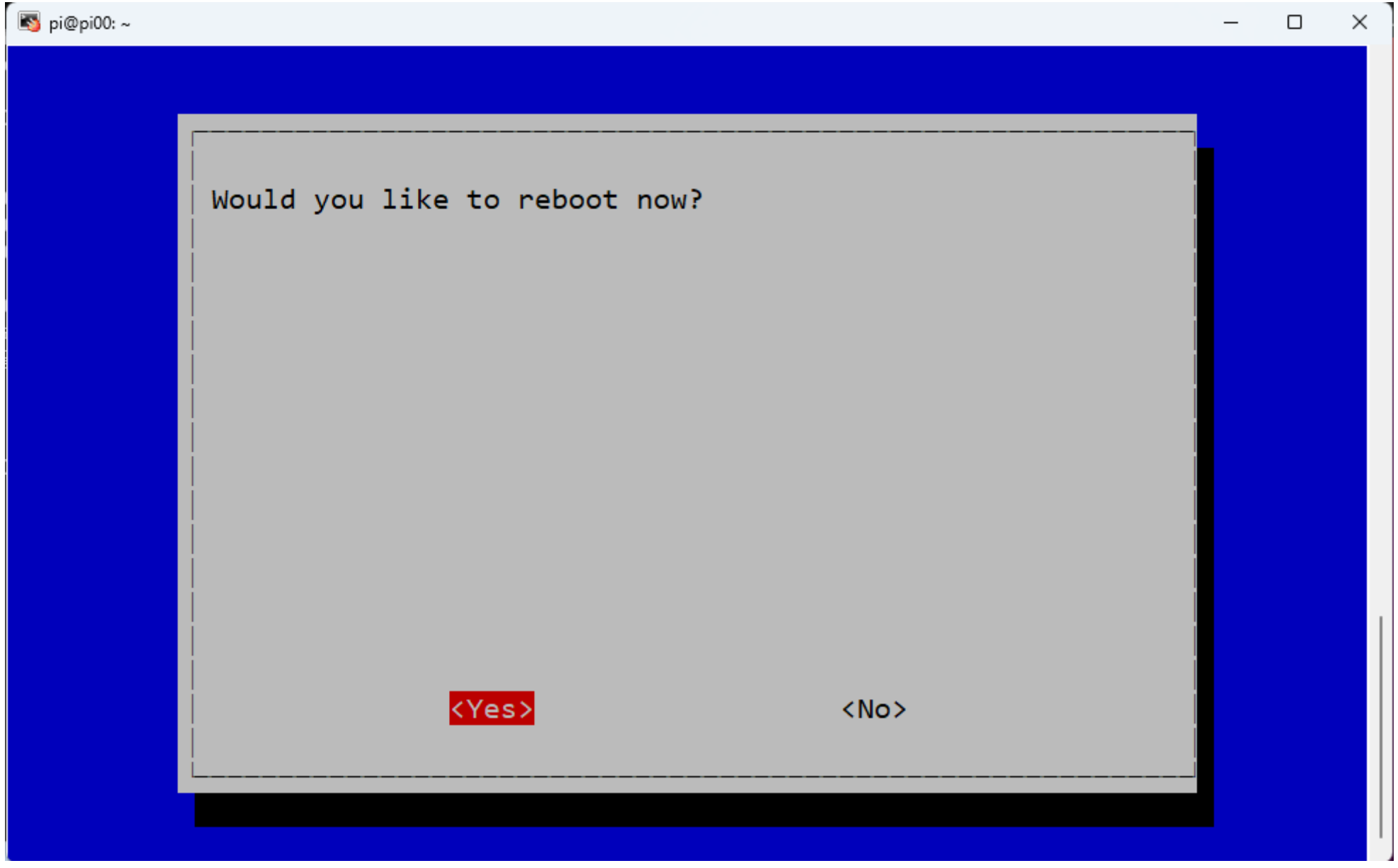
파일시스템 확장3


pi@pi00: ~
Root partition has been resized.
The filesystem will be enlarged upon the next reboot
<Ok>

파일시스템 확장4 - 종료


pi@pi00: ~
Raspberry Pi 4 Model B Rev 1.2
Raspberry Pi Software Configuration Tool (raspi-config)
1 System Options Configure system settings
2 Display Options Configure display settings
3 Interface Options Configure connections to peripherals
4 Performance Options Configure performance settings
5 Localisation Options Configure language and regional settings
6 Advanced Options Configure advanced settings
8 Update Update this tool to the latest version
9 About raspi-config Information about this configuration tool
<Select>
<Finish>

파일시스템 확장5 – 재부팅



재부팅후 파일시스템 사이즈 확인