PE_cyclenvm.md 2025-01-24

디스크 정보 확인

```
lsblk
```

smartctl 설치

```
sudo apt install smartmontools sudo apt install smartmontools nvme-cli
```

smartctl 사용

```
sudo smartctl -A /dev/nvme0n1 > before_rocksdb.txt
sudo nvme smart-log /dev/nvme0n1 > before_rocksdb.txt

./db_bench --benchmarks=fillrandom --wal_dir= --db=
sudo smartctl -A /dev/WAl_口바이스 > after_rocksdb.txt
```

smartctl 예제

Smart Log for NVMe device: /dev/nvme0n1

Temperature: 34 Celsius

Available Spare: 100%

Available Spare Threshold: 10%

Percentage Used: 5%

Data Units Written: 123456789

nand block 확인 (논리)

```
sudo nvme id-ns /dev/nvme0n1
```

RocksDB 실행 중 102,848 LBA가 추가로 쓰임

- 15350796120 15350693272 = 102848 (LBA: 512 bytes)
- 102848 * 512 = 52,659,456 bytes
- 52,659,456 / 1,000,000,000 ≈ 0.0527 GB (약 52.7 MB)
- 52.7 MB / 3 MB ≈ 17.57 P/E 사이클 (TLC NAND 기준 블록 크기: 3MB)