

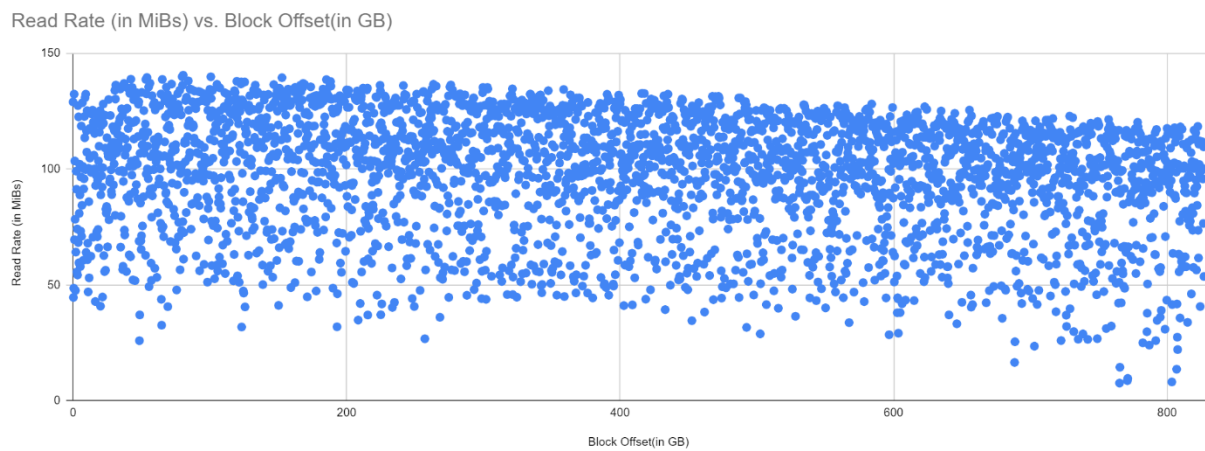
Homework 4

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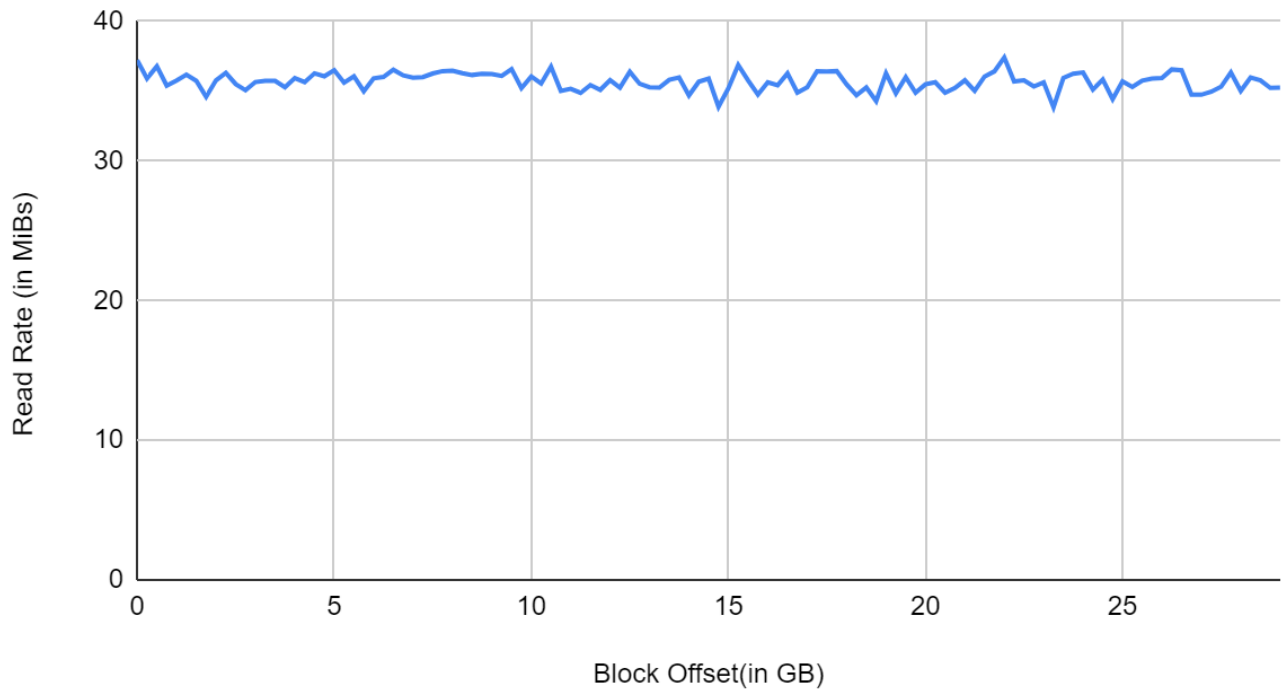
Assignment : ZCAV

Hard Disk Drive(1TB) Read Rate vs Block Offset



USB (32 GB) Read Rate vs Block Offset

Read Rate (in MiBs) vs. Block Offset(in GB)



Laptop Lenovo Ideapad 520

Hdd Capacity 2 TB

Hdd Type SATA

Avg Access time (including rotational latency) 19.71 ms

Throughput 190 MB/s

Assignment : xv6 file system

Note : *b*->*sector* was incorrect, replacing it with *blockno* worked though

echo->a

log_write 34

log_write 34

log_write 59

the first is allocating on inode on device (isalloc())

the second is modifying in-memory inode to disk (update())

the third is writing data to inode.

echo x >a

log_write 58 (called by balloc, allocating the a-zoned block)

log_write 566 (called by bzero, zeroing the write block)

log_write 566 (Called by write, writing the data to in node)

log_write 34 (called by update, copying the in memory inode to disk)

log_write 566 (called by write writing data to inode)

log_write 3 (called by update copying in memory inode to disk)

rm a

log_write 59 (called by write, to write data to inode)

log_write 34 (called by update copy in memory inode to disk)

log_write 58 (called by bfree, free a disk block)

log_write 34 (Called by update, modify in memory inode to disk)

log_write 34 (called by update)