Let SSD = solid state disks

Hard disks

Input/Output / Storage device
Block 0:1 2 3 -- min-1

Playeo

Score dependent on block of data

Less exposure

Lola of reasons -- in per desk

Lots of sections -- per hand
4. Down

Takes time

3. Controller do the rest

new address

2. Read controller block 8

put data in new

To write a block of data
drive (road/wind breaks)
drop brain feel like a cloud
→ combination (headache, nausea
address unscientific non-physical
SSD ← null voluntary
Load the data (done by hardware)

1. phys block
   0  1  2  3  4
   5  6  7  8  9
   10 11 12 13 14

2. desynch

Write to SSD
How to do I/O (feed to components)
If the label is busy, go to end to stand.
Set \( y \) of \( \phi \) to

Set put in data

Put block \( \phi \) to set

must fill idle big \( \phi \) set

else go

... Break

... SR

DSS want to write block to from

new location in disk cell
interrupt driven I/O

→ every time the disk controller finishes an operation, it signals sends an interrupt to the CPU

→ device driver \to user half
  has 2 halves \to interrupt half
\textbf{INT} \{ \textbf{v}\text{(done)} \}

\textbf{else} \{ \textbf{v}\text{(disk-write)} \}

\textbf{I/O} \{ \text{set \& lt } \}

\textbf{put \text{ack} } \to \text{DE}

\textbf{put \text{block} } \leftarrow \text{SR}

\textbf{v}\text{(disk-write)} \rightarrow \text{I/O } \}

\textbf{if} \text{a \text{block} (\text{block}, \text{addr})}

\textbf{done} = 0

\textbf{disk-write} = 1
For semaphore are needed.

I/O scheduling

First in First out (FIFO)

What order come (assuming p come)

Write to disk

P1, P2, P3 ... as want to
Should we pick $R$ when $f$ is closed? If yes, draw $\triangle$.
to move head forward to lead

Time taken for seeker to come to

Time taken to work

Seek timer

1) Direct head scheduling
2) Direct I/O scheduling

Direct I/O scheduling
First

2. SSTF → Shortest Seek Time

0. FCFS → Next Shortest

Seek phosphorylation