1) Blocks = Sector = 512 byte.

1000 bytes = 1 kb 1024 bytes = 1 kib

= 1 Kib

1 kb } = 1000 bytes 1 KiB

1 kb 1024 bytes 1 KB

80 Gb

74 GB

---

1 TB

= 1024 GB

= 1024 x 1024 MB

= 1024 x 1024 x 1024 kB

= 2 x 1024 x 1024 x 1024

$= 2 \times 2^{30}$

$= 2^{31}$

$1\ TB = 2^{31}$ sectors. >>> 2 **31

0 to $2^{31} - 1$

1907 GB 2048 GB X

2,147,483,648

$2 \times 1907 \times 2^{20}$ Sector

---

512 bytes

320GB

2KB

80GB

2G

a

2047

500x2KB

= 1000KB

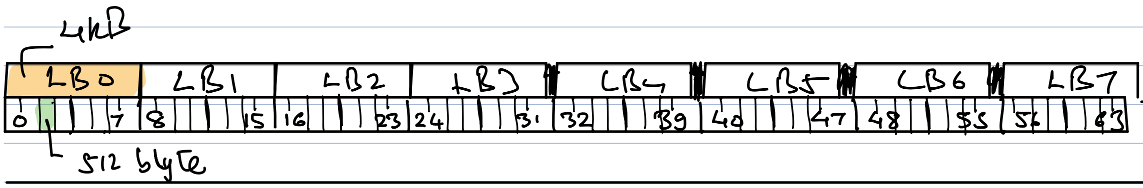
2048

1

Disk Driver. logical block

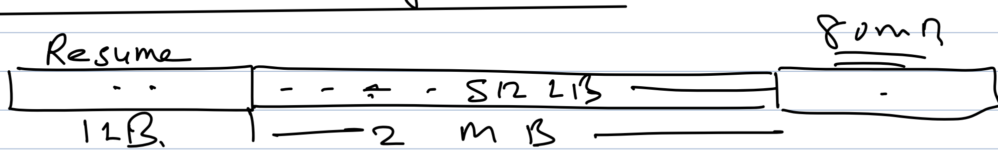
4KB

8 contiguous Sectors = 1 block



Data Unit = 1 file

File = A collection of logical blocks.



Regular Files = collection of Non-contiguous logical blocks.

Persistent Representation of a Resource.

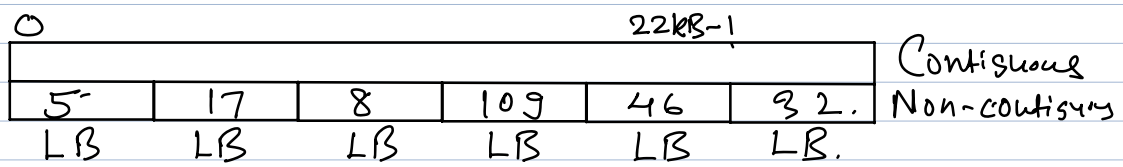
1) Conceptual 2) Primary / secondary memory block. 3) Data.

4) Hard-ware device

Hard disk:

logical block = to store the actual data of file

End-user and programmer



0 – 4K-1	:	LB#5
4K – 8K-1	:	LB#17
8K – 12K-1	:	LB#8
12K – 16K-1	:	LB#109.
16K – 20K-1	:	LB#46
20K – 24K-1	:	LB#32.

Meta-Data

1. Contiguous to Non-contiguous mapping.
2. Owner of file.
3. type of file.
4. Permission
5. Hard link count
6. last accessed / last modified / last metadata modified