① <u>Topics to be covered</u> → Google Cloud Storage, Bigtable, SQL & Spanner.

» Diff apps & workloads require different storage database solutions.

»

② <u>Cloud Storage</u>

→ obj storage [unlike file storage (or) block storage] has keys called URLs. Used in web technology.

→ Cloud storage is like obj storage but better.

» Obj storage is immutable, a new version is created in every edit.

» Cloud storage files are organised into buckets. (objects)

②·1 <u>Cloud Storage interactions</u>

(like archives)
» Multiregional, regional, Nearline, coldline
(daily)   (3 times   (Once a   (Once a
a week)   month)   year).
access

———————————→
Cost decreases.

②·2 Cloud storage is like Amazon S3 & AWS Glacier.
(Frequent   (Cold storage)
Access).

———————— ✗ ————————

③ <u>Cloud Bigtable</u> :   » Google's NoSQL bigdata
database service.

✱ ✱ Used in Maps, Search & Gmail

④ <u>Cloud SQL and Cloud Spanner</u>

⇒ Cloud SQL is
managed RDBMS,

⌐ Offers MySQL, SQL & PostreSQL.

⇒ Cloud Spanner → Specifically for horizontal scaling.

⑤ Cloud DataStorage is also a NoSQL DB which is
horizontally scalable.
⌐ Offers transactions (unlike Bigtable).
& lets you do SQL like queries.

✷ Cloud services 3, 4, 5 are like Amazon RDS and
Amazon Aurora.

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End of week 4: