

Agenda

→ Complete Consistent Hashing.

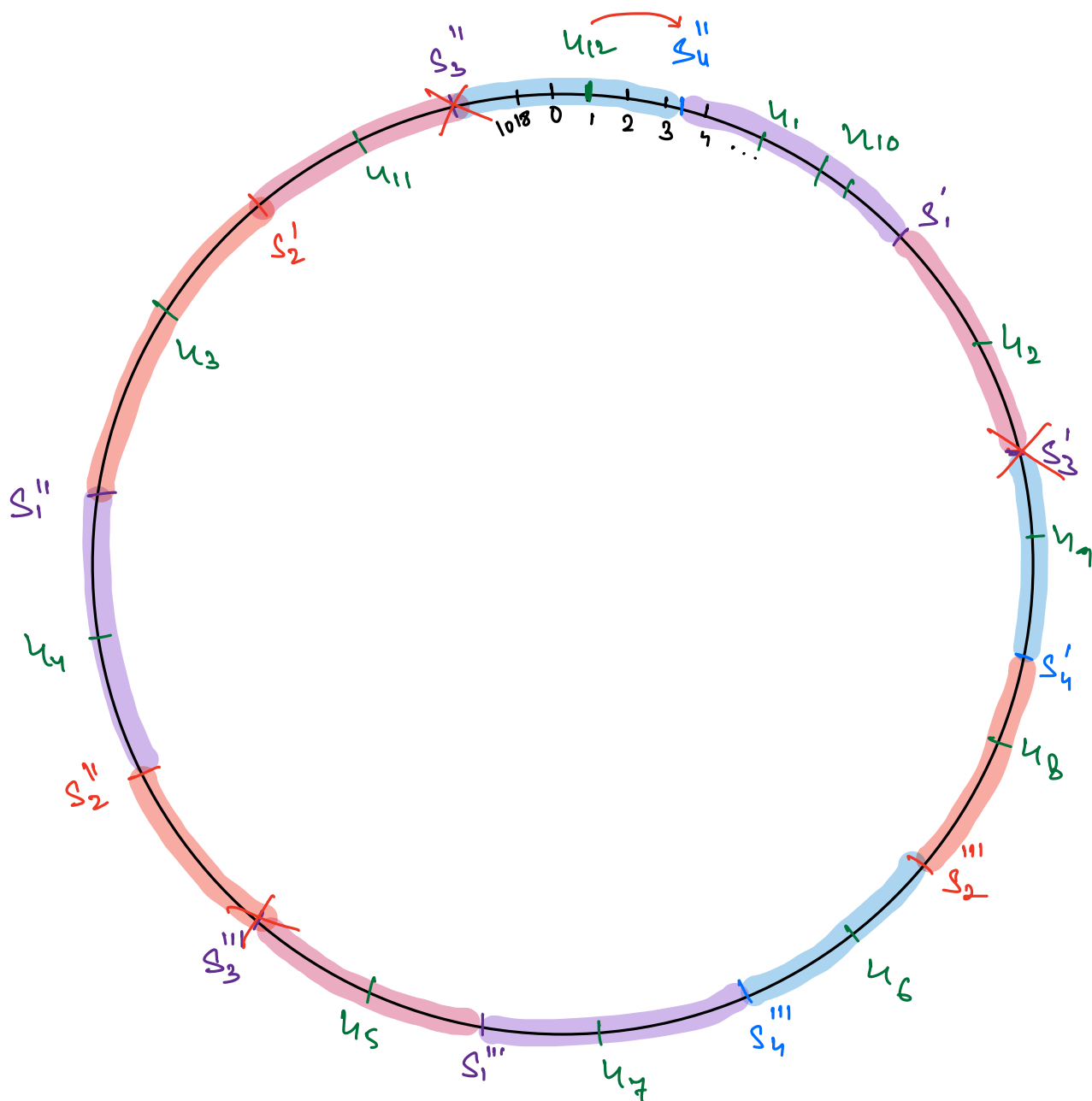
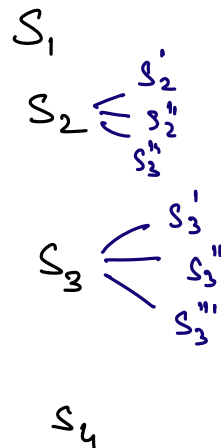
→ Caching.

27

$$H_{S_1}(S_1) = S_1'$$

$$H_{S_2}(S_1) = S_1''$$

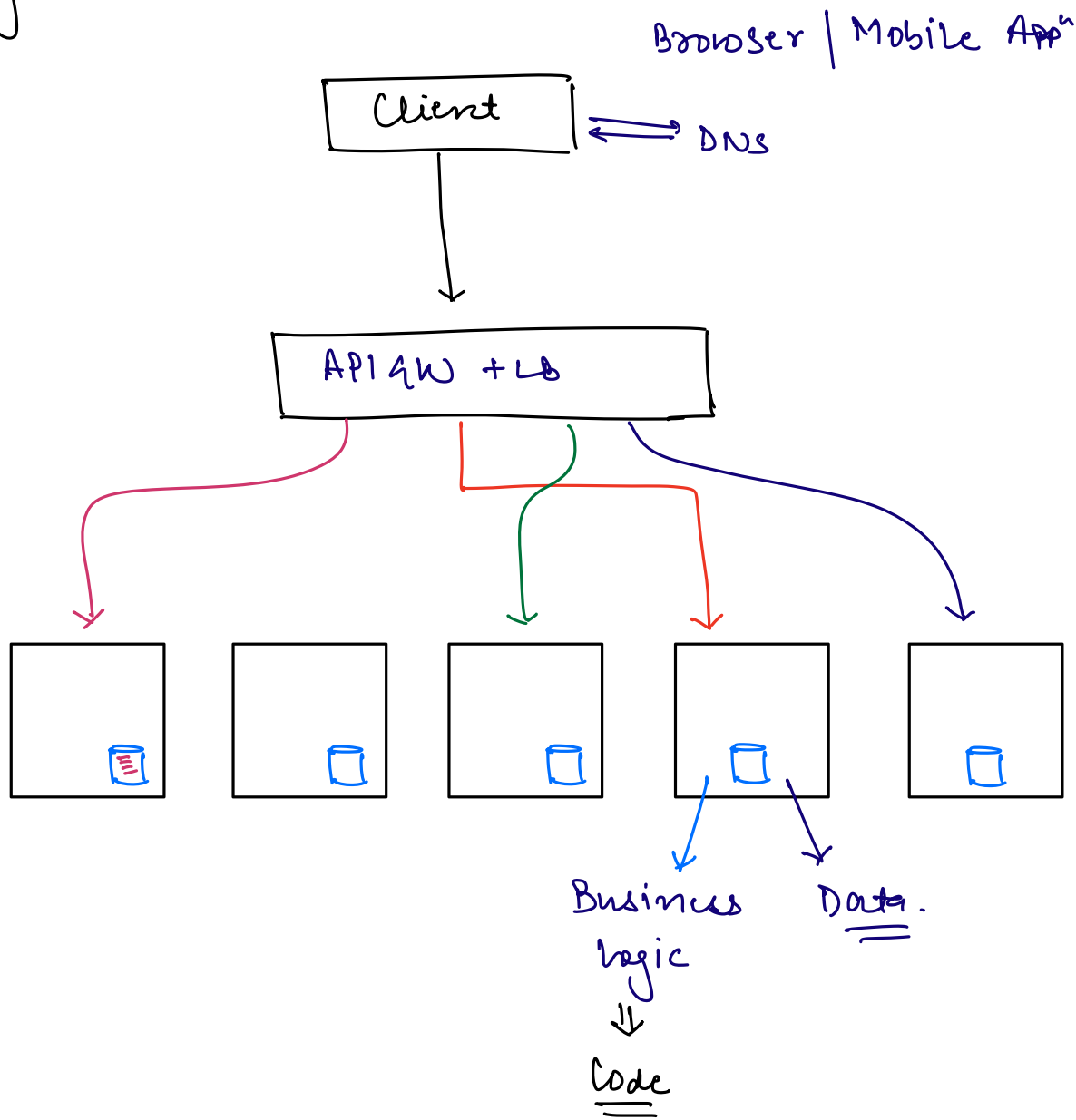
$$H_{S_3}(S_1) = S_1'''$$



If S_3 goes down.

$$S_3 \rightarrow S_4 \mid S_2 \mid S_4$$

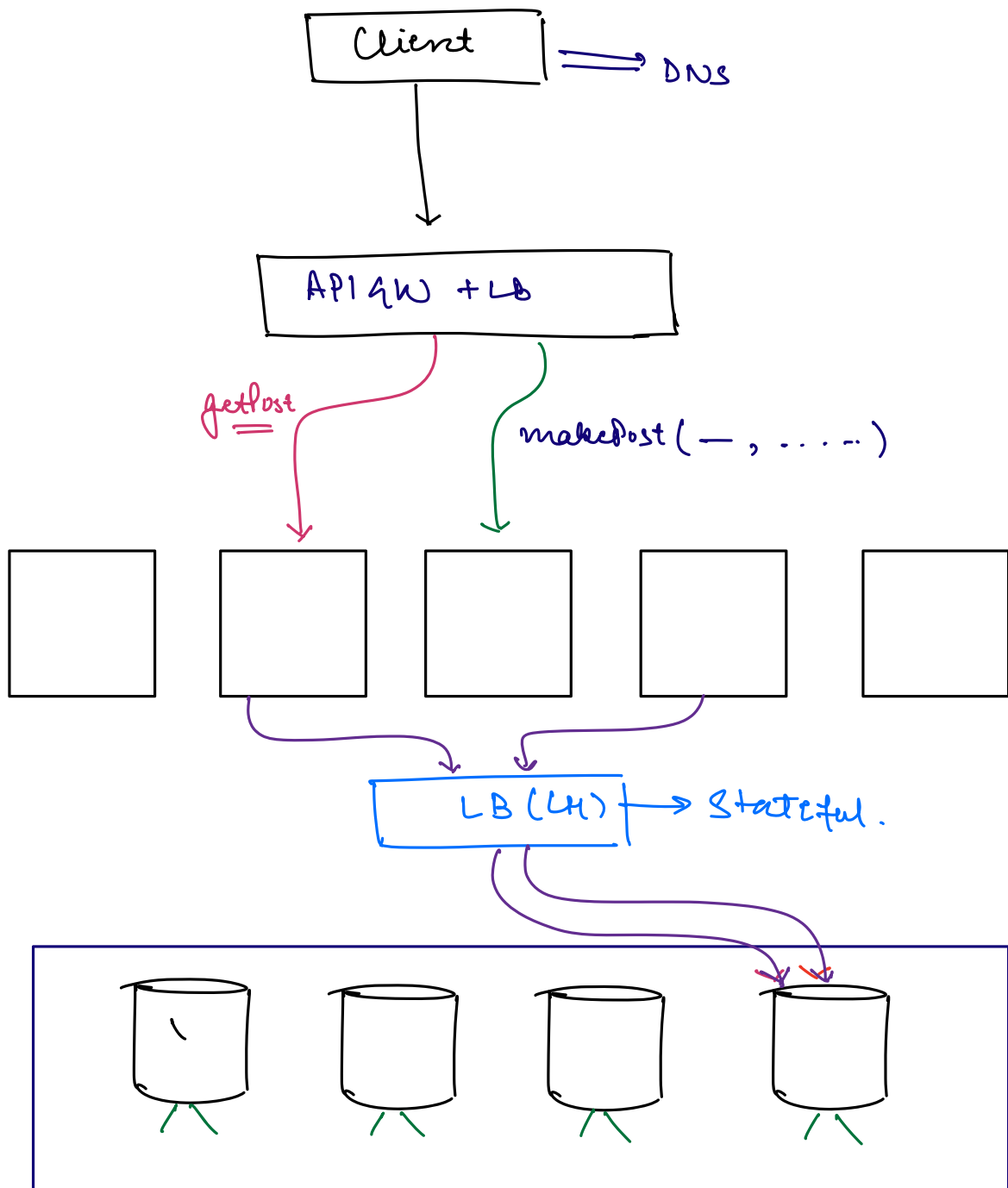
Calling.



→ Data Sync issue

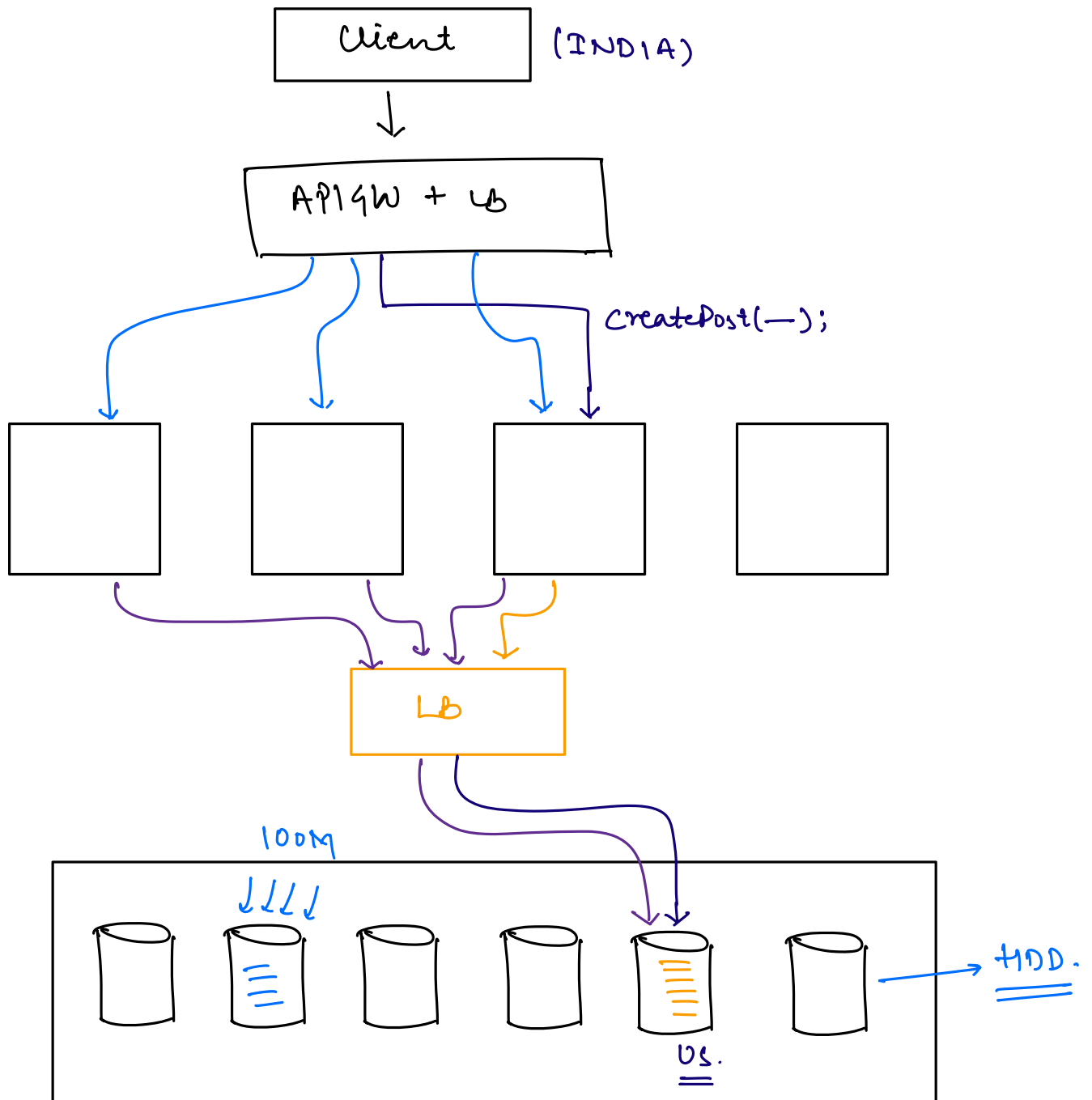
→ While deploying the code, m/c will get restarted & during that time data will also be unavailable.

→ Different types of h/w are required for server (vs) DB.



latency \propto No. of n/w hops.
 \propto distance

Instagram.



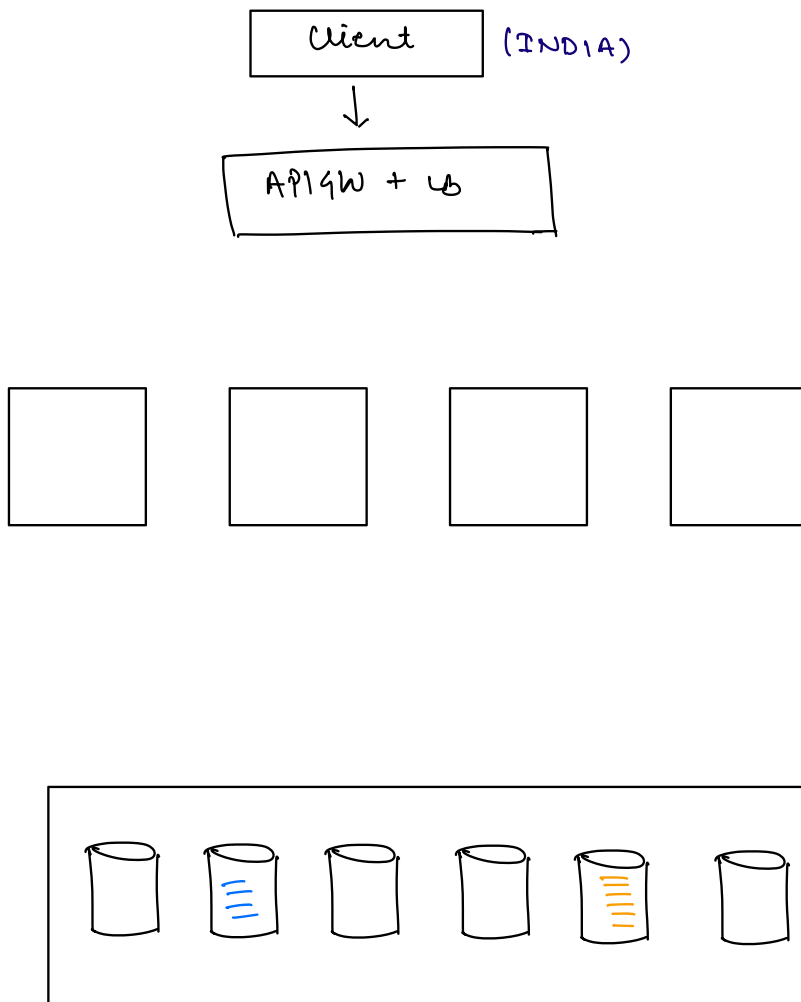
Latency \propto Distance

Caching

→ process of storing copies of frequently accessed data near to the end users so that they can fetch the data in a much faster way.

Client Side Caching

↓
Mobile Appⁿ |
Browser Appⁿ.

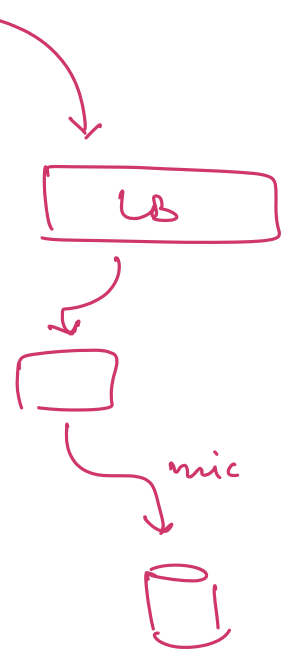


Google Search.

Case

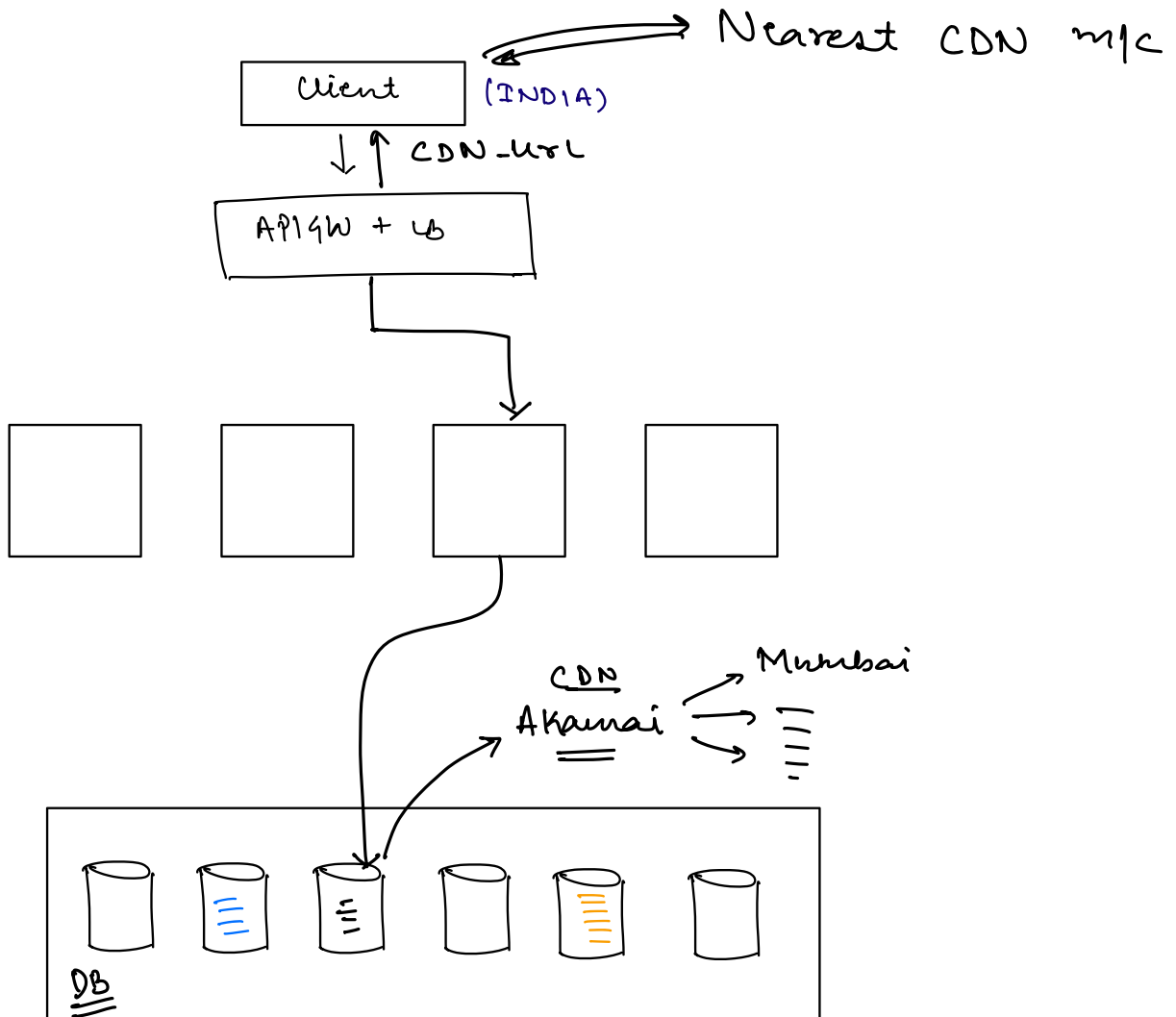
mic

- microsoft
- microservice
- microwave
- michael Jackson
- _____
- _____
- _____
- _____

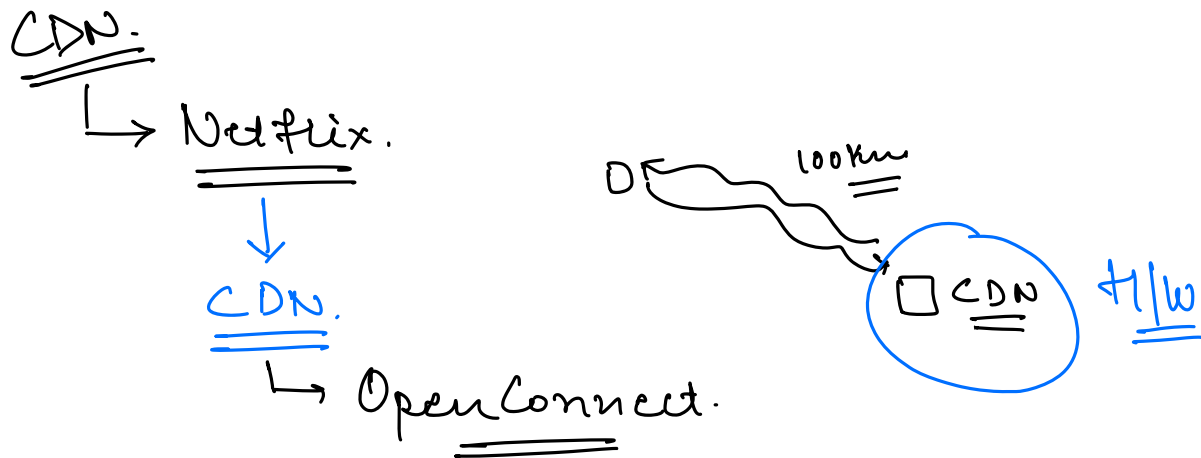
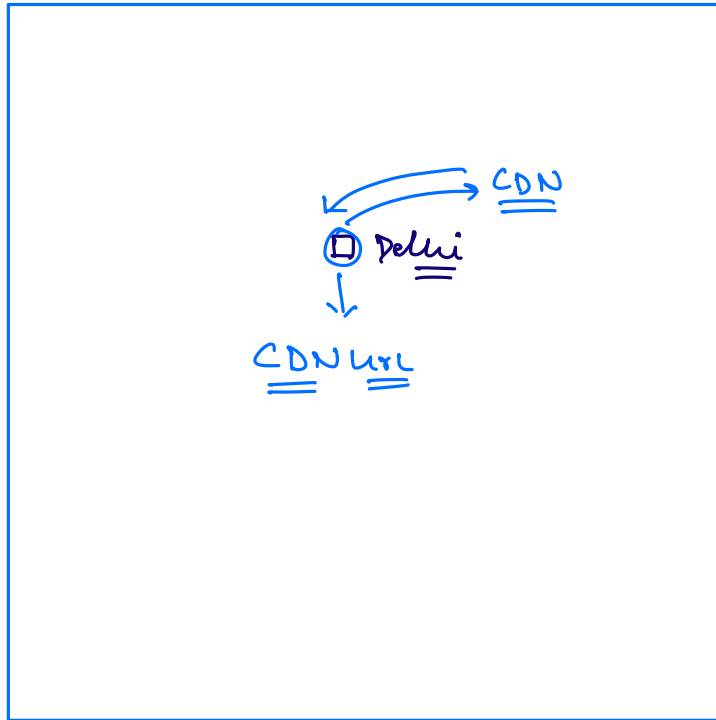


Content Delivery Network [CDN].

↳ Akamai
Cloudflare
Cloudfront
=====



CDN : Images | Videos → Reels.
↳ Static Content



⇒ Placing their CDN servers in all the major ISP's Datacentre.

