

# Sharding

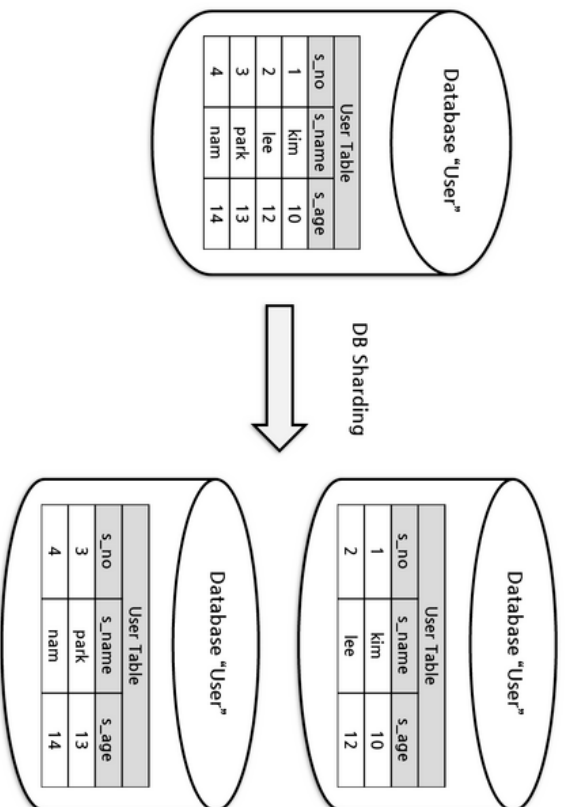
Sharding is a horizontal partition of data in a database.

Horizontal partitioning is a design principle whereby rows of a database table are held separately, rather than splitting by columns (as for normalization).



# The advantages

- the total number of rows in each table in each database is reduced
- A database shard can be placed on separate hardware
- improving performance





# The disadvantages

- A heavier reliance on the interconnect between servers
- Increased delay when querying
- Issues of consistency and durability due to the more complex failure modes of a set of servers

