Feature	Normalization	Denormalization
Definition	Process of organizing data to reduce redundancy.	Process of combining data to improve read performance.
Goal	Eliminate data redundancy and maintain data integrity.	Improve query performance by reducing the need for joins.
Data Storage	Requires more tables and less space.	Requires fewer tables and more space.
Query Performance	Slower for complex queries due to joins.	Faster read operations due to fewer joins.
Update Performance	Faster and more accurate due to less redundancy.	Slower and error-prone due to duplicate data.
Use Cases	OLTP systems (Online Transaction Processing).	OLAP systems (Online Analytical Processing).
Data Integrity	High data integrity ensured.	Data integrity can be compromised due to redundancy.