

Denormalization:

It is the inverse process of normalization where the redundancy is added to the data intentionally to improve the performance of the specific application and data integrity.

Denormalization vs Normalization:

Sr. No.	Key	Normalization	Denormalization
1	Implementation	Normalization is used to remove redundant data from the database and to store non-redundant and consistent data into it.	Denormalization is used to combine multiple table data into one so that it can be queried quickly.
2	Focus	Normalization mainly focuses on clearing the database from unused data and to reduce the data redundancy and inconsistency.	Denormalization on the other hand focus on to achieve the faster execution of the queries through introducing redundancy.
3	Number of Tables	During Normalization as data is reduced so a number of tables are deleted from the database hence tables are lesser in number.	On another hand during Denormalization data is integrated into the same database and hence a number of tables to store that data increases in number.
4	Memory consumption	Normalization uses optimized memory and hence faster in performance.	On the other hand, Denormalization introduces some sort of wastage of memory.

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5	Data integrity	Normalization maintains data integrity i.e. any addition or deletion of data from the table will not create any mismatch in the relationship of the tables.	Denormalization does not maintain any data integrity.
6	Where to use	Normalization is generally used where number of insert/update/delete operations are performed and joins of those tables are not expensive.	On the other hand Denormalization is used where joins are expensive and frequent query is executed on the tables.