

MASTERING

Primary Key vs. Unique Key

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01

What is a Primary Key?

- A **Primary Key** is a unique identifier for a table row.
- Enforces **entity integrity**.
- One per table.
- **Cannot accept NULL** values.

EmployeeID (PK)	Name	Dept
101	Alice	Sales
102	Bob	HR

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02

What is a Unique Key?

- A **Unique Key** ensures all values in a column are distinct.
- **Enforces uniqueness** constraint.
- **Multiple unique keys** allowed per table.
- Can **accept NULL** values, but only one NULL per unique key.

EmployeeID (PK)	Email (UK)	Name
101	alice@company.com	Alice
102	bob@company.com	Bob

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03

Key Differences

Aspect	Primary Key	Unique Key
Uniqueness	✔ Always Unique	✔ Always Unique
NULL Values	✗ Not Allowed	✔ Allowed Once
Count per Table	1 Only	Multiple Allowed
Index Type	Clustered (Default)	Non-Clustered



04

Why Are They Important?

- **Data Accuracy:** Prevents duplicates and maintains integrity.
- **Indexing:** Optimizes query performance.
- **Relationships:** Primary Key forms the foundation of table relationships.
- **Flexibility:** Unique Key allows additional uniqueness constraints.




05

Top 5 Interview Questions

1. What are the primary differences between a primary key and a unique key?
2. Can a table have multiple primary keys? Why or why not?
3. How does a unique key handle NULL values?
4. What is the default index type for a primary key and unique key?
5. Can a column be both a primary key and a unique key? Explain.



 Want to avoid costly database mistakes? Hit the **Save** button now!

 Drop your **questions** or share how you use these keys in your projects.

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