

02-database-keys.md

Database Keys

Definition

A **key** is an attribute or a set of attributes that uniquely identifies a row (tuple) in a table.

Example Table

Roll_No Name Branch Email

1	Nitish	CSE	n@gmail.com
2	Ankit	EEE	a@gmail.com

Types of Keys

Super Key

Any column or combination of columns that uniquely identifies a row.

Examples:

- Roll_No , Roll_No + Name

Candidate Key

A minimal super key with no redundant attributes.

Examples:

- Roll_No, emails

Primary Key

A selected candidate key used to uniquely identify records.

Rules:

- Only one primary key per table , Cannot contain NULL values

Alternate Key

A candidate key not selected as the primary key.

Composite Key

A key made using two or more columns when one column is not sufficient.

Key Point for Revision

All primary keys are candidate keys, but not all candidate keys are primary keys.