Keys In SQL

DM for Project Help
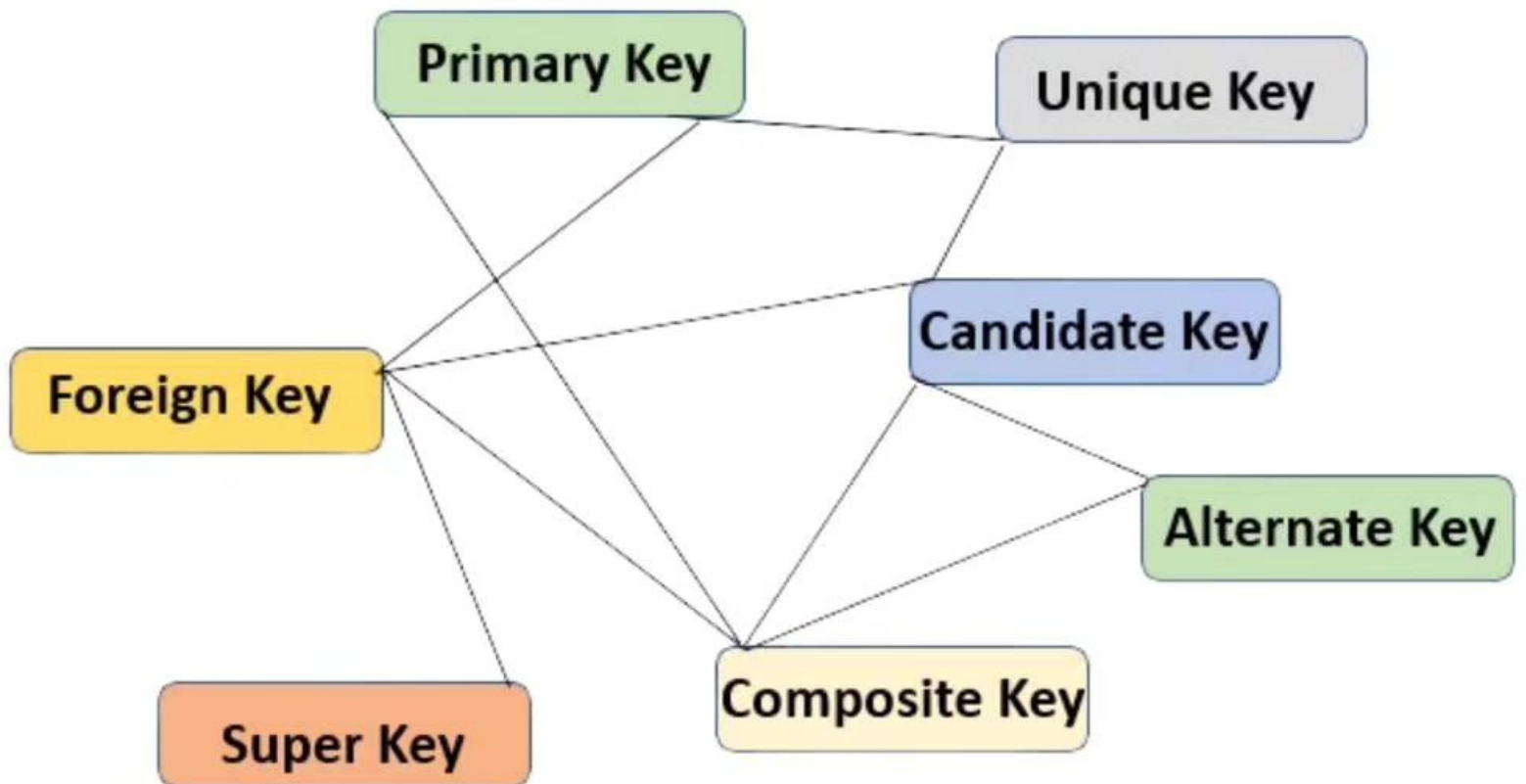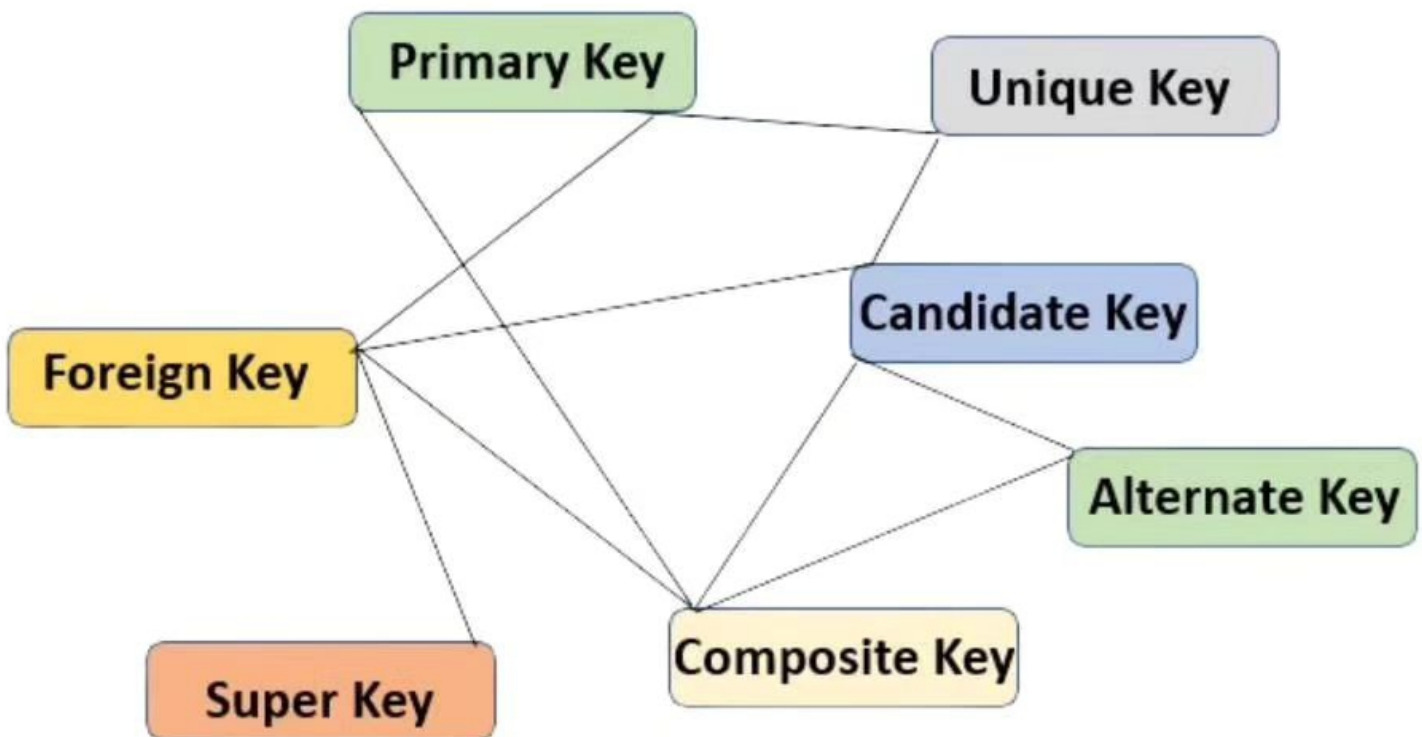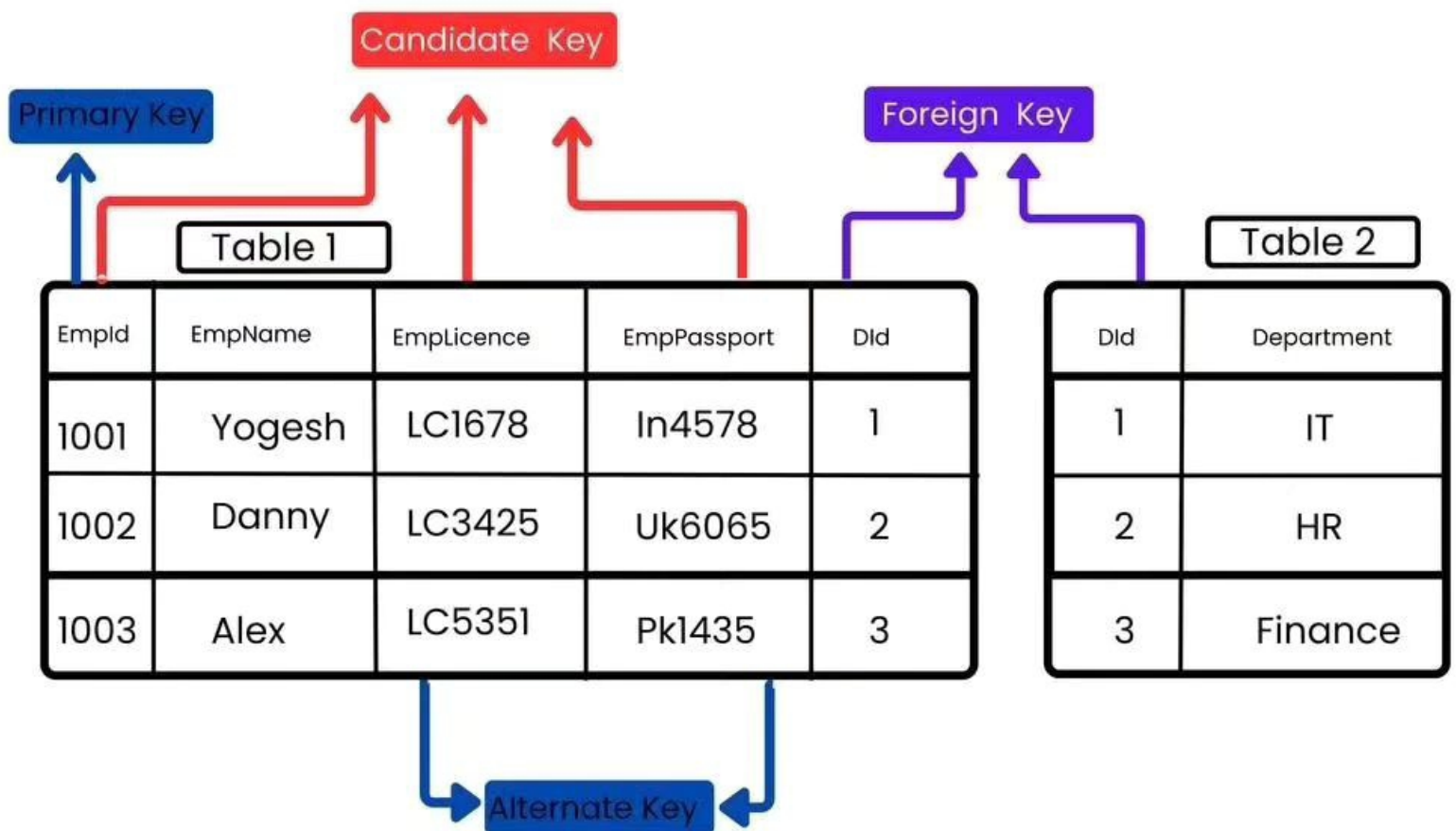
What is a KEY in SQL?

A key in SQL is an attribute or a set of attributes which helps you uniquely identify a record or a row of data in a relation/table.

Types Of Keys:

We are going to see five common types of keys available in SQL.

Candidate Key

Primary Key

Foreign Key

Table 1

EmpId	EmpName	EmpLicence	EmpPassport	DId
1001	Yogesh	LC1678	In4578	1
1002	Danny	LC3425	Uk6065	2
1003	Alex	LC5351	Pk1435	3

Table 2

DId	Department
1	IT
2	HR
3	Finance

Alternate Key

Primary Key **Candidate Key** **Alternate Key**

Super Key

DM for Project Help

Swipe >>>

Primary Key:

A primary key is a table attribute or column that identify every record present in a table uniquely.

There can be only one primary key attribute in a table and primary key column element can; be same or has Null value.

EmpId	EmpName	EmpLicence	EmpPassport	DId
1001	Yogesh	LC1678	In4578	1
1002	Danny	LC3425	Uk6065	2
1003	Alex	LC5351	Pk1435	3

In the above table, EmpId is the primary key.

Candidate Key:

A candidate key is a column or a set of columns the can qualify as a primary key in the database.

There can be multiple candidate keys in a table and only one candidate key can qualify as the primary key.

The candidate key other than the primary key is called an Alternate Key.

Candidate Key

Candidate Key

EmpId	EmpName	EmpLicence	EmpPassport
1001	Yogesh	LC1678	In4578
1002	Danny	LC3425	Uk6065
1003	Alex	LC5351	Pk1435

DM for Project Help

Swipe >>>

Super Key:

It is the set of columns that helps to identify rows in a table uniquely.

Super Key

EmpId	EmpName	EmpLicence	EmpPassport	DId
1001	Yogesh	LC1678	In4578	1
1002	Danny	LC3425	Uk6065	2
1003	Alex	LC5351	Pk1435	3

DM for Project Help

Foreign Key:

A foreign key is a key used to link two tables together. It is sometimes also called as referencing key.

Foreign Key

Table 1

EmpId	EmpName	City	DId
1001	Yogesh	Mumbai	1
1002	Danny	Noida	2
1003	Alex	Pune	3

Table 2

DId	Department
1	IT
2	HR
3	Finance

DM for Project Help

Swipe >>>

Composite Key:

It is a set of two or more attributes that helps to identify each tuple in a table uniquely.

Any key such as super, primary, or candidate key can be called a composite key if it has more than one attribute.

Composite Key

EmpId	EmpName	City	EmpPassport
1001	Yogesh	Mumbai	In4578
1002	Danny	Noida	Uk6065
1003	Alex	Pune	Pk1435

DM for Project Help