**Keys:-**

**A Primary Key is a column or a combination of columns that uniquely identify a record**.

Employee ID is primary key. Primary key chosen from candidate key but it should be unique. **Only one Candidate Key can be Primary Key.**

**A candidate key is an attribute or set of an attribute which can uniquely identify a tuple. There can be multiple Candidate Keys in one table. A table can have only one primary key, which may consist of single or multiple fields.**

**Finally Primary VS Candidate Key**:- Each table may have one or more **candidate keys**, but one **candidate key** is unique, and it is called the **primary** **key**.

**When multiple fields/attributes are used as a primary key, they are called a composite key.** **Composite Key: A key that has more than one attributes is known as composite key. It is also known as compound key.**

**Super key is a set of an attribute which can uniquely identify a tuple.**

The super key would be EMPLOYEE-ID, (EMPLOYEE\_ID, EMPLOYEE-NAME), etc.

**Primary Key constraint**  
1. A primary key cannot allow null.  
2. Multiple primary keys are NOT allowed.  
3. On some RDBMS a primary key generates a clustered index by default.

**Unique constraint**  
1. A unique constraint can be defined on columns that allow nulls.  
2. Multiple unique keys are allowed.  
3. On some RDBMS a unique key generates a nonclustered index by default.

**PK can not change value if its value use as FK in other table**

| **S.NO.** | **PRIMARY KEY** | **FOREIGN KEY** |
| --- | --- | --- |
| 1 | A primary key is used to ensure data in the specific column is unique. | A foreign key is a column or group of columns in a relational database table that provides a link between data in two tables. |
| 1 | **Only one primary key is allowed in a table.** | **Whereas more than one foreign key are allowed in a table.** |
| 2 | It is a combination of UNIQUE and Not Null constraints. | It can contain duplicate values and a table in a relational database. |
| 3 | **It does not allow NULL values.** | **It can also contain NULL values.** |
| 4 | Its value cannot be deleted from the parent table. | Its value can be deleted from the child table. |
| 7 | It constraint can be implicitly defined on the temporary tables. | It constraint cannot be defined on the local or global temporary tables. |