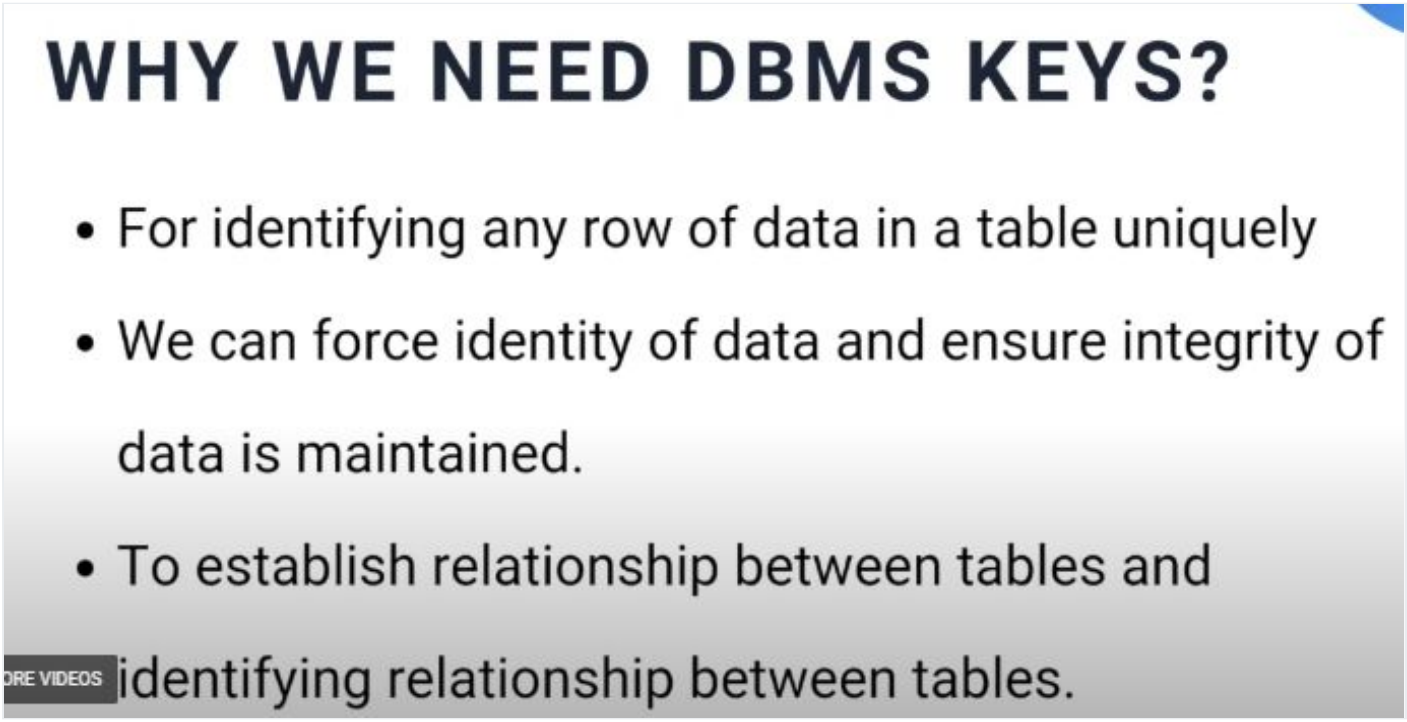
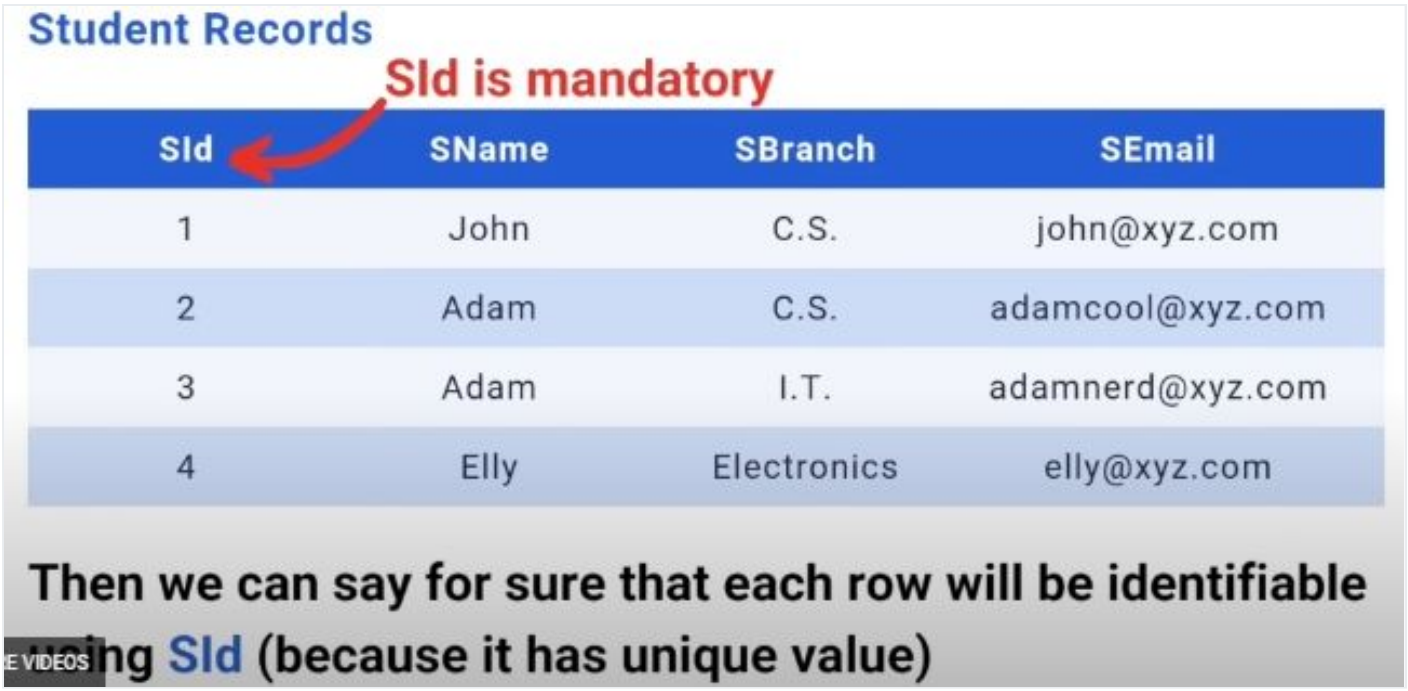
Types of Keys

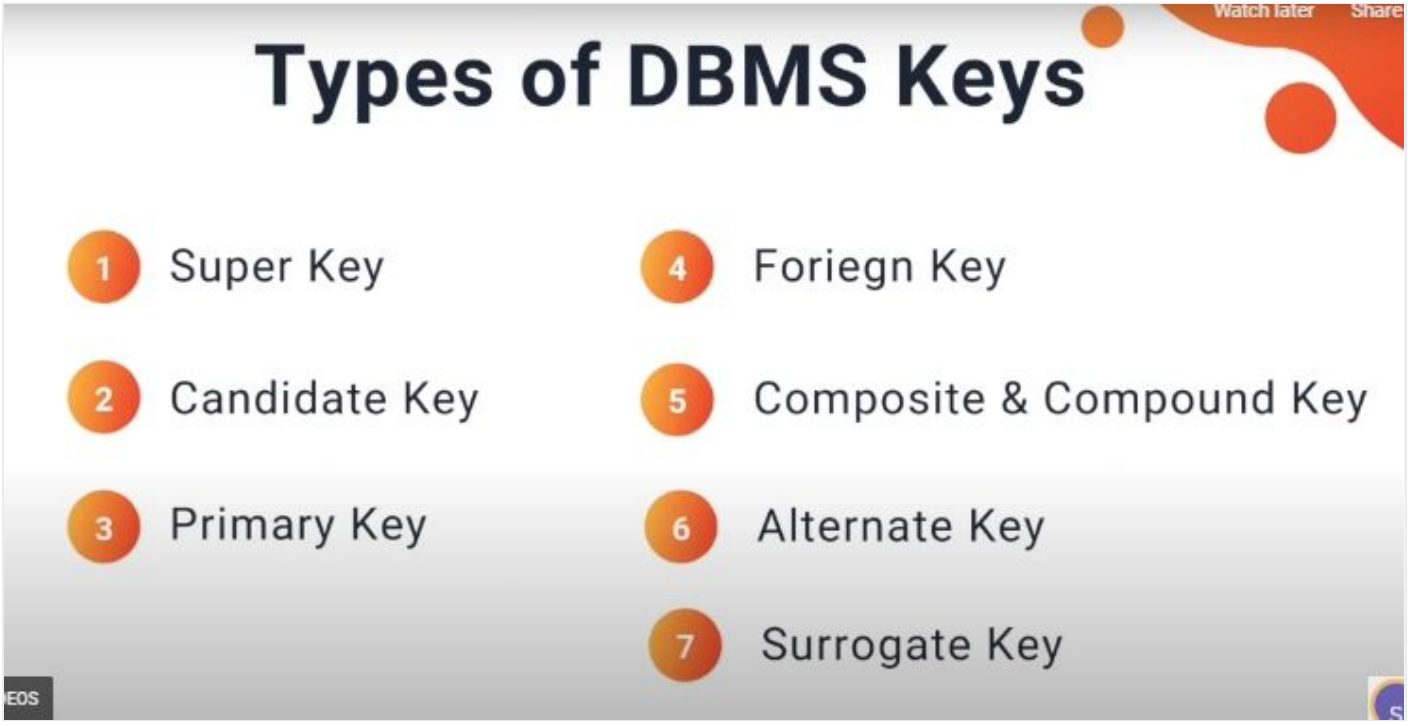
1. What is key :

2. Need :



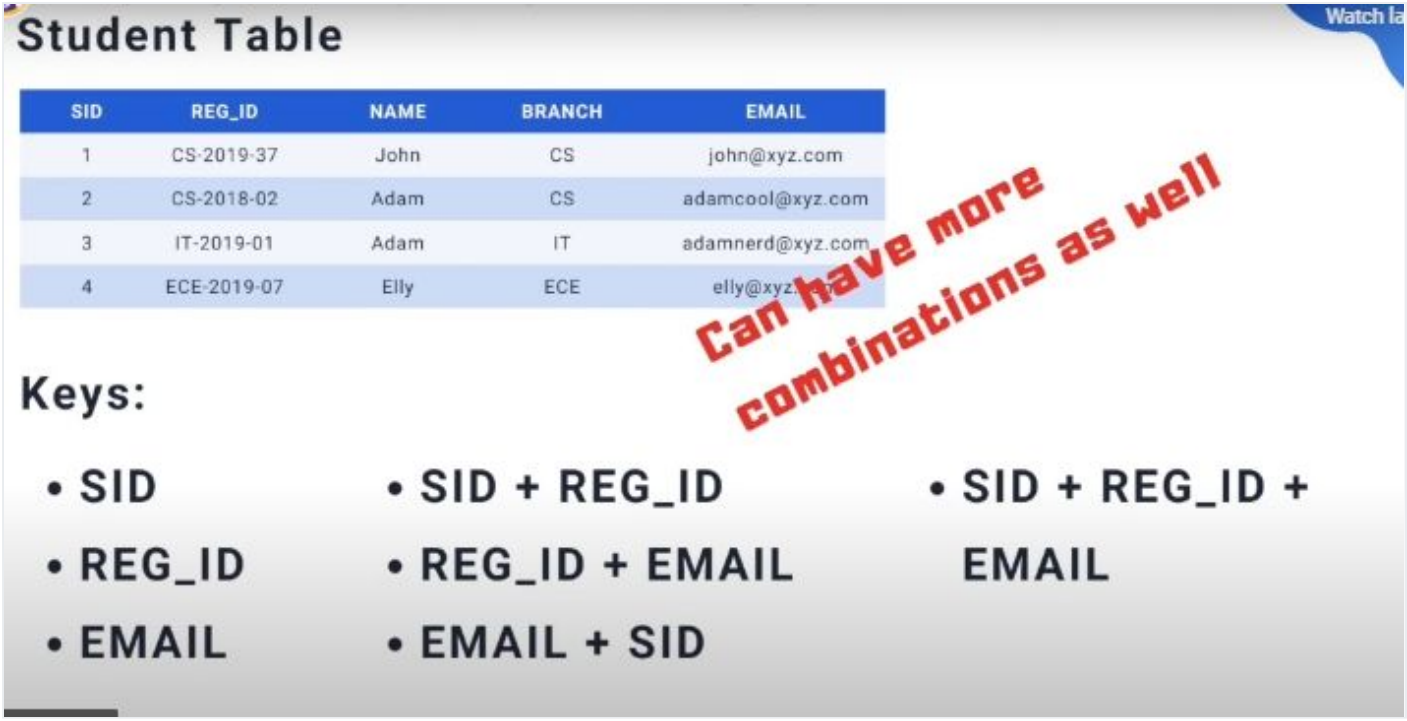


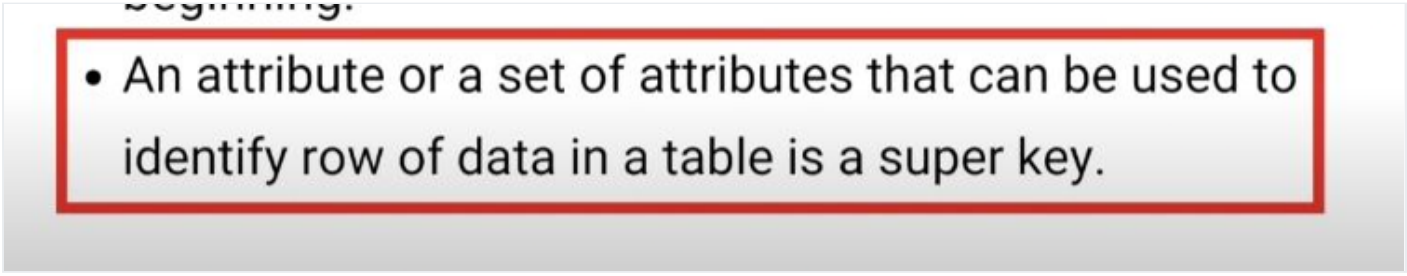
3. Types



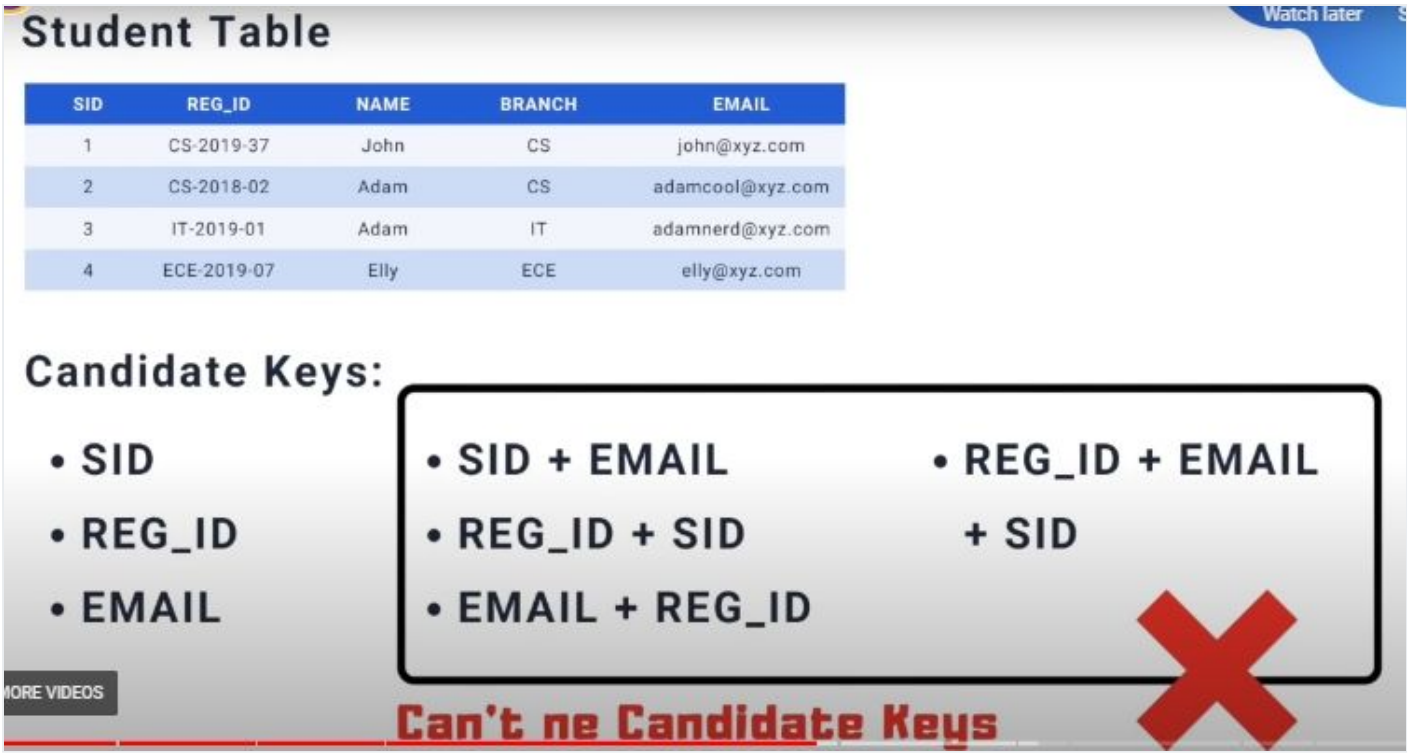
Super key is a default key and composite and compound keys are like sisters.

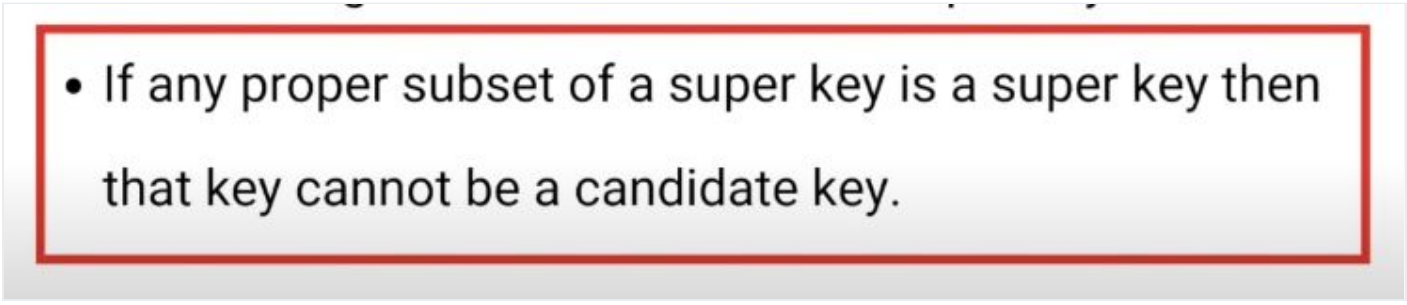
1. Super Key : Every possible key inside a table is said to be as super key.



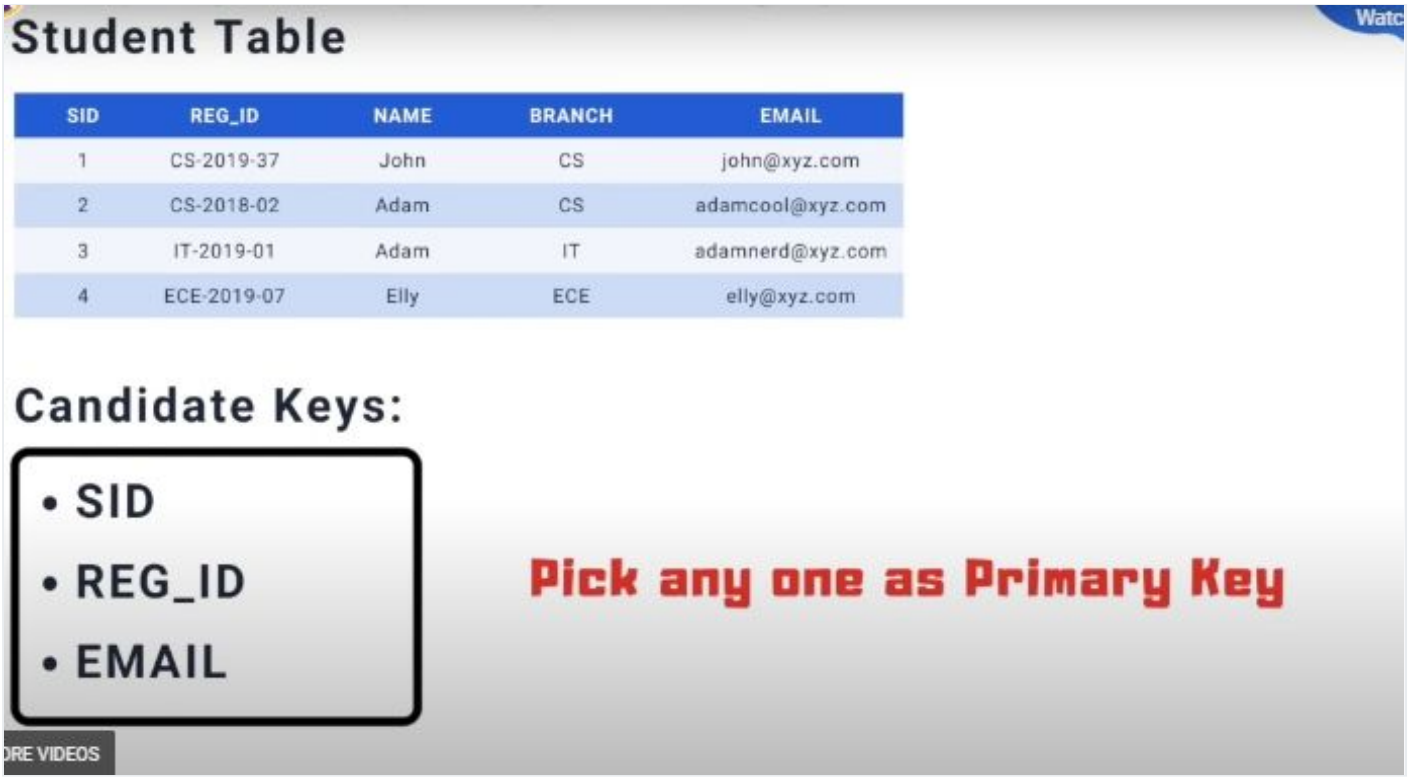


2. Candidate Key: It is a minimal subset of the super key which can be used to identify a set of rows uniquely.





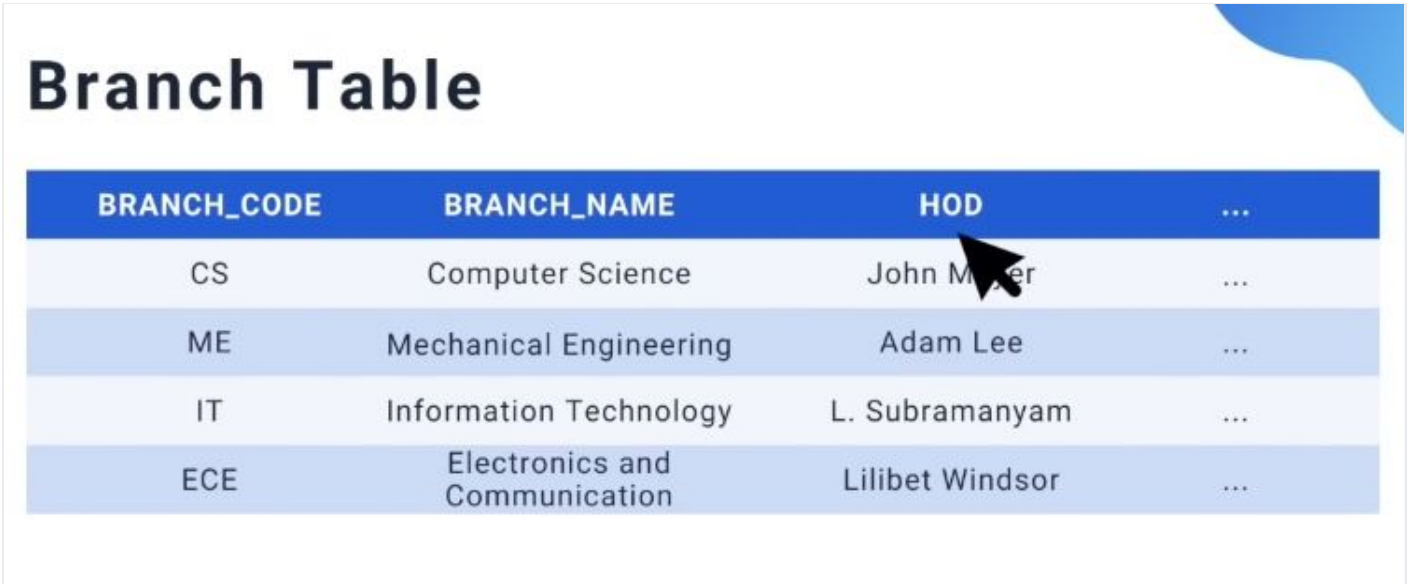
3. Primary key : It is the key which is any one of a subset of candidates key and anyone of them can be used as to find a unique row of data.



4. Alternate Key: From the set of Candidates key after picking one of them as primary key the remaining keys are said to be Alternate keys.

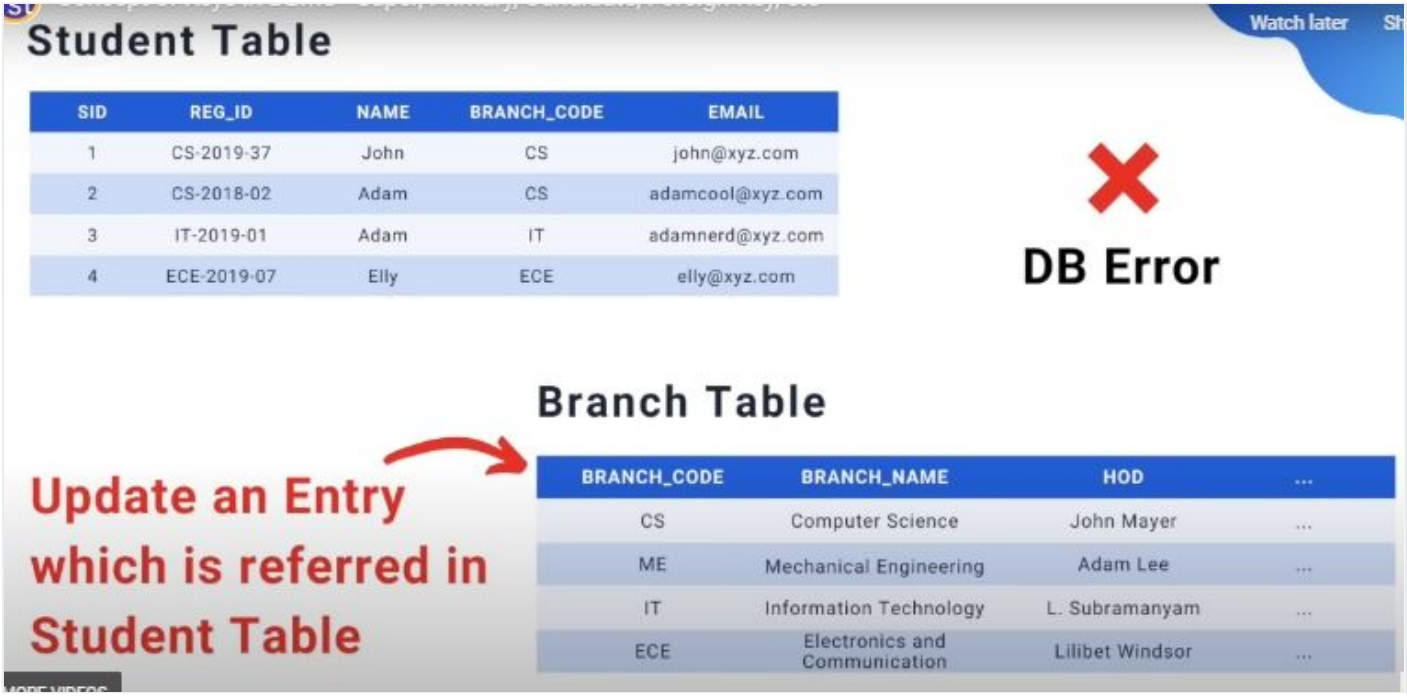
5. Foreign Key: This key comes into the picture when we have 2 tables where one table is making a relationship with another table.

Firstly, the key that we consider a foreign key must be the primary key of that table and the same ID should be stored in another table to show the relationship between the two.



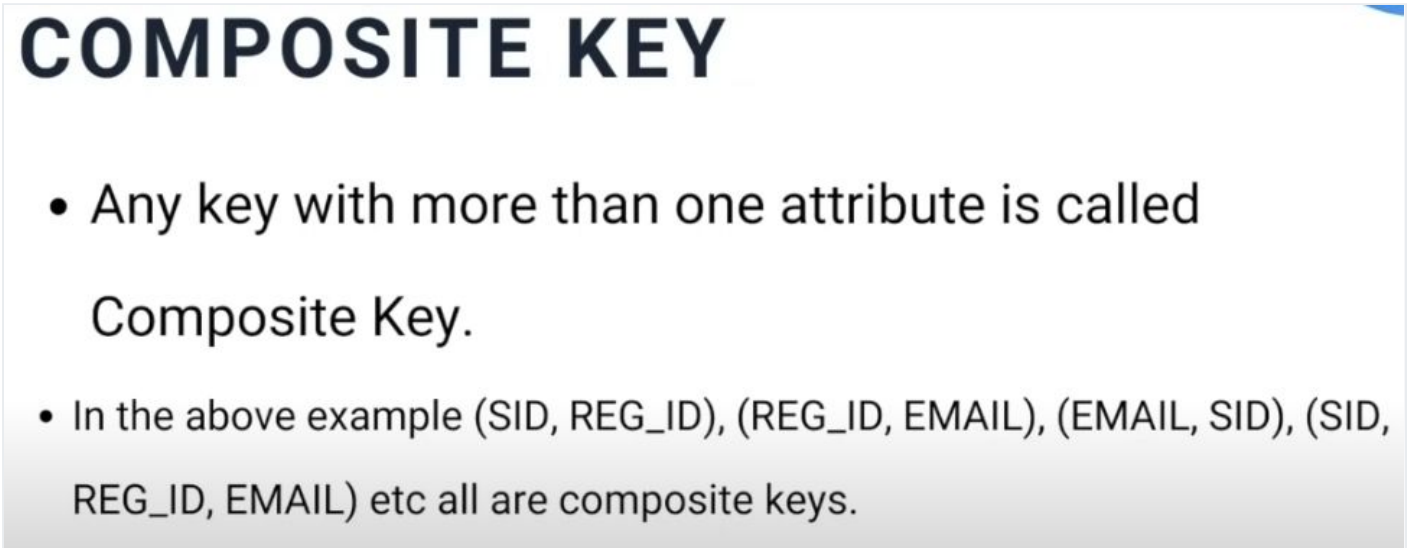
Student Table

SID	REG_ID	NAME	BRANCH_CODE	EMAIL
1	CS-2019-37	John	CS	john@xyz.com
2	CS-2018-02	Adam	CS	adamcool@xyz.com
3	IT-2019-01	Adam	IT	adamnerd@xyz.com
4	ECE-2019-07	Elly	ECE	elly@xyz.com



This is how data integrated is maintained.

6. Composite Key: Any key with more than one attribute is called a composite key.



all super key more than one attribute are considered to be composite keys.

7. Compound Key: If a composite key has at -least one attribute which is a foreign key. This is a compound key.

COMPOUND KEY

- If a composite key has at-least one attribute which is a foreign key then it is called as Compound Key.
- In the above example if we have a composite key (REG_ID, BRANCH_CODE) then it will be known as a Compound Key because BRANCH attribute is a Foreign Key.

8. Surrogate key:

SURROGATE KEY

- If a relation has no attribute which can be used to identify the data stored in it, then we create an attribute for this purpose.
- It adds no meaning to the data but serves the sole purpose of identifying rows uniquely in a table.