In relational databases we have two kinds of keys, primary and foreign. These keys are elements in each table that tie tables together and ensure that each record is unique. These keys are the reason we can find particular records in databases that often have thousands of records in them. These keys enforce integrity on both a table and relationship level.

Primary keys are used to uniquely identify each record within a table. The primary key s generally a column of values which cannot be NULL, but which contain a unique value for each record. These keys may be part of an existing table, or it may be a field added to the table after it’s creation expressly for this purpose.

Foreign keys are used to link records in two different tables within the same database. The key must uniquely identify the key field, most often the primary key, in the other table. This key differs from a primary key however, in the fact that it can have duplicated values, and it can also have NULL values. A table can also contain multiple foreign keys.

There are some other differences between the two worth noting, such as the fact that a foreign key can be deleted from the target table, whereas a primary key cannot be deleted from any table. While the two keys have a very similar structure, their roles within the database are very different, and it is this difference that allows them to properly serve to help us manage large and unwieldy databases.

References:

*Difference between primary key and foreign key*. GeeksforGeeks. (2020, March 28). Retrieved July 1, 2022, from https://www.geeksforgeeks.org/difference-between-primary-key-and-foreign-key/

Khillar, S. (2018, April 16). *Difference between primary key and foreign key*. Difference Between Similar Terms and Objects. Retrieved July 1, 2022, from http://www.differencebetween.net/technology/difference-between-primary-key-and-foreign-key/

Peterson, R. (2022, April 30). *Primary key vs foreign key: What's the difference?* Guru99. Retrieved July 1, 2022, from https://www.guru99.com/difference-between-primary-key-and-foreign-key.html