

# 8.1

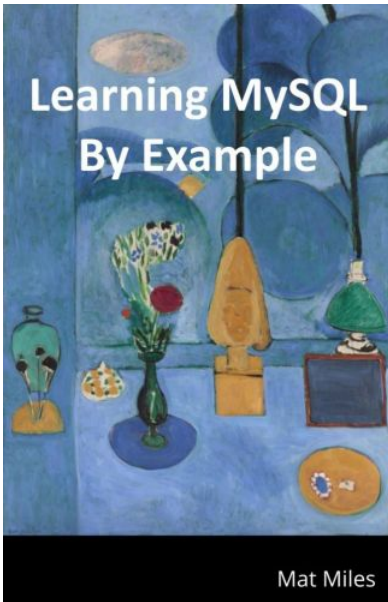
## SQL Indexes Explained

### SQL Indexes

- You can create SQL indexes from single or multiple columns.
- A SQL index is like the index of a book. It speeds up the retrieval of a record. The relational database management system (RDBMS) can retrieve a record with the index key instead of having to perform a table scan.
- MySQL automatically creates indexes for primary and foreign keys significantly speeding up join performance.
- You should only create indexes on columns used in a join or search because the RDMS must update an index every time you execute an INSERT, UPDATE, or DELETE.

### When to Create an Index

- When a column is used frequently in a search or a join.
- When a column contains a large number of distinct values.
- When the column is updated infrequently



Miles, M. (2021). *Learning MySQL By Example*. EdTech Books. [https://edtechbooks.org/learning\\_mysql](https://edtechbooks.org/learning_mysql)