<https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql1>  
  
**12 ways to optimize SQL queries for cloud databases**

As a cloud database user myself, I am always looking for ways to speed up my query runtime and reduce costs. Cloud databases are powerful, but if you don’t pay attention to how and when you are running your queries, costs can quickly add up. In this article, I’ll share the top SQL tips to optimize your queries and ensure you have the lowest runtimes and the lowest costs.

**Click the link below to jump to the SQL query optimization you’re interested in:**

* [**Use indexes effectively**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql1)
* [**Avoid SELECT \* and retrieve only necessary columns**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql2)
* [**Optimize JOIN operations**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql3)
* [**Minimize the use of subqueries**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql4)
* [**Avoid redundant or unnecessary data retrieval**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql5)
* [**Utilize stored procedures**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql6)
* [**Consider partitioning and sharding**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql7)
* [**Normalize database tables**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql8)
* [**Monitor query performance**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql9)
* [**Use UNION ALL instead of UNION**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql10)
* [**Optimize subquery performance**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql11)
* [**Leverage cloud database-specific features**](https://www.thoughtspot.com/data-trends/data-modeling/optimizing-sql-queries#sql12)