[An **in-memory database** is a purpose-built database that relies primarily on internal memory for data storage, enabling minimal response times by eliminating the need to access standard disk drives (SSDs)](https://github.com/pingcap/awesome-database-learning) [1](https://github.com/pingcap/awesome-database-learning). Here are some free resources to learn more about in-memory databases:

1. **Redis Course - In-Memory Database Tutorial**: This YouTube crash course covers Redis, an in-memory data structure store often used as a database. [It explains key concepts and usage for beginners](https://github.com/pingcap/awesome-database-learning) [2](https://www.youtube.com/watch?v=XCsS_NVAa1g).
2. [**Implementing In-Memory SQL Database Objects**: An edX course that teaches techniques for implementing in-memory features in SQL databases, including columnstore indexes and memory-optimized tables](https://github.com/pingcap/awesome-database-learning) [3](https://www.classcentral.com/course/edx-implementing-in-memory-sql-database-objects-7399).
3. **teachdb**: A free, in-memory micro relational database for teaching SQL concepts. [It’s designed for instructors and students who want to learn and practice the fundamentals](https://github.com/pingcap/awesome-database-learning) [4](https://github.com/freestackinitiative/teachingdb).
4. [**Awesome Database Learning**: A GitHub repository with a curated list of learning materials to understand database internals, including papers, blogs, courses, and talks](https://github.com/pingcap/awesome-database-learning) [1](https://github.com/pingcap/awesome-database-learning).
5. [**Top 27 In-Memory Databases Compared**: A comprehensive comparison of various in-memory databases, their strengths, weaknesses, and use cases](https://github.com/pingcap/awesome-database-learning) [5](https://www.dragonflydb.io/guides/in-memory-databases).

Feel free to explore these resources to deepen your understanding of in-memory databases! 🚀