Replicating data in a distributed system is hard

Different replications strategies have different pros and cons

 Strong consistency: consistent state achieved with complex consensus protocols, at the expense of write performance

 Eventual consistency: states can diverge for the benefit of write performance and offline availability

 Strong eventual consistency (SEC): eventual consistency + additional safety guarantees

Conflict-free replicated data types are one way to achieve SEC

- Replicating data in a distributed system is hard
- Different replications strategies have different pros and cons
  - Strong consistency: consistent state achieved with complex consensus protocols, at the expense of write performance
  - Eventual consistency: states can diverge for the benefit of write performance and offline availability
  - Strong eventual consistency (SEC): eventual consistency + additional safety guarantees
- Conflict-free replicated data types are one way to achieve SEC