

Q). Why Spark is preferred over Java Program for transferring large amounts of data?

1. Type Of Data: The type of data that needs to be stored in a database.
 - Example:-
 - To store images: Use Amazon S3 Or CDN or Google Cloud
 - To store structured data: MySQL, PostgreSQL
2. Amount of Data: How fast does your application need to read and write data?
 - Example:- If your application has billions of visitors per minute.
 - Cassandra is easier to scale to handle billions of read requests per minute
 - MySQL is hard to scale to handle billions of read requests per minute.
3. ACID vs BASE: ACID (Atomicity, Consistency, Isolation, and Durability) vs BASE (Basic Availability, Soft-state, and Eventual consistency)
 - Example:-
 - MySQL is used for banking transactions to achieve ACID.
 - If Cassandra is used for the banking transaction ACID is not achieved.
4. Cost: What is your budget for database licensing, hardware, and maintenance?
 - Example:-
 - Cassandra requires more hardware as compared to MySQL.