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Describe the following:

Sink and Source connectors:

Sink and source are for retrieving and sending data to Kafka. Source is to send data to Kafka and sink is retrieving it.

The applications/advantages of using Kafka Connectors with data storage. The flexibility and modularity of kafka connections is their primary benefit.

How do Kafka connectors maintain availability?

The connector interacts with the system which is not in kafka environment and connects it to kafka connect.

List the popular Kafka converters for values and the properties/advantages of each.

JSON: makes the decision which json file can be used

Protobuf: it's a fast connector that handles the signals not to lost in other apps

Avro: it's small but beneficial, sterilizes record keys and values

Search the internet to answer the following question:

What's a Key-Value (KV) database?

A key-value database is a nonrelational database that stores data using a simple key-value mechanism. Data is stored in a key-value database as a collection of key-value pairs, with a key serving as a unique identifier. Both keys and values can be any type of object, from basic to sophisticated compound objects.

What are KV databases' advantages and disadvantages?

A key-value store is a basic data format that lends it its name. It may be highly quick for reading and writing operations. And, as we produce more data without traditional structures, key-value stores are a valuable asset in modern programming.

Only works with data that has a single key and value. Multiple values must be stored, which necessitates the use of a parser. Lookup isn't optimal.

Lookup necessitates either a full scan of the collection or the creation of individual index values.

List some popular KV databases.

Amazon DynamoDB, Oracle NoSQL Database, InfinityDB, Redis, Aerospike, Oracle Berkeley DB, Riak KV, Voldemort are some of the Top NoSQL Key-Value Databases.

List some possible applications that can be implemented by using the uploaded dataset.

It allows accessing the data from anywhere in the cloud so that can be used in various AI applications.

