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**Types Of Databases**

1. **Relational Database**

A relational database is a collection of data items with pre-defined relationships between them. These items are organized as a set of tables with columns and rows. Tables are used to hold information about the objects to be represented in the database. Each column in a table holds a certain kind of data and a field stores the actual value of an attribute. The rows in the table represent a collection of related values of one object or entity. Each row in a table could be marked with a unique identifier called a primary key, and rows among multiple tables can be made related using foreign keys. This data can be accessed in many different ways without reorganizing the database tables themselves.

1. **Analytical Database**

An analytical database stores and manages big data, including business, market and customer data for business intelligence (BI) analysis. Analytical databases are specially optimized for faster queries and scalability.

1. **Key-Value Database**

A key–value database, or key–value store, is a data storage paradigm designed for storing, retrieving, and managing associative arrays, and a data structure more commonly known today as a dictionary or hash table. Dictionaries contain a collection of objects, or records, which in turn have many different fields within them, each containing data. These records are stored and retrieved using a key that uniquely identifies the record, and is used to find the data within the database.

1. **Column-Family Database**

NoSQL column family database is another aggregate oriented database. In NoSQL column family database we have a single key which is also known as row key and within that, we can store multiple column families where each column family is a combination of columns that fit together. Column family as a whole is effectively your aggregate. We use row key and column family name to address a column family. It is, however, one of the most complicated aggregate databases but the gain we have in terms of retrieval time of aggregate rows. When we are taking these aggregates into the memory, instead of spreading across a lot of individual records we store the whole thing in one database in one go. The database is designed in such a way that it clearly knows what the aggregate boundaries are. This is very useful when we run this database on the cluster. As we know that aggregate binds the data together, hence different aggregates are spread across different nodes in the cluster. Therefore, if somebody wants to retrieve the data, say about a particular order, then you need to go to one node in the cluster instead of shooting on all other nodes to pick up different rows and aggregate it. Among the most popular column family NoSQL databases are Apache HBase and Cassandra.

1. **Graph Database** A graph database is defined as a specialized, single-purpose platform for creating and manipulating graphs. Graphs contain nodes, edges, and properties, all of which are used to represent and store data in a way that relational databases are not equipped to do. Graph analytics is another commonly used term, and it refers specifically to the process of analyzing data in a graph format using data points as nodes and relationships as edges. Graph analytics requires a database that can support graph formats; this could be a dedicated graph database, or a converged database that supports multiple data models, including graph.
2. **Document Database**

A Document Database (Also known as a document-oriented database or a document store) is a database that store information in documents.