RULES FOR DATA MODELLING IN CASSANDRA :

Cassandra is a query language which is resembles with SQL , but the modulation of data is completely different when compared with other data types

In Cassandra , a worst model of data can lower the performance , especially when the data is tried to implement in RDBMS

CASSANDRA DATA MODEL RULES :

In Cassandra the database is not supported by support joins, group by, OR clause, aggregations, etc. So the data must be stored in a way that it should be retrievable. So we must keep the rules in our mind while modelling the data in Cassandra

**Maximize the number of writes :**

In Cassandra, writes are very cheap. Cassandra is optimized for high write performance. So try to maximize your writes for better read performance and data availability. There is a trade off between data write and data read. So, optimize you data read performance by maximizing the number of data writes.

### Maximize Data Duplication:

### Data denormalization is a defect in Cassandra . memory is more expensive as compared to disk space . As Cassandra is a NOSQL data base , duplication is provided instantl data availability with reducing failures in the nodes

### MAINTAINENCE OF CLUSTER :

### The amount of data on each node is of Cassandra cluster . Data is spread to different nodes depended on the no. of partition keys available in Cassandra and the very first key is known for primary key . So we must follow te primary key spreading data evenly around the cluster.

### What is Cassandra Cluster? Definition & FAQs | ScyllaDB

### Multi Datacenter Apache Cassandra Database

### Good Primary Key in Cassandra

### Let’s take an example and find which primary key is good.

### Here is an example of employee details

### Create table employee details

### (

### ID , int

### Name , text,

### Joining year int

### Salary double

### Primary key (ID, name)

### )

### Apache Cassandra Data Model: Components And Statements [Updated]

### In the above example

### Id is the partition key

### Name is clustering column

### Data will be clustered on the basis of employee name . only one partition key will created for each employee

### Create table according to your queries

### Create table according to your queries. Create a table that will satisfy your queries. Try to create a table in such a way that a minimum number of partitions needs to be read.

### Cassandra: How To Create, Drop, Alter, And Truncate Tables

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RELATIONSHIPS HANDLING :

One to one relationship or one to many relationship is Cassandra is dealed with the correspondence between one on one table and one to multiple tables

ONE TO ONE : For example, the employee can register only one course, and I want to search on a employee that in which course a particular employee is registered in.

ONE TO TWO : For example, a course can be studied by many employees. I want to search all the employees that are studying a particular course.

So by querying on course name, I will have many names that will be studying a particular course.