1.) Explain the differences between Cassandra and typical databases.

*CASSANDRA*

1.
Cassandra is a high performance and highly scalable distributed NoSQL database management system.

2. Cassandra is a NoSQL database.

3. It deals with unstructured data.

4. It has a flexible schema.

5.
Cassandra has peer-to-peer architecture with no single point of failure.

6.
Cassandra handles high volume incoming data velocity.

7.
In RDBMS there is limited data source means data come from many locations.

8. It supports simple transactions.

9.
In Cassandra the outermost container is Keyspace.

10.

Cassandra follows decentralized deployments.

11.

In Cassandra data written in many locations.

12.

In Cassandra row represents a unit of replication.

13.In Cassandra column represents a unit of storae.

14.In cassandra, relationships are represented using collections.

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RDBMS

1.

Cassandra is a high performance and highly scalable distributed NoSQL database management system.

RDBMS is a Database management system or software which is designed for relational databases.

2. RDBMS uses SQL for querying and maintaining the database.

3. It deals with structured data.

4. It has fixed schema.

5.RDBMS has master-slave core

architecture means a single

point of failure.

6.RDBMS handles moderate

incoming data velocity.

7.In Cassandra there are various

data source means data come

from one/few location.

8.It supports complex and nested

transactions.

9.In RDBMS the outermost

container is database.

10.RDBMS follows centralized

deployments.

11.In RDBMS mainly data are

written in one location.

12.In RDBMS row represents a

single record.

13.In RDBMS column represents

an attribute.

14.In RDBMS relationships are

represented using keys and

join etc.

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2.) What exactly is CQLSH?

A)>>> cqlsh is a command-line interface for

interacting with Cassandra using CQL

(the Cassandra Query Language). It is

shipped with every Cassandra package,

and can be found in the bin/ directory

alongside the cassandra executable

3.) Explain the Cassandra cluster idea.

A)>>>A Cassandra cluster does not have a single point of failure as a result of the peer-to-peer distributed architecture. Nodes in a cluster communicate with each other for various purposes. There are various components used in this process: Seeds: Each node configures a list of seeds which is simply a list of other noedes.

4.) Give an example to demonstrate the class notion.

A)>>>> Python is an object oriented programming language. Almost everything in Python is an object, with its properties and methods. A Class is like an object constructor, or a "blueprint" for creating objects.

EXAMPLE:-

>>>class Myroom:

y =10

5.) Use an example to explain the object.

A)>>> Example of class and object For example, Person(Human) can be treated as a class which has properties such as name, age,gender etc. Every individual can be treated as an object of the class human or Person. Each

individual will have different values of

the properties of class Person.