## NoSQL 2 Marks Questions and Answers
## 1. What do you understand by NoSQL?
**Ans:** Nowadays, developers are dealing with a large volume of data which is called big data. So naturally, big complexity and big issues will be there. Once most of the systems are getting online, so data load increases. NoSQL helps to manage unstructured, messy, and complicated data. This is not a traditional database or relational database management.
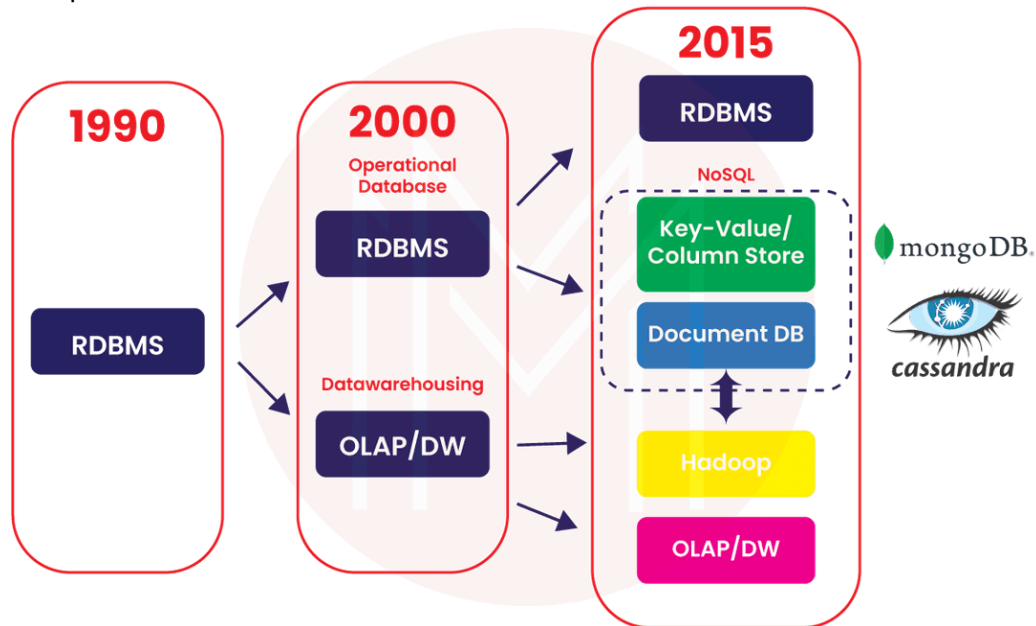


## 2. How many types of mechanism works in NoSQL? Write down their name?
**Ans:** There are four types of mechanisms:

A. Graph database

B. Key value calculation

C. Document oriented

D. Column view presentation

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## 3. Write down the difference between vertical and horizontal databases?

| Vertical Database | Horizontal Database |
|---|---|
| You can do vertical scaling, adding more power to the present PC. | Here you can do horizontal scaling with more equip |
| All data will be stored in a single node. | Only part data will be stored in all nodes. |
| Multi-core scaling will be done. | Single-core scaling will be done. |
| Example: Amazon cloud | Example: Cassandra |

## 4. Can you tell me when you should use NoSQL in place of the normal database?

**Ans:** If you are looking for key-value stores with massive high-speed performances, you can use NoSQL. Because in the relational databases, we use ACID transactions. Once we use this kind of transaction, the schema-based process will slow down the database performance.

Suggestive possible situations to use NoSQL are:

A. If you use multiple JOIN queries.
B. If the client wants high traffic site.
C. If you are using denormalized data.

*[Also Read: [What is NoSQL?](#)]*

## 5. Write down the NoSQL's different features?

**Ans:** These are different features of NoSQL:
A. It can store a big amount of unstructured, structured, and semi-structured data.
B. It is object-oriented programming based, which is best for a web application.
C. It is agile, sprints based, which is best for project management.
D. It is cost-effective with scale-out architecture and efficiency.

## 6. What do you know about polyglot persistence in NoSQL?

**Ans:** Once the applications are used and developed with mixed programming languages, debugging becomes easy in databases. However, tough complex problems will be there. Now let's talk about an e-commerce web application with a huge database of carts that is highly available to the buyer and will be easy to manage by this hybrid concept of polyglot. This hybrid technology helps the database to give suggestions to buyers.
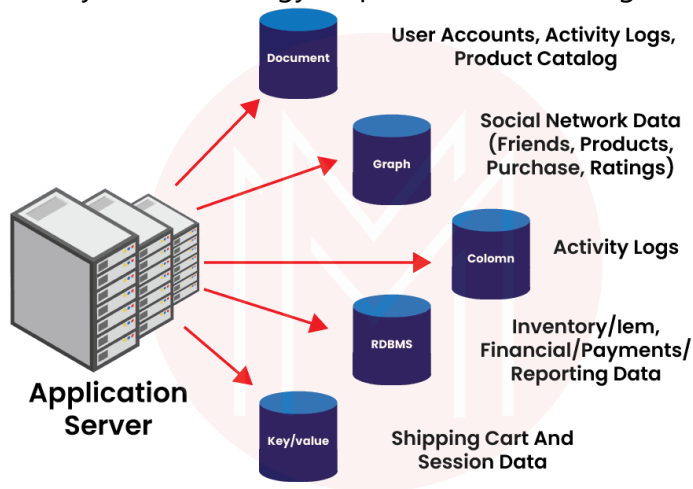


## 7. Can we use NoSQL in an Oracle-based database?

**Ans:** Yes, NoSQL is applicable in the Oracle database to record data. This database helps to find out the data records through external table functions. As well, it is easier to perform some queries in the Oracle base database. It is very flexible and key-value based.

*[Related Article: [NoSQL Performance Management](#)]*

## 8. Clarify the key value in the NoSQL database?

**Ans:** Generally, in a database, we store the data in a table. In NoSQL, we usually store data in the hash table. These all have tables are having unique identities. If you are finding some

data, then using a key-value store is a better option than working with joins. This key value will be picking up data faster from the hash table.
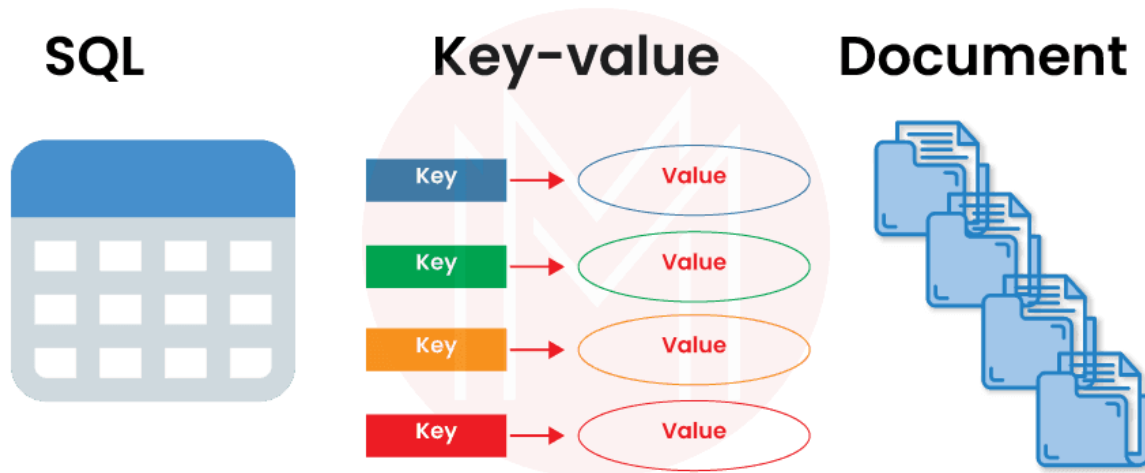


## 9. What is a hash table? How does it work in NoSQL?
**Ans:** This is like a data structure that provides an associative array of abstract data types. This table uses to function in a complex database. You need to write has code-based queries in this type of database.

## 10. What is the meaning of document-oriented DB?
**Ans:** This is one of the features of the NoSQL database. It helps to store the data as schema-free. As a result, JavaScript object notation will be used, and scalability will be higher. The project will be developed faster at a low cost too. You can use given below these DocumentDB:

A. MongoDB

B. Amazon DocumentDB

C. Microsoft Azure CosmosDB

```json
{
  "_id": "5cf0029caff5056591b0ce7d",
  "firstname": "Jane",
  "lastname": "Wu",
  "address": {
    "street": "1 Circle Rd",
    "city": "Los Angeles",
    "state": "CA",
    "zip": "90404"
  },
  "hobbies": ["surfing", "coding"]
}
```

## 11. How can you perform column view data presentation in NoSQL?

**Ans:** If you are looking for a highly analytical output, you can use this column view data presentation. This NoSQL can store a huge analytical amount of data in columns rather than rows. You can also build subgroups by collecting columns. You don't need to give any key names to this type of database. This is mainly recommended for the data belonging to the data science field.

*[Explore More: MongoDB vs DynamoDB]*

## 12. How to increase scalability in the NoSQL database?

**Ans:** All these databases are heavy and need good server configuration on PC. To increase scalability, you can use a vertical database or a horizontal database also. Now on the PC, you can increase the RAM and SSD hard disk size so that the PC will be running faster. This way also, you can increase the scalability in NoSQL.

## 13. What is a Graph database?

**Ans:** A graph database is one of the most important of all databases. It is mainly specific for storing and navigating data relationships. The concept is entity information, and edges will store data relationships. This database is used by banks or social media or new channels etc.
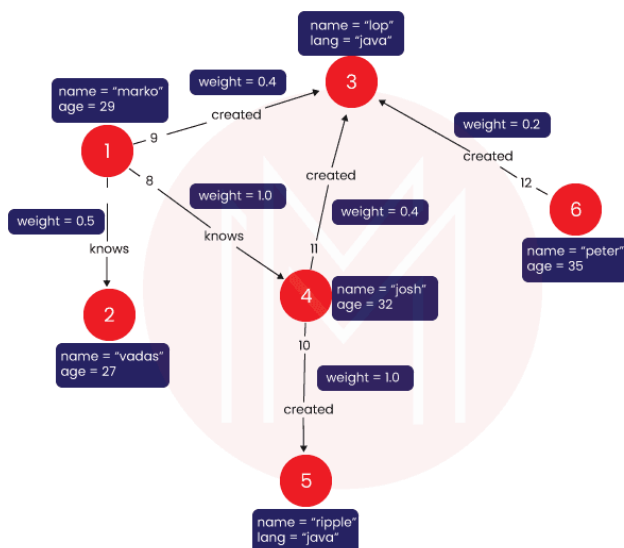
### 14. Explain the CAP theorem in NoSQL?

**Ans:** It is the most reliable three guarantees for a database. CAP theorem is expertise with skills like consistency, availability, and partition tolerance. The nodes will be working in the network seamlessly. As a result, the database will work faster.

### 15. What do u know about database sharding in the NoSQL database?

**Ans:** In NoSQL, database sharding means partitioning the database in patterns for the NoSQL age. You can store data by sharding in different potentially separate servers around the world. Then, a database administrator can access these stored data easily with high data speed performances from all over the world.

### 1. How does the NoSQL database control machine price range memory?

**Ans:** The replication node that manages the NoSQL database save information is the replication node. It is likewise the primary client of reminiscence. The java heap and the cache length that the replication node can utilize are the critical elements in performance phrases. By default, those matters are calculated via way of means of NoSQL in phrases of the quantity of memory to be had to the storage node. Specification of the to be had reminiscence for a storage node is recommended. The memory can be calmly divided among all of the RNs if the garage node hosts a couple of replication node.

### 2. What do you know about Big SQL in NoSQL?

**Ans:** This Big SQL is developed by IBM. This is a high-speed performance database that follows MPP ( Massive parallel processing) SQL engine for a large amount of data managed by Hadoop. Mainly enterprise data will be stored by this process. By using Big SQL, you can access data from across the organization with the permission of the database administrator. It is fully secured too. Mainly banking industries are using this.

### 3. How is this impedance mismatch happening in the database?

**Ans:** Let's talk about the main difference between NoSQL and relational databases. This is a problem statement that happens due to the miss-match of database models and programming languages. If you want to use a richer memory structure, then you have translated this database to a relational database to store on disk. As a result, impedance mismatch will occur.

**[Related Article: EY Interview Questions]**

### 4. What is the role of the aggregate-oriented database?

**Ans:** Actually, this is a collection of data that interacts with other data as a unit. By using ACID operations and key-value, all data can be seen as a form of an aggregate-oriented database. It helps to manage the storage over the cluster. This often reduces computation.

### 5. Write down the script for NoSQL DB config?

**Ans:** If you are looking forward to building a NoSQL DB connection repeatedly, then you need to admin CLI commands. It can be used as scripted in different ways. For example, you can build a file that will store a sequence of commands to run using any programming language suitable for the particular database. Please go through the given below script:

```
configure -name mystore

plan deploy-datacenter -name boston -rf 3 -wait

plan deploy-sn -dcname boston -host localhost -port 5000 -wait

plan deploy-admin -sn sn1 -port 5001 -wait

You could execute this script by issuing the command

java -jar kvstore.jar runadmin -host localhost -port 5000 load -file

deploy.kvs
```

## 6. If we ask you to track data record relations in NoSQL, how will you do?

**Ans:** You can follow these steps to track data records in NoSQL:

A. First, you can embed all data in any user object.

B. Then, you can create the user id credentials.

C. By using login id, need to give comments value with a list of comments.

D. Your expected data will be found.

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## 7. What is eventual consistency in the context of NoSQL?

**Ans:** In the database, we do use service logic. Once you execute these service logics, the database system will be left in a constant state. To increase the data availability, you can use this concept. It has a distributed database system too.

## 8. Explain the base property of the NoSQL database?

**Ans:** These are the base property of NoSQL:

A. Availability of stored data after even multiple data search failures.

B. In the soft state, all base data will be stored in the ACID model.

C. Regularity.

## 9. Why do we use impala in the NoSQL database?

**Ans:** Once the database administrators handle big data with the Hadoop system, then this impala provides parallel processing in database technology. You can also do low latency queries by using impala. Due to this parallel processing, data fetching time will be less.

# Top 10 Frequently Asked NoSQL Interview Questions

## 1. Is NoSQL occurring in a normal database table?

**Ans:** NoSQL does not mean no to SQL; obviously, SQL is there. It works in the non-tabular form. Actually, you do not need to create any table for this type of database. By using NoSQL, you can improve the database performance. Mostly in dynamic SQL, to make parameterized queries, database developers use this NoSQL.

## 2. What is the main target of NoSQL?

**Ans:** The main target of NoSQL is to create an alternate database in SQL. It helps to store textual data in a database easily that is also in a non-structured format.

### 3. Can you tell me what the main principle of NoSQL is?

**Ans:** The main principle of NoSQL is to make the database high availability.

### 4. If I learn NoSQL, what will be my future career scope?

**Ans:** Data Science is booming nowadays. It's all about a huge amount of data management by adopting a big data methodology. If you see, other types of databases are not going to business on a large scale, but NoSQL is coming up with high demand in business. It has very faster career growth.

### 5. Do you give me any idea which particular NoSQL database is most demanding?

**Ans:** See, there are many database systems under NoSQL. But MongoDB is a most helpful and efficient database as it is a document-based NoSQL database. It is also use case sensitive.
MongoDB is the best if anyone wants to do read and write operations in the database.

### 6. What is your opinion on NoSQL replacing SQL?

**Ans:** The answer is yes. As per market demand, the database is also changing and getting replaced by NoSQL. Because it can manage big data, the cost is less, the latest technologies are compatible with this new database, but the traditional database is costly as well as doe's not matched with new technologies.

### 7. Can I learn NoSQL easily?

**Ans:** Yes, of course, you can learn NoSQL easily and quickly. It is a bit different from the traditional database, but it has some easily understandable logic. Here you don't need to maintain schemas or normalize at all. As a result, your workload will be less.

### 8. Name a few of the companies that are using NoSQL?

**Ans:** There are lots of companies that are using NoSQL. Mostly these companies are using a huge volume of data and also using AI, Data science to pretend the future business. In this situation, NoSQL is the best solution. Companies are:
A. Google
B. Amazon
C. Netflix
D. Facebook

### 9. What do you think, NoSQL uses normalization?

**Ans:** Yes, normalization is used by the NoSQL database. One of the famous NoSQL named Cassandra is based on normalization to finding stored data. It creates a series of tables related to the different fields. All these fields will be given true value in the table.

### 10. What kind of data can we manage in NoSQL?

**Ans:** Mainly this NoSQL types database can manage semi-structured data as well as unstructured data. Moreover, it has a flexible data model system.