List of MongoDB MCQs

1. Amongst which of the following is / are true about MongoDB?

    A. MongoDB is a cross-platform database
    B. Document oriented database
    C. High performance database
    D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

A database is a physical container for storing information about collections. A separate set of files is created on the file system for each database. MongoDB is a document database that is designed to be simple to develop and scale with the needs of modern applications. MongoDB is a document-oriented database that is available on a variety of platforms and offers high performance, high availability, and easy scalability. MongoDB is built around the concepts of collection and document storage.

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2. The data model available within MongoDB allows us to represent ___.

    A. Hierarchical relationships
    B. Able to handle complex structures
    C. Both A. and B.
    D. None of the mentioned above

Answer: C) Both A. and B.

Explanation:

The data model provided by MongoDB makes it easier to represent hierarchical relationships, to store arrays, and to store other more complicated structures. It is very easy to scale up and down the MongoDB environments. Companies all over the world have defined clusters, with some of them running 100 or more nodes and containing hundreds of thousands of documents in the database at any given time.

3. MongoDB is one of the leading NoSQL databases?

    A. True
    B. False

Answer: A) True

Explanation:

MongoDB is a NoSQL database that is among the most popular. JSON documents are contained within each of the individual collections. MongoDB is capable of storing virtually any data model that can be expressed as a JSON document with relative ease. MongoDB is a distributed database that runs on both servers and clients. The binary file MongoDB is used by the server, and the mongo client is used by the client.

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4. A record in MongoDB is a ___.

    A. Document
    B. Table
    C. Application
    D. None of the mentioned above

Answer: A) Document

Explanation:

A record in MongoDB is a document, which is a data structure composed of field and value pairs that represents a single instance of the database. Documents in MongoDB are similar to JSON objects in appearance. Other documents, arrays of documents, and arrays of arrays of documents may be used as values in fields.

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5. MongoDB stores documents in ___.

    A. Store
    B. Collections
    C. Indexes
    D. None of the mentioned above

Answer: B) Collections

Explanation:

MongoDB stores documents in collections. Collections in relational databases are analogous to tables in a relational database. A collection is a collection of MongoDB documents that have been grouped together. Documents within a collection can have a variety of different fields assigned to them. In a relational database system, a collection is equivalent to a table in terms of functionality. Within a single database, there is a collection of items.

6. The Collections screen ___ the existing collections.

    A. Lists
    B. Package
    C. Network
    D. None of the mentioned above

Answer: A) Lists

Explanation:

The Collections screen displays a list of all of the collections and views that are currently active in the selected database. Each list item contains the name of the collection or view, as well as other general information about the collection or view. It is possible to access the Collections screen for a database from the Databases screen by either selecting a Database Name in the main Databases view or by selecting a database from the left navigation pane.

7. The Collections screen displays ___ for each collection in the selected database.

    A. Collection name
    B. Number of documents in the collection
    C. Both A. and B.
    D. None of the mentioned above

Answer: C) Both A. and B.

Explanation:

The collections screen displays each collection in the selected database's name and the number of documents that are contained within the collection.

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8. A document is a set of ___.

    A. Key-value pairs
    B. Application pairs
    C. Activity pair set
    D. None of the mentioned above

Answer: A) Key-value pairs

Explanation:

A document is a collection of key-value pairs that are stored together. Documents have a dynamic schema that changes over time. Using a dynamic schema, documents in the same collection do not all need to have the same set of fields or structure, and the same common fields across multiple documents in a collection may contain different types of data.

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9. Aggregation's operations process data records and return computed results.

    A. True
    B. False

Answer: A) True

Explanation:

Aggregation operations process data records and return computed results in a single operation. Aggregation operations combine values from multiple documents into a single result, and they can perform a variety of operations on the grouped data in order to return a single result. Aggregation operations can be used to group values from multiple documents together. To aggregate data in MongoDB, there are three

methods to choose from. These are the aggregation pipeline, the map-reduce function, and single-purpose aggregation methods.

10. Amongst which of the following is / are true about the authentication ___.

    A. It is a process of verifying the identity of a client
    B. It is a process of verifying network
    C. It is a process of verifying the database
    D. None of the mentioned above

Answer: A) It is a process of verifying the identity of a client

Explanation:

Authentication refers to the process of determining the identity of a customer. Authentication and authorization are required by MongoDB when access control, also known as authorization, is enabled. This ensures that only authorized clients are granted access. Clients can use a variety of authentication mechanisms to verify their identity in MongoDB, all of which are supported. With the help of these mechanisms, MongoDB can be integrated with your existing authentication system.

11. Amongst which of the following is / are the client and user authentication mechanisms in MongoDB.

    A. SCRAM-SHA-1
    B. MongoDB Challenge and Response (MONGODB-CR)
    C. Both A. and B.
    D. None of the mentioned above

Answer: C) Both A. and B.

Explanation:

The reason for this is that MongoDB supports a variety of authentication mechanisms. SCRAM-SHA-1, X.509 Certificate Authentication, MongoDB Challenge

and Response (MONGODB-CR), LDAP proxy authentication, and Kerberos authentication are some of the client and user authentication mechanisms available.

12. Keyfile and X.509 are the internal authentication mechanisms in MongoDB.

 A. True
 B. False

Answer: A) True

Explanation:

The internal authentication mechanisms in MongoDB are represented by the keyfile and the X.509 certificate.

13. The document structure is more in line with how developers construct their ___.

 A. Network and security
 B. Classes and objects
 C. Tables and relations
 D. None of the mentioned above

Answer: B) Classes and objects

Explanation:

It is more in line with the way developers construct classes and objects in their respective programming languages. Developers will frequently claim that their classes do not consist of rows and columns, but instead have a clear structure consisting of key-value pairs.

14. Cursor is a pointer to the result set of a ___.

A. Query
B. Table
C. Dataset
D. None of the mentioned above

Answer: A) Query

Explanation:

The cursor is a pointer to the result set of a query, as explained above. In order to retrieve results, clients can iterate through a cursor. In this case, the Cursor is a MongoDB Collection of the document that is returned as a result of the find method being executed. By default, it is automatically executed as a loop, which is undesirable. We can, on the other hand, request a specific index document from the cursor that was returned. It works in the same way as a pointer those points to a specific index value in a database.

15. Field is a name-value pair in a ___.

A. Attribute
B. Table
C. Document
D. None of the mentioned above

Answer: C) Document

Explanation:

A field in a document is a name-value pair that contains information. There are zero or more fields in a document. Fields in relational databases are analogous to columns in traditional databases. In MongoDB, each document stored in a collection is identified by a unique _id field, which serves as the collection's primary key. If the _id field is not present in an inserted document, the MongoDB driver creates an ObjectId for the _id field by generating it automatically.

16. MongoDB supports searching by ___.

A. Field
B. Range queries
C. Regular expression searches
D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

Ad hoc queries in MongoDB are supported by searching by field, range queries, and regular expression searches, among other search options. In order to return specific fields within documents, queries can be created. Ad-hoc queries are those that were not anticipated when the database was being built. Consequently, MongoDB provides ad-hoc query support, which distinguishes it from other databases in this situation. Ad-hoc queries are updated in real time, resulting in a significant improvement in the performance of the system.

Discuss this Question

17. Indexes can be created to improve the performance of searches within ___.

A. MongoDB
B. NoSQL
C. Both A. and B.
D. None of the mentioned above

Answer: C) Both A. and B.

Explanation:

Indexes can be created in MongoDB to improve the performance of searches in the database. Any field in a MongoDB document can be indexed, including the document's name. When using MongoDB, indexes are used to speed up the execution of queries. Due to the lack of indexes, MongoDB is forced to perform a collection scan, which is to say it must scan each and every document in a collection, in order to select the documents that match the query statement. Whenever a query is associated with an appropriate index, MongoDB can use the index to reduce the number of documents that must be inspected by the query.

Discuss this Question

18. MongoDB can provide high availability with replica sets?

A. True
B. False

Answer: A) True

Explanation:

MongoDB can provide high availability through the use of replica sets. A replica set is made up of two or more instances of the mongo DB. Each member of the replica set has the ability to take on the role of either the primary or secondary replica at any time. Essentially, the primary replica is the main servers that interacts with the client and performs all read and write operations on their behalf. Built-in replication is used by the secondary replicas to keep a copy of the data from the primary replicas.

19. The data in MongoDB has a flexible schema?

A. True
B. False

Answer: A) True

Explanation:

The data in MongoDB has a flexible schema. Unlike SQL databases, where you must first declare the schema of a table before you can insert data, MongoDB's collections do not enforce document structure before you can insert data. This type of adaptability is what distinguishes MongoDB as a powerful database.

20. NoSQL is not a ___.

A. Relational database
B. Network database
C. Communication set
D. None of the mentioned above

Answer: A) Relational database

Explanation:

NoSQL is not the same as a relational database, as explained above. Because all records are not restricted by the same column names and types that have been defined across the entire table, it allows for greater flexibility. The following example will give you a better understanding of what NoSQL is.

21. During the year ___, Dwight Merriman, Eliot Horowitz, and Kevin Ryan developed MongoDB.

A. 2007
B. 2008
C. 2009
D. None of the mentioned above

Answer: A) 2007

Explanation:

In the year 2007, Dwight Merriman, Eliot Horowitz, and Kevin Ryan collaborated to create the database MongoDB. They decided to create a database in order to provide a solution for the problems of scalability and agility that they were experiencing at Double-click at the time. It was at this point that MongoDB came into being.

22. MongoDB was first developed by ___ Software in 2007.

A. 9gen
B. 10gen
C. 12gen
D. All of the mentioned above

Answer: B) 10gen

Explanation:

In 2007 10gen Software created MongoDB as part of their proposal for platform as a service. In 2009, the company shifted to an open-source development approach, with

commercial support and additional services made available as an option. In 2013, the name MongoDB Inc. was adopted to replace 10gen as the company's official name. It became a publicly traded company on October 20, 2017, when it went public on the NASDAQ under the ticker symbol MDB at a price of $24 per share in its initial public offering (IPO). This partnership with Alibaba Cloud, which was announced on October 30, 2019, will allow it to provide clients with a MongoDB-as-a-Service solution. Managed services provided by BABA can be accessed from any of the company's data centres located throughout the world.

23. Amongst which of the following is / are show the need of MongoDB technology –

A. No downtime while the application is being scaled
B. Exceptional scalability feature
C. No downtime while the application is being scaled
D. All of the mentioned above

Answer: C) No downtime while the application is being scaled

Explanation:

The technology behind MongoDB overcomes one of the major drawbacks of traditional database systems, namely, scalability. Businesses' database systems needed to be updated in order to keep up with their constantly changing requirements. The scalability of MongoDB is exceptional. It simplifies the process of retrieving data while also providing continuous and automatic integration.

24. MongoDB meets the business requirements by –

A. It provides the right mix of technology and data for competitive advantage
B. It increasingly accelerated the time to value and lowered the total cost
C. It builds applications that are just not possible with traditional relational databases
D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

The business requirements are met by using MongoDB. It provides the optimal combination of technology and data for gaining a competitive edge. It is best suited for mission-critical applications due to the significant risk reduction it provides. It steadily decreased the time to value while simultaneously increasing the total cost of ownership. It enables the development of applications that would otherwise be impossible with traditional relational databases.

25. Due to Distributed Data Platform, MongoDB can be run ensuring new levels of availability and scalability –

    A. True
    B. False

Answer: A) True

Explanation:

Because of the Distributed Data Platform, MongoDB can be used to achieve unprecedented levels of availability and scalability. MongoDB can be run across a network of geographically dispersed data centres and cloud regions, enabling it to achieve unprecedented levels of availability and scalability. MongoDB scales elastically in terms of data volume and throughput with no downtime and without requiring any changes to our application code. The technology provides you with sufficient flexibility across multiple data centres while maintaining high consistency.

26. MongoDB is rich in a flexible data model with dynamic schema –

    A. True
    B. False

Answer: A) True

Explanation:

Because of its flexible data model with dynamic schema, as well as its powerful GUI and command-line tools, it allows developers to build and evolve applications quickly. When data is stored in MongoDB, it is in flexible JSON-like documents, which

makes data persistence and combining simple. Due to the fact that the objects in your application code are mapped to the document model, working with data becomes straightforward. Naturally, schema governance controls, data access capabilities, complex aggregations, and rich indexing functionality are all preserved in their entirety. Dynamic schema modification is possible without the need for downtime. Because of this flexibility, a developer will have less to worry about when it comes to data manipulation.

27. Amongst which of the following is / are the Integrated Feature Set of MongoDB –

    A. Flexible with real-time applications
    B. Greatly deals with analytics and data visualization
    C. Event-driven streaming data pipelines
    D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

MongoDB is flexible with real-time applications; it is extremely effective with analytics and data visualization; and it is extremely effective with event-driven streaming data pipelines. Because of analytics and data visualization, event-driven streaming data pipelines, text and geospatial search, graph processing, and in-memory performance, one can develop a wide range of real-time applications. Aside from additional complex technologies and separate integration requirements, RDBMS are required to achieve this goal.

28. Database_name is a MongoDB command is used for ___.

    A. Database Creation
    B. Dropping Databases
    C. Creating a Collection
    D. All of the mentioned above

Answer: B) Database Databases

Explanation:

MongoDB does not have any methods for creating databases. When you save values into the defined collection for the first time, it automatically creates a database in the background. Database name is a MongoDB command that is used for the creation of databases. If a database with the name 'database name' does not already exist, this will create one. If it does exist, it will be chosen for further consideration.

29. In MongoDB, db.dropDatabase () is used for ___.

A. Dropping Databases
B. Creating a Collection
C. Database Creation
D. None of the mentioned above

Answer: A) Dropping Databases

Explanation:

In MongoDB, the db.dropDatabase () function is used to remove databases from the system. This command has an effect on the currently active database.

30. Amongst which of the following is / are the command used to create collection in MongoDB?

A. db.dropDatabase()
B. db.createCollection()
C. Both A. and B.
D. None of the mentioned above

Answer: B) db.createCollection()

Explanation:

The *db.createCollection (name, options)* command is used to create a collection in MongoDB. Explanation: MongoDB uses the db.createCollection (name, options) command to create a collection. Normally, this is not necessary because MongoDB automatically creates collections when new documents are inserted into the database. db.createCollection is the command to use (name, options).

- **Name:** This is a string type that specifies the name of the collection that is going to be created.
- **Options:** The document type determines the amount of memory available and how the collection is indexed. It is a parameter that can be omitted.

31. Amongst which of the following is / are the data types of MongoDB?

A. Timestamp
B. Object
C. Symbol
D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

The data types supported by MongoDB are timestamp, object, and symbol. The timestamp feature can be useful for keeping track of when a document has been modified or added. When embedding documents, the object data type is used, and the symbol data type is used in the same way as a string; however, it is generally reserved for languages that use a specific symbol type.

32. The below example can be used to create a collection to store the ___.

```
db.Employee.insert
(
    {
        ...
        ...
    }
)
```

A. Employee records
B. Students record
C. Product records
D. All of the mentioned above

Answer: A) Employee records

Explanation:

db.Employee. Insert collections can be used to store information about employees. The quickest and most straightforward method of creating a collection is to insert a record (which is nothing more than a document containing Field names and Values) into an existing collection. This means that if the collection does not already exist, one will be created.

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33. MongoDB provides the insert () command to insert documents into a collection.

    A. True
    B. False

Answer: A) True

Explanation:

Inserting documents into a collection is made possible by the insert () command in MongoDB. To accomplish this, we must first write the "insert" command, and then within the "insert" command, we must include the required Field Name and Field Value for the document that needs to be created.

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34. To create an index, you need to use ___ method of MongoDB.

    A. createTable()
    B. createIndex()
    C. createdata()
    D. None of the mentioned above

Answer: B) createIndex()

Explanation:

Indexes aid in the quick and efficient resolution of query requests. In the absence of indexes, MongoDB must scan every document in a collection in order to select the

documents that match the search query statement. It is necessary to use the createIndex() method of MongoDB in order to create an index. Indexes are special data structures that are used to store a small portion of a data set in a format that is easy to navigate. It stores the value of a specific field or set of fields, ordered by the value of the field as specified in the index, and it does so in an organized manner.

35. To build the index in the background creates an index which does not block other database activities.

    A. True
    B. False

Answer: A) True

Explanation:

Builds the index in the background, so that it does not interfere with other database activities while it is being built. True means that the build will take place in the background. The default value for this parameter is false.

36. Aggregation operations in MongoDB ___ values from multiple documents.

    A. Data set
    B. Set
    C. Group
    D. None of the mentioned above

Answer: C) Group

Explanation:

The aggregate () method in MongoDB is used to perform the aggregation. Processing data records and returning computed results are the objectives of aggregation operations. Aggregation operations combine values from multiple documents into a single result, and they can perform a variety of operations on the grouped data in order to return a single result. Aggregation operations can be used to group values from multiple documents together. The SQL function count (*) and the group by function are equivalent to the MongoDB aggregation.

37. MongoDB achieves replication by the use of ___.

A. Replica set
B. Data set
C. $first
D. All of the mentioned above

Answer: A) Replica set

Explanation:

Replication in MongoDB is accomplished through the use of replica sets. A replica set is a collection of mongod instances that are all hosting the same data set at the same time. In a replica, one node is designated as the primary node, and it is responsible for receiving all write operations.

38. In MongoDB, Sharding is the process of ___ across multiple machines.

A. Drop data records
B. Storing data records
C. Truncate data records
D. All of the mentioned above

Answer: B) Storing data records

Explanation:

In MongoDB, sharding is the process of storing data records across multiple machines in a distributed fashion. Data storage is accomplished through the use of shards. They ensure high availability and consistency of data in a distributed environment. In a production environment, each shard corresponds to a separate replica set of the database. Sharding is the method by which MongoDB achieves horizontal scaling. Large databases are divided into smaller, more manageable chunks by using a partitioning technique. A carefully chosen key (shard key) is used to accomplish this separation, and then the partitions are distributed across multiple servers, typically based on ranges of the shard key values.

39. Amongst which of the following is / are used to create backup of database in MongoDB?

    A. mongodump command
    B. mongodelete command
    C. mongotruncate command
    D. None of the mentioned above

Answer: A) mongodump command

Explanation:

It is necessary to use the mongodump command in order to create a backup of a MongoDB database. This command will dump all of the data on our server into a directory named "dump" on our computer. There are numerous options available for limiting the amount of data that can be stored on our remote server or creating backups of our remote server. Creating a binary export of the contents of a database is made possible by the mongodump utility. It is possible to export data from mongod or mongos instances; that is, data can be exported from standalone, replica set, and sharded cluster deployments of the two databases.

40. Amongst which of the following MongoDB command is used to import the data from various sources?

    A. mongoimport
    B. mongoexport
    C. mongotruncate
    D. None of the mentioned above

Answer: A) mongoimport

Explanation:

It is necessary to use the mongoimport command in MongoDB in order to import data from various sources. When you use the mongoimport tool, you can import content from an Extended JSON, CSV, or TSV export that was created by mongoexport or, in some cases, by another third-party export tool.

41. Amongst which of the following MongoDB command is used to export the data?

A. mongoexport
B. mongoimport
C. mongodelete
D. None of the mentioned above

Answer: A) mongoexport

Explanation:

To export the data, the mongoexport command in MongoDB is utilised. Using the command-line tool mongoexport, you can generate a JSON or CSV export of data that is stored in a MongoDB instance. A CSV or JSON file can be created to contain either the entire collection or a specific field from the collection. Similarly, a CSV or JSON file can be imported into a collection and vice versa. In order to accomplish this, we should use the following syntax:

```
mongoexport --db DB_NAME --collection COLLECTION_name --fields
Field_name(s) --type=[csv or JSON} --out=Name-Path-Output-File
```

42. In MongoDB command, the ___ utility provides a quick overview of the status of a currently running mongod or mongos instance.

A. mongoexport
B. mongoexport
C. mongostat
D. None of the mentioned above

Answer: C) mongostat

Explanation:

The mongostat utility gives you a quick overview of the current status of a mongod or mongos instance that is currently running. Although functionally similar to the UNIX/Linux file system utility vmstat, mongostat provides information on mongod and mongos instances instead of the file system.

43. mongotop provides a method to track the amount of time a MongoDB instance mongod spends reading and writing data.

    A. True
    B. False

Answer: A) True

Explanation:

mongotop is a method for keeping track of how much time a MongoDB instance mongod spends reading and writing data to and from the database. mongotop provides statistics at the collection level, rather than at the collection level as a whole. By default, mongotop returns values every second, which is inefficient.

44. In MongoDB, mongoreplay is a ___.

    A. Traffic capture
    B. Replay tool
    C. Both A and B
    D. None of the mentioned above

Answer: C) Both A and B

Explanation:

It is possible to use mongoreplay, a MongoDB traffic capture and replay tool, to inspect and record commands sent to a MongoDB instance, and then replay those commands back onto another host at a later time. It is available as a free download.

45. Amongst which of the following is / are the features of MongoDB?

    A. Authentication
    B. Encryption
    C. Access control
    D. All of the mentioned above

Answer: D) All of the mentioned above

Explanation:

Authentication, access control, and encryption are just a few of the features that MongoDB provides to help us keep our MongoDB deployments safe. Some of the most important security features are as follows: SCRAM for authentication, x.509 for encryption, and x.509 for decryption. Enable Access Control, Manage Users and Roles, and Authorization Role-Based Access Control are the options for authorising access control. Configure mongod and mongos for TLS/SSL, as well as TLS/SSL configuration for clients, in order to use TLS/SSL.

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46. MongoDB employs Role-Based Access Control (RBAC) to govern access to a MongoDB system.

 A. True
 B. False

Answer: A) True

Explanation:

MongoDB uses Role-Based Access Control (RBAC) to control who has access to what parts of the system. A user is assigned one or more roles, which determine the extent to which the user has access to database resources and can perform database operations. The user does not have access to the system unless he or she is assigned a role.

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47. MongoDB does not enable access control by default.

 A. True
 B. False

Answer: A) True

Explanation:

By default, MongoDB does not allow for the use of access control. Authorization can be enabled by specifying the —auth option or the security.authorization setting. Client authorization is enabled as a result of enabling internal authentication.

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48. MongoDB Enterprise provides mongoldap for testing MongoDB's LDAP configuration options against a running ___.

    A. LDAP server
    B. Set of servers.
    C. Both A and B
    D. None of the mentioned above

Answer: C) Both A and B

Explanation:

LDAP configuration options in MongoDB Enterprise can be tested against a live LDAP server or set of servers using mongoldap, which is included with the MongoDB Enterprise installation. Configure the mongoldap —config option to the path of the LDAP configuration file in order to validate the LDAP options in the configuration file. mongoldap generates a report that includes information about whether any step in the LDAP authentication or authorization procedure was successful or unsuccessful.

Error messages contain information about the specific errors that were encountered, as well as possible advice for resolving the error.

The mongoldap configuration utility executes an LDAP query constructed with the provided configuration options and username, and returns a list of roles on the admin database that the user is authorized to perform.

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49. In MongoDB, the mongofiles utility makes it possible to manipulate files stored in your MongoDB.

    A. True
    B. False

Answer: A) True

Explanation:

The mongofiles utility allows you to manipulate files stored in your MongoDB instance in GridFS objects directly from the command line using the MongoDB command line interface. It is particularly useful because it serves as a bridge between objects stored in your file system and GridFS, which is extremely convenient. The following are the components of the mongofiles command:

- We can control the behaviour of mongofiles by using one or more of the options listed above.
- To determine the behaviour of mongofiles, use one of the following commands.
- **This filename can be one of two things:** the name of a file on your local file system, or the name of a GridFS object.

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50. In MongoDB, install_compass is a platform-specific installation script for MongoDB Compass.

A. True
B. False

Answer: A) True

Explanation:

Install compass (also known as Install-Compass in Windows) is a MongoDB Compass installation script that is specific to the Windows platform. This script, which can be downloaded as part of the MongoDB Enterprise Server package, will install the standard edition of MongoDB Compass if it is not already installed. The install compass script, which can be found in the MongoDB Community Server package, is responsible for installing the MongoDB Compass Community edition.