

Database quiz

9 out of 10 correct

1.

What is the name of the official MongoDB driver for Python?

- ☐ MongoPython
- ☐ PyMongoDB
- ☐ MongoDB-Py
- ☒ PyMongo

Explanation: PyMongo is the official MongoDB driver for Python. It is a Python library that allows you to interact with MongoDB from Python, and it provides a simple and convenient way to connect to MongoDB, query data, and perform CRUD operations on collections.

2.

How do you connect to MongoDB using PyMongo in Python?

- ☐ By using the connect() method
- ☐ By using the PyMongo() method
- ☒ By using the MongoClient() method
- ☐ By using the MongoDB() method

Explanation: To connect to MongoDB using PyMongo in Python, you need to use the MongoClient() method. This method takes a connection string as an argument, which specifies the host and port of the MongoDB server, and returns a MongoClient instance that you can use to interact with the database.

3.

How do you access a collection in MongoDB using PyMongo in Python?

- ☐ By using the collection() method
- ☐

By using the `get_collection()` method

- ☐

By using the `get_database()` method

- ☒

By using the `database[collection]` syntax

Explanation: To access a collection in MongoDB using PyMongo in Python, you can use the `database[collection]` syntax. This allows you to access the collection by its name, and you can use the collection to perform CRUD operations, such as inserting, updating, and querying documents.

4.

How do you insert a document into a collection in MongoDB using PyMongo in Python?

- ☒

By using the `insert_one()` method

- ☐

By using the `insert()` method

- ☐

By using the `save()` method

- ☐

By using the `add()` method

Explanation: To insert a document into a collection in MongoDB using PyMongo in Python, you can use the `insert_one()` method. This method takes a document as an argument, and it inserts the document into the collection. The `insert_one()` method returns an `InsertOneResult` object that you can use to check the result of the operation.

5.

How do you query documents from a collection in MongoDB using PyMongo in Python?

- ☒

By using the `find()` method

- ☐

By using the `query()` method

- ☐

By using the `get()` method

- ☐

By using the `select()` method

Explanation: To query documents from a collection in MongoDB using PyMongo in Python, you can use the `find()` method. This method returns a cursor that you can use to iterate over the documents that match the query. The `find()` method takes an optional filter argument, which specifies the conditions that the documents must match, and it returns all the documents in the collection if no filter is provided.

6.

What is MongoDB?

- ☐ A relational database management system
- ☒ A document-oriented database management system
- ☐ A graph database management system
- ☐ A key-value store database management system

Explanation: MongoDB is a document-oriented database management system that stores data as documents in a binary representation called BSON (Binary JSON). BSON provides a flexible data model that allows you to store data in a variety of structures, and it supports rich data types such as arrays, dates, and binary data.

7.

What is a collection in MongoDB?

- ☐ A database
- ☐ A table
- ☒ A set of documents
- ☐ A set of rows

Explanation: In MongoDB, a collection is a set of documents. Each document in a collection is a self-contained unit of data that can have a different structure than other documents in the same collection. Collections are equivalent to tables in relational databases, but they provide a more flexible data model.

8.

What is a document in MongoDB?

- ☐

A row

• ☐

A tuple

• ☐

An instance of data

• ☒

A JSON-like structure

Explanation: In MongoDB, a document is a JSON-like structure that represents an instance of data. Documents can have fields with values of different data types, including strings, numbers, arrays, and nested documents. Documents are the fundamental unit of data in MongoDB, and they are stored in collections.

9.

What is the default storage engine for MongoDB?

• ☐

RocksDB

• ☒

WiredTiger

• ☐

InnoDB

• ☐

MyISAM

Explanation: The default storage engine for MongoDB is WiredTiger. WiredTiger provides high performance, scalability, and data compression for MongoDB, and it allows you to use features such as document-level locking and multi-threaded read operations. WiredTiger is the recommended storage engine for most MongoDB use cases.

10.

What is the purpose of the MongoDB aggregation framework?

• ☒

To perform complex data processing on collections

• ☐

To enforce data consistency and integrity

• ☐

To manage transactions and rollbacks

• ☐

To define indexing strategies

Explanation: The MongoDB aggregation framework is a powerful tool for performing complex data processing on collections. It allows you to perform operations such as grouping, filtering, and transforming data, and it provides a pipeline-based interface for building complex data processing pipelines. The aggregation framework is a powerful way to extract insights from collections in MongoDB.