

Database 2 Final Review

Exam 1

1. Which part of the CAP theorem does MongoDB adhere to?
 - Consistent/Partition tolerant
2. Which of the following is not a Redis data type?
 - Integer
3. Which part of the MongoDB system architecture is responsible for listening to incoming client requests to the database?
 - MongoDB Shard Daemon
4. Dividing the system data set and load over multiple servers is known as which of the following?
 - Horizontal Scaling
5. Redis is which type of database?
 - Key-Value Database
6. Which part of the CAP theorem does PostgreSQL adhere to?
 - Consistent/Available
7. Which part of the PostgreSQL system architecture is responsible for listening to incoming client requests to the database?
 - Postmaster
8. Redis stores data in:
 - Memory
9. Which part of the PostgreSQL server architecture is responsible for checking that the SQL query has valid syntax?
 - Parser
10. What types of workloads is Redis typically used for?
 - Page/Session Caching
11. Which part of the CAP theorem does Redis adhere to?
 - Consistent/Partition tolerant
12. In MongoDB, a set of key-value pairs can be designated as which of the following?
 - Document
13. Following the Redis architecture a secondary node is called which of the following?
 - Read Replica
14. Of all the NoSQL databases on the market MongoDB is one of the least used has the lowest market share.
 - False
15. In MongoDB a group of mongod processes that maintain the same set of data are known as which of the following?
 - Replica Set

16. Redis is very fast it can perform approximately how many SET operations per second?
- 110000
17. In MongoDB, a group of database documents is referred to as which of the following?
- Collection
18. If Redis runs out of memory it will either shutdown, crash or slow down?
- True
19. One of the strengths of Mongo is its support of an extensive query model.
- True
20. Which part of the Postgresql server architecture is responsible for choosing the best path or a reasonably efficient one if too many possibilities exist?
- Planner
21. Which part of the MongoDB system architecture is responsible for storing the distributed data.
- MongoDB Shard Server
22. In Redis, a collection of key-value pairs can be stored as which of the following?
- Hash
23. What is the mechanism that allows Postgresql or any other RDBMS to quickly locate and read the data a query is asking for?
- Index
24. Which part of the Postgresql server architecture is responsible for sending simple queries directly to the executor?
- Traffic Cop
25. Storing all the columns and values in a single table is referred to as which of the following?
- Denormalizing
26. Which of the following is the most limiting factor for Redis?
- Memory
27. Which part of the Postgresql server architecture is responsible for recursively following the plan and extracting any necessary data tables?
- Executor
28. In MongoDb the geospatial operator that will produce a list of results within a certain distance from a point is which of the following:
- \$near
29. Redis has built in geospatial capabilities one in particular _____ allows you to fetch the members matching a given max distance from a point.
- GEORADIUS
30. In PostgreSQL, the difference between a function and a stored procedure is that in a stored procedure you can return a value.
- False

Exam 2

1. Which of the following is only available as a service on AWS?
 - DynamoDB
2. Which part of the CAP theorem does Dynamo adhere to?
 - Available/Partition tolerant
3. In Neo4j Graph Data Science an algorithm that is ready for production is considered to be in the Alpha category.
 - False
4. In Neo4j relationships matter more than data points.
 - True
5. In Neo4j graph data science which of the following algorithms measures the importance of each node within the graph, based on the number incoming relationships and the importance of the corresponding source nodes.
 - Page Rank
6. Which of the following Dynamo features provides a fully managed solution for deploying a multi-region, multi-master database, without having to build and maintain your own replication solution?
 - Global Tables
7. How many North American AWS regions are there?
 - 4
8. Which of the following is the category of Neo4j Data Science algorithms that are used to evaluate how groups of nodes are clustered or partitioned, as well as their tendency to strengthen or break apart
 - Community Detection
9. Neo4j uses a query language called _____.
 - Cypher
10. Which Dynamo feature adjusts your table's provisioned throughput based on CloudWatch?
 - Auto Scaling
11. Which part of the Neo4j server architecture is responsible for maintaining ACID compliance?
 - Transaction Management
12. Which category of algorithms are used to determine the importance of distinct nodes in a network?
 - Centrality
13. Which part of the Neo4j system architecture is responsible for processing write transactions?
 - Core Servers
14. ____ is a no-code UI that helps users onboard with the *Neo4j* Graph Data Science Library.
 - Neuler
15. Which Dynamo feature is an in-memory cache that reduces read workloads to microseconds?
 - DAX
16. ____ is an easy-to-use graph exploration application for visually interacting with Neo4j graphs
 - Bloom
17. Which part of the CAP theorem does Neo4j adhere to?

- Consistently/Available
18. The maximum item size in DynamoDB is ____.
- 400KB
19. In Dynamo the fundamental database objects are called Tables, Items and Attributes
- True
20. In Neo4j Data Science which of the following algorithms is a way of detecting the amount of influence a node has over the flow of information in a graph.
- Betweenness Centrality
21. Which of the following Neo4j categories indicates that the algorithm has been tested with regards to stability and scalability.
- Production-quality
22. In Neo4j which of the following represents an entity?
- Node
23. This Neo4j plugin is a dependency for the Graph Data Science Library.
- APOC
24. Neo4j is which type of Database:
- Graph Database
25. In Neo4j Bloom you create rule based styling to show nodes or relationships with varying size based on a property.
- True
26. Choosing Dynamo offers you a fully managed service that is consistent and predictable?
- True
27. In Neo4j which of the following can have a property?
- Node and Relationship
28. Storing all the columns and values in a single table is referred to as which of the following?
- Denormalizing
29. In Neo4j moving along nodes following relationships is known as which of the following?
- Traversal
30. The Neo4j node limit is which of the following
- Unlimited