1. In the context of relational databases, what are relationships? Provide an example.
   1. Database relationships are used to specify how data relate to one another.
   2. They could either be maintained separately or can be embedded into one another.
   3. An example of a relationship database would be Domino inc. owns multiple products that are being sold at multiple stores. They could keep a separate list for stores and the products being sold at which store. They could also create an ID for each store and list the products they want to sell at that particular store.
2. What are the advantages of relational databases? What are the advantages of NoSQL databases?
   1. The advantage of relational databases is that you can create a unique ID to relate data to multiple pieces of other data. This keeps data organized and allows you to reference the other data that is needed.
   2. The advantage of NoSQL databases is you can just get started right way creating files/data and not worry about relating the data at all. Nonrelational databases are capable of handling high amounts of traffic, making them adaptable.
3. What are the disadvantages of relational databases? What are the disadvantages of NoSQL databases?
   1. The disadvantage to relational databases is that it’s difficult to program and get going. A lot of this has to do with the way that the data needs to be structured and structuring data just takes time.
   2. The disadvantage of NoSQL databases is that the more complex your data becomes the less useful NoSQL databases become. There is also the chance of duplicating data.
4. Identify at least two features of MySQL and two features of MongoDB and describe what they are and how they are used.
   1. Language - MongoDB stores documents in BSON format, which is a binary-encoded JSON format. This allows you to store images, videos, and other binary data. With MySQL you can store data in SQL (structured query language) format so that you can access the data. Using SQL allows you to create multiple tables that can access each other’s data.
   2. Storage - MongoDB offers a cloud feature for free to use for exploratory purposes and with MySQL you need an account and you have to be with in the free tier terms in order to continue using the services without a subscription.

Resources:

<https://www.studytonight.com/mongodb/relationships-in-mongodb>

<https://www.oracle.com/database/nosql/what-is-nosql/>

<https://www.mongodb.com/compare/mongodb-mysql>