Short Answer

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail

1. What is Marker interface?
2. How do you achieve caching in your Spring application?
3. How do you document your Rest APIs?
4. What are Docker and Container?
5. What is the difference between SQL database and NoSQL database?
6. How do you connect Java to MongoDb?

Coding Questions

Write code in Java to solve following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practice when you write the code so that it would be easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

1. In your HR project, which request takes the longest time? Try to improve it with Caching
    a. Push your code to your personal branch of the project
2. Create a RESTful API with MongoRepository and Spring Boot
    a. Create two classes
        i. Owner: String id, String name, List<Pet> pets
        ii. Pet: String name, String species
    b. Use MongoRepository to retrieve/save/update information to MongoDB
    c. Create the following endpoints
        i. GET “/api/owner”, get all owners along with their pets
        ii. POST “/api/owner”, save an owner to MongoDB, along with any possible pets
        iii. PUT “/ap/owner/{id}/pet, add a pet to an existing owner with the path variable id.
        iv. DELETE /api/owner/{id}, delete an owner by the id
    d. Test your endpoints with Postman and take screenshots.