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 details.

1. What is the advantage of criteria query compared with HQL or SQL?

2. What are the steps to use Criteria API in Hibernate 5?
3. What are the fetching strategies?
4. What is LazyInitializationException?
5. How to avoid LazyInitializationException?
6. What are first-level cache and second-level cache?
7. What are the locking types of a relational database?
8. What can the types of a version attribute be?

Coding Questions:

Write code in Java to solve the 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. Use the tables for the homework of Week 3 Day 4 (address and resident), write a criteria query to retrieve the data of addresses and residents, and trigger a LazyInitializationException; then figure out a way to make the exception disappear. Make a screenshot of the exception you triggered, and make a screenshot after you solve it.