1. What are the communication methods between microservices in Lagom Framework? What are the uses cases of these methods? Why?

* With Service calls method microservices can communicate with weach other either synchronous or asynchronous (streaming) by using public APIs and accepted protocols such as HTTP etc.
* Message Broker API provides communication for microservices.

1. What are the methods to filter a non-primary key columns in CQL. Are they useful for production?

* There are three methods we can filter columns without primary keys.

1. First, we can create a secondary index, but this can cause performance problems.
2. We can create a new table, but we shouldn’t redunant our data.
3. We can use ‘Where’ clause, but it can’t be combined with the IN or = operators.
4. Is denormalization useful for Cassandra architecture? Why?

* Yes, it is useful. Because Cassandra is a NoSQL data base so it doesn’t support joins. And with denormalization we can speed it up our queries so it is useful to denormalize our Cassandra database.

1. What are the advantages of event sourcing?

* It provides ease of rollback. Since there is no single entity record, the transactions are stored like audit log and this way we can rollback certain transaction.
* It avoids the object-relatioal impedance mismacth because it is event-driven.
* It has good write performance since all the events appended to the data store.
* Easy to test and debug.

1. In a CQRS (Command Query Responsibility Segregation) paradigm, can we read a record from microservice state? Is this approach the best practice? Why?

* Yes, we can read records from microservices by using their APIs or querying them. This is not the best approach because it is not directly communiicating with database. The best approach is the read data direcrtly from database.

1. Suppose an application that has many Lagom Microservices uses Cassandra Database(no-sql) for readside. How can you gather (make relation) of two different microservice’s data tables?

* Yes, we can gather of different microservice’s data by using Selective Data Replication. With this method we can replicate data from other microservices