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Homework 1

SUBJECT: RE: Welcome to Borromean Team!

FROM: Jonas Zhonghan Xie

TO: Raj Kumar

Hi Raj,

Thank you for your email. I am also really excited to be part of the Borromean Team and working with you!

For your questions in Part 1:

- 1. The author defines three types of relationships in the reading: one-to-one, one-to-many, and many-to-many.
- 2. Similar relationships can be students to classes: one student enrolls in one class or multiple classes. There are many students in one single class. Also, for the example of schools and alumni, one student can be alumnus of multiple schools. A school can have many alumni.
- 3. There are two types of databases mentioned in the reading: operational database and analytical database. Operational databases are powerful for transactional processing. We may use this type of databases for daily operations. Analytical databases are more suitable for data analysis and reporting. We may want to use analytical database to pull, analyze data for business intelligence.

For questions in Part 2: I was able to connect to the MySQL server and found the following databases with the command SHOW DATABASES;. There are 14 databases on the server.

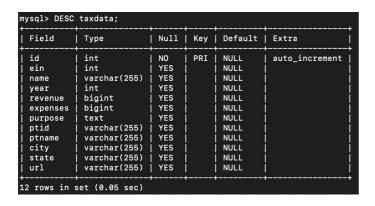
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```
mysql> SHOW DATABASES;
 Database
 bikes
 information_schema
 kubedb_system
 mysq1
 performance_schema
 ro_company1
 ro_employees
 ro_query
 ro_recipes
 ro_research1
 ro_twitter
 sakila
 sys
 world
14 rows in set (0.05 sec)
```

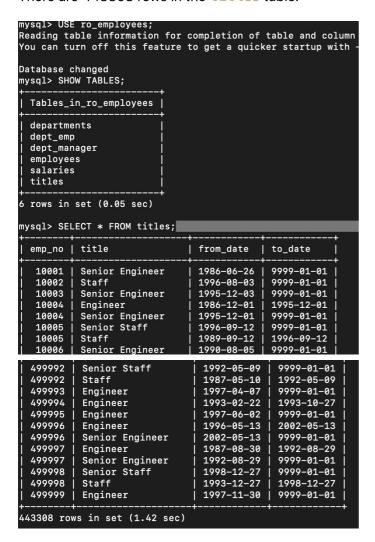
For the tables in ro_query, I only found 2 tables in the database. They are home_value_by_zip and taxdata. Probably there are something wrong with the database or my query. Please point me to the right direction if I missed anything.

In the taxdata table, there are 12 columns in the table.

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There are 443308 rows in the titles table.



Please let me know if you have any additional questions. Thank you so much!

Best, Jonas