

## Exercise 1.1 ITravel

**Purpose:** think about data and how it relates to a business problem.

**IT Requirements:** Part B Uses “world” database in mySQL workbench (included with the installation).

**zyBooks:** Relates to zybooks 1.1-1.5

1.1 Database basics
1.2 Database systems
1.3 Query languages
1.4 Database design and programming
1.5 MySQL

### Part A – warm-up exercise

**Problem Scenario:** ITravel is an idea for a start-up company that you and some friends want to pursue. You decide to put together a few different vacation packages to sell to students at discounted rates. (You and your friends travel for free, of course, so you want to pick places where you want to go too.)

#### Step 1. Decide on three destinations.

Where do you want to go?

How do you decide on three destinations?

What criteria is important?

- Warm, sunny beaches?
- Cold, snowy mountains?
- Urban, cultured, rainy is ok?
- Resort vs inexpensive?

Action: Take 5 minutes and decide on 3 destinations.

#### Step 2. Report back

Ask: Where do you want to go?

Probe: How did you decide these were good places to go

#### Step 3. What information did you use to decide on your destination?

For example:

- Location
- Climate
- Population

- Safety
- Things to do
- Ways to travel to destination – plane, train, bus, boat, etc.

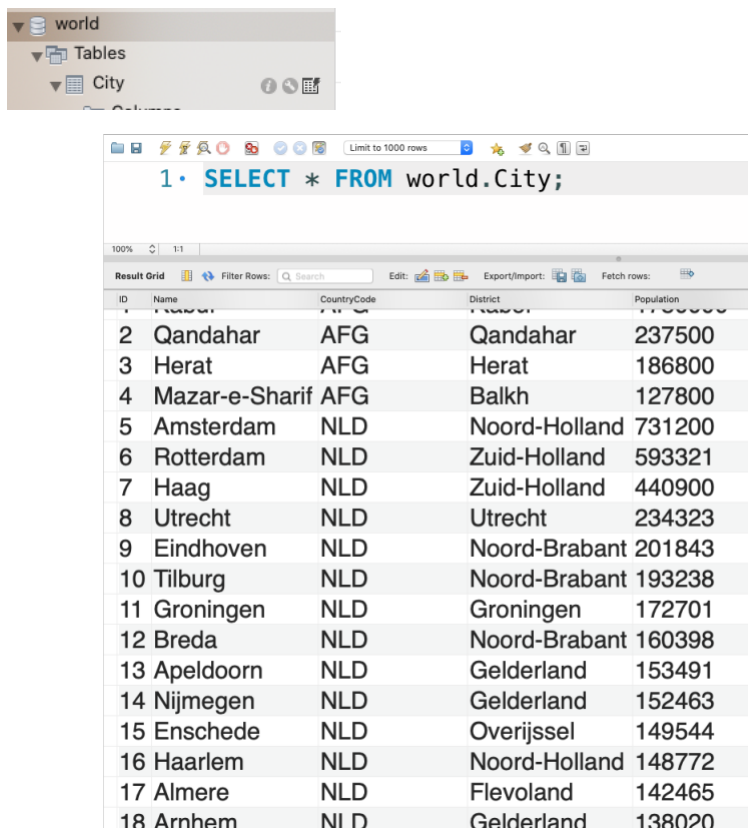
## Part B – explore MySQL

**IT Requirements:** Uses “world” database in mySQL workbench (comes with the installation). If you do not have this loaded on your laptop yet, just follow along with the demo. Do NOT take class time to try and load the database, as you will run out of time.

**Purpose:** To explore the database tables and the data stored in the tables

1. Open up MySQL
2. Let's see what data is stored in this database.  
→ show list of tables using MySQL
3. Note how the data is divided into 3 tables: City, Country, and CountryLanguage  
→ review attributes in each table
4. What sorts of questions can be answered using this database?
5. Display table contents by clicking on the table grid to generate `SELECT *`. Do this for each table.

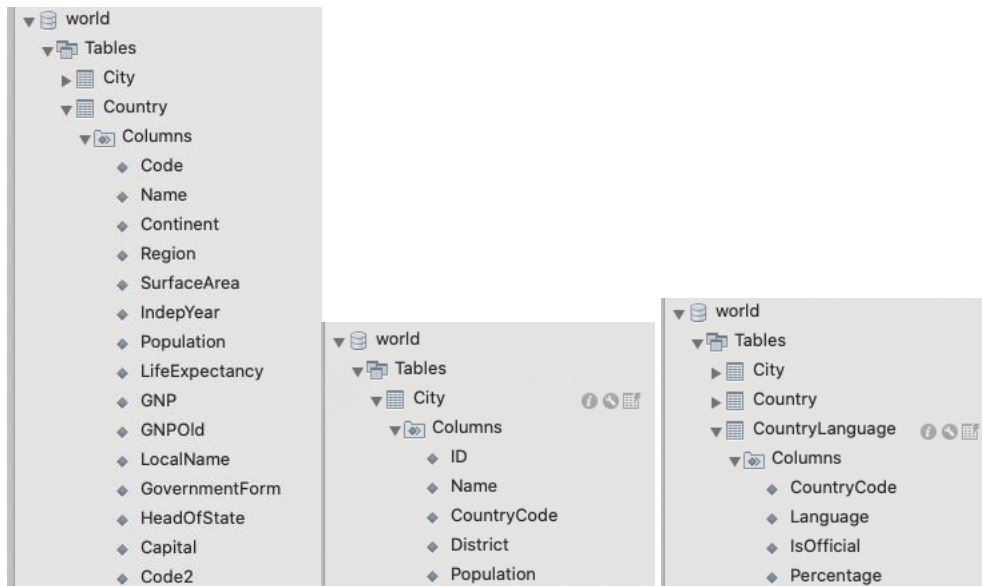
For example, the contents (partial) of the City table after selecting the



The screenshot shows the MySQL Workbench interface. On the left, the 'world' database is selected, and the 'City' table is highlighted in the 'Tables' pane. The main window displays the SQL query `1. SELECT * FROM world.City;` and the resulting data grid. The data grid shows 18 rows of city information, including ID, Name, CountryCode, District, and Population.

ID	Name	CountryCode	District	Population
2	Qandahar	AFG	Qandahar	237500
3	Herat	AFG	Herat	186800
4	Mazar-e-Sharif	AFG	Balkh	127800
5	Amsterdam	NLD	Noord-Holland	731200
6	Rotterdam	NLD	Zuid-Holland	593321
7	Haag	NLD	Zuid-Holland	440900
8	Utrecht	NLD	Utrecht	234323
9	Eindhoven	NLD	Noord-Brabant	201843
10	Tilburg	NLD	Noord-Brabant	193238
11	Groningen	NLD	Groningen	172701
12	Breda	NLD	Noord-Brabant	160398
13	Apeldoorn	NLD	Gelderland	153491
14	Nijmegen	NLD	Gelderland	152463
15	Enschede	NLD	Overijssel	149544
16	Haarlem	NLD	Noord-Holland	148772
17	Almere	NLD	Flevoland	142465
18	Arnhem	NLD	Gelderland	138020

6. Look at the content of each table.  
Why is the data grouped together into 3 tables?  
How is the data related within a table?



### Lesson Wrap-up

In IST 210, we will learn how to take a problem and create a database to store the data needed to address the problem.