## 4.1 MySQL

Import the **world** database from **world.sql** to MySQL

* **MySQL Workbench**

To import the *world* database from *world.sql* to MySQL I am using MySQL Workbench.

Open MySQL Workbench => Server => Data Import => Import from self-Contained File =>

Click and find the location where it is on my computer => start import => open new SQL query tab and type “SHOW DATABASES;” (When I run it I can see what databases are in world.sql).

* **Command prompt (cmder)**

Type commands in cmder prompt:

1. cd “\Program Files”
2. cd MySQL
3. cd MySQL Server 8.0
4. cd bin



1. Then type commad as follows:

mysql -u (here is my root name) -p(here is my password to my root) < "C:\Users\karolina\Desktop\AD\_project\_2020\world.sql" (enter)

I give the whole path to the file here

1. I can go back to MySQL Workbench and I can run “SHOW DATABASES;” and world database is there.



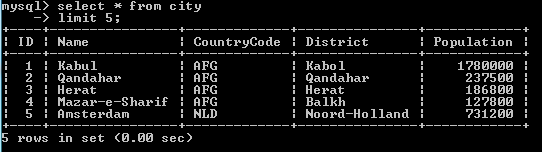
The ***world*** database is imported.

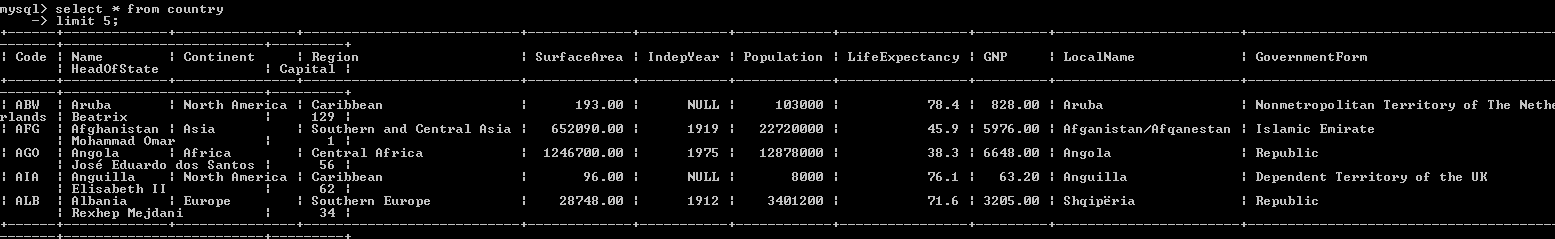
I can see what tables are in the ***world*** database by typing:

1. use world; (ctrl + enter)
2. show tables; (ctrl + enter)

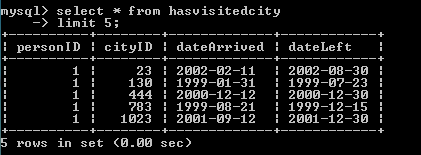
The same commands I can type in MySQL 8.0 Command Line Client.

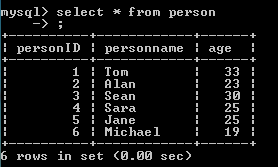












### 4.1.1 Alan’s travel details

Give the MySQL command that shows;

* the name of the cities,
* the arrival date in the cities,
* the name of the country the city is in.

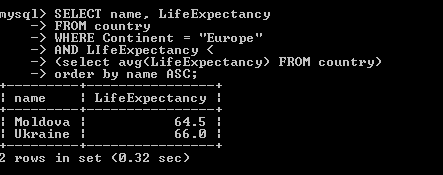
For all cities and countries visited by Alan in alphabetical order by city name.



### 4.1.2 European countries with lower than average life expectancy

Give the MySQL command to show the country name the country's life expectancy for all countries

in Europe whose life expectancy is lower than the average in alphabetical order by country name.

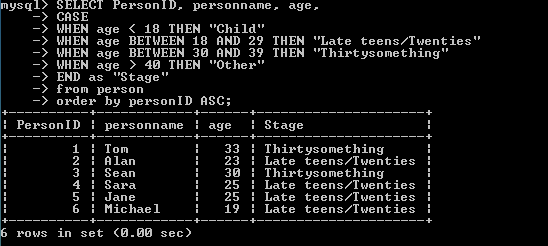


### 4.1.3 Peoples stage of life

Give the SQL command to show the following in ascending personID order:

* The person’s ID
* The person’s name
* The Person’s age
* A column called Stage that shows the following:

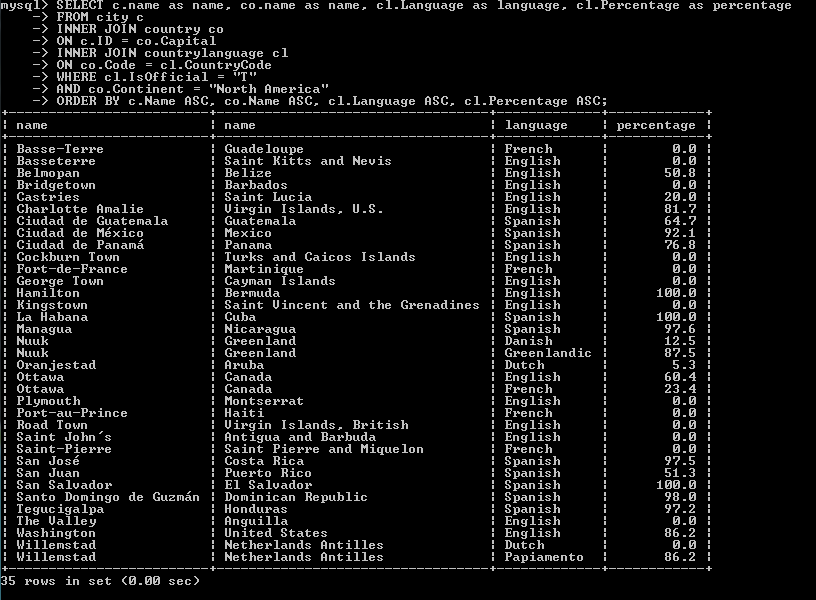
|  |  |
| --- | --- |
| **Person’s ID** | **Stage column output** |
| Under 18 | Child |
| Between 18 and 29 | Late teens/Twenties |
| Between 30 and 39 | Thirty something |
| 40 or older | Other |



### 4.1.4 Capitals and Official Languages of North America

Give the SQL command to show for each country in North America:

* The name of the capital city
* The name of the country
* The official language(s)
* The percentage of people who speak the official language(s) The results should be alphabetical city name order, and within that by country name order, and within that by language order, and within that by ascending percentage.



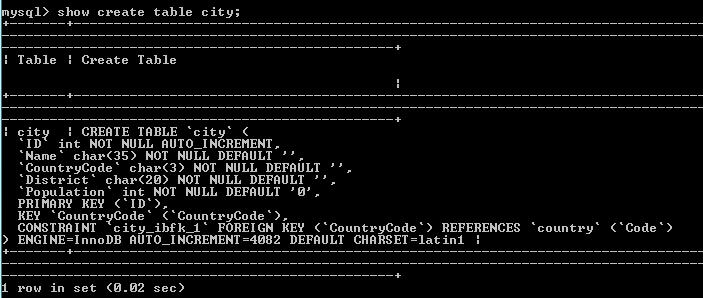
I had to work with 3 tables here to get all needed information.

1. the**city** table,
2. the **country** table
3. and the **countrylanguage** table.

c.name is in the city table

co.name and co.Continent are in the country table

cl.language, cl.IsOfficial and cl.Percentage fields are in the countryLanguage table.







The country table has a foreign key called “Capital” field which references the “ID” field in the city table.

The city table has a foreign key called “CountryCode” which references the “Code” field in the country table.

The countrylanguage table has a foreign key constraint where the “CountryCode” field references the “Code” field in the country table.

### 4.1.5 Length of Stays

Give the SQL command to show for each country person:

* The person’s name
* The name of the city the person visited
* A column called Stay Length that shows the following:

|  |  |
| --- | --- |
| Time the person stayed in city | Stay Length column output |
| Less than 20 days | Short |
| Between 20 and 99 days | Long |
| Over 99 days | Very long |

The results should be sorted alphabetically by personname, and within that by city name.