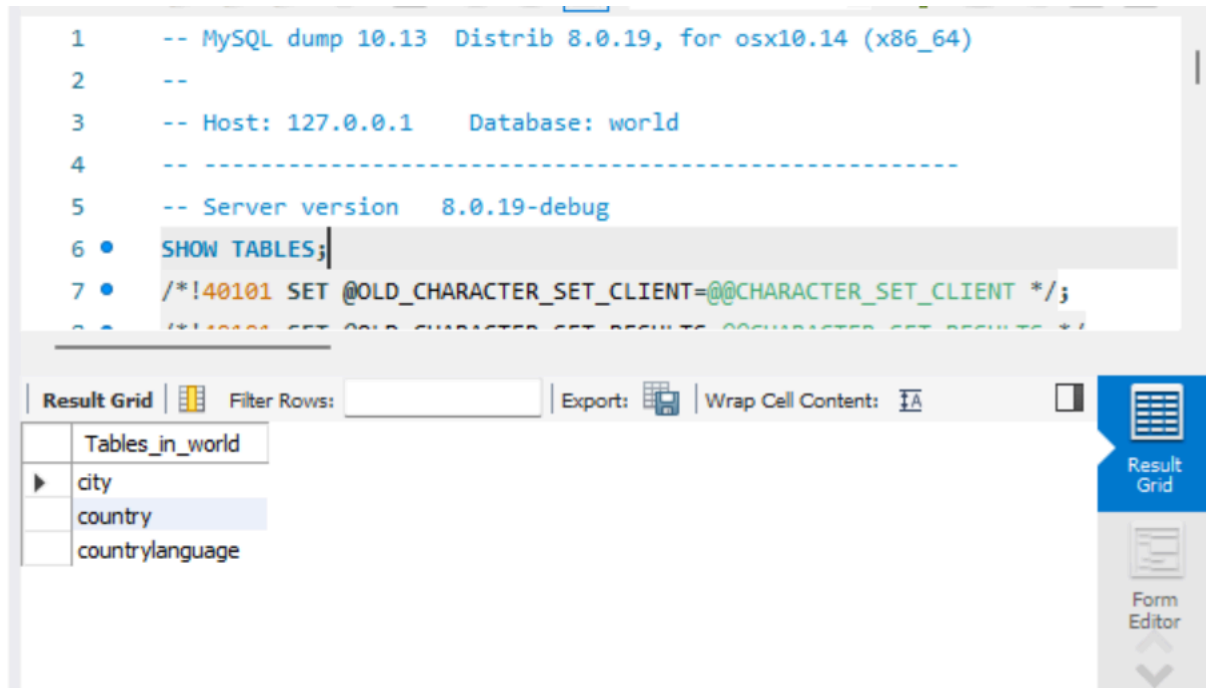
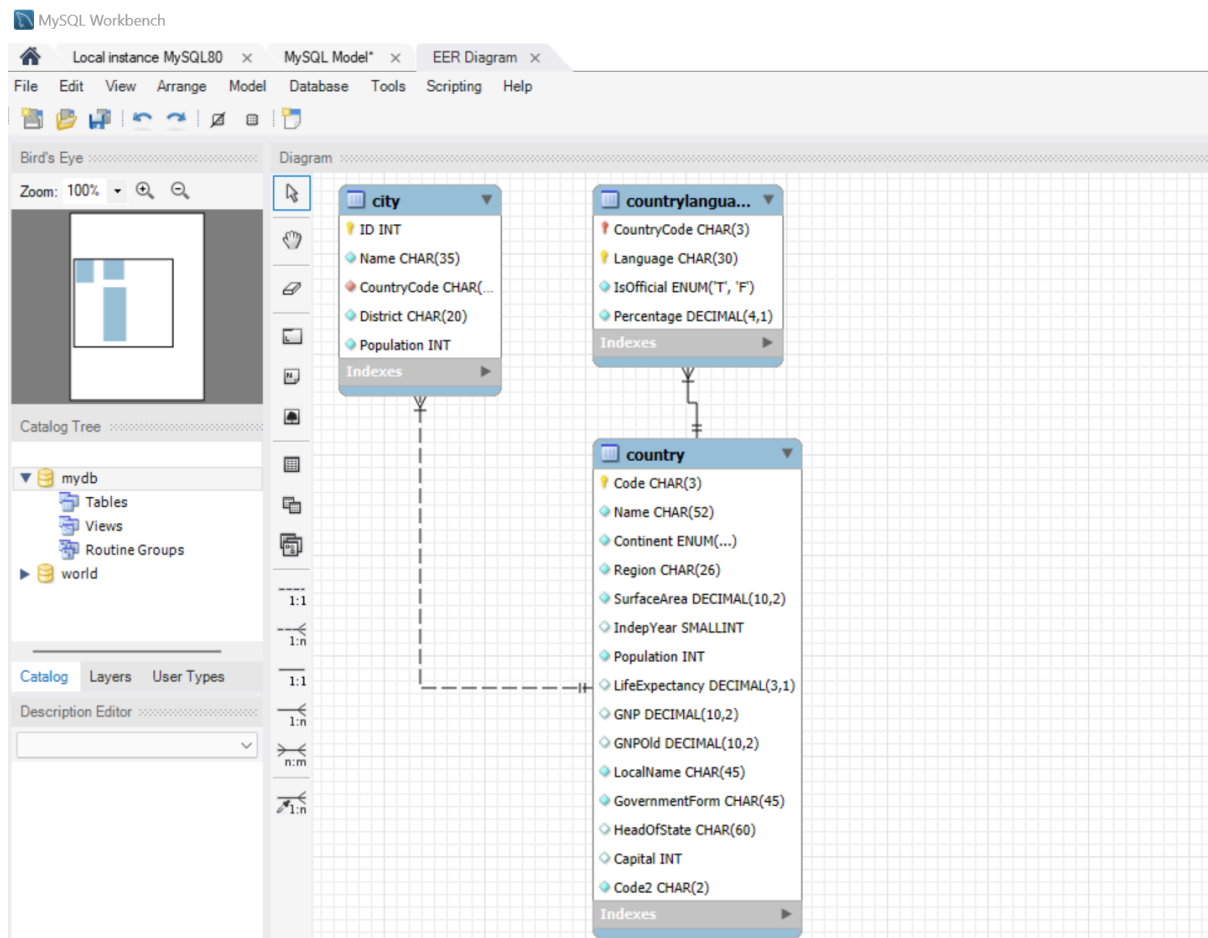


Screenshot of the command SHOW TABLES of the database world.



We reverse engineer the world database:



We get all country names and their official language:

```

4  -----
5  -- Server version  8.0.19-debug
6  • SELECT c.Name, cl.Language
7  FROM CountryLanguage cl
8  JOIN Country c ON cl.CountryCode = c.Code
9  WHERE cl.IsOfficial = 'T';
10 • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;

```

Result Grid		
Filter Rows:	Export:	Wrap Cell Content:
Name	Language	
Aruba	Dutch	
Afghanistan	Dari	
Afghanistan	Pashto	
Anguilla	English	
Albania	Albaniana	
Andorra	Catalan	

Result 2 x

We list all cities in Germany with thir population:

Query 1 world*		
Limit to 1000 rows	Result Grid	Form Editor
4 -----		
5 -- Server version 8.0.19-debug		
6 • SELECT City.Name, City.Population		
7 FROM City		
8 JOIN Country ON City.CountryCode = Country.Code		
9 WHERE Country.Name = 'Germany';		
Result Grid		
Filter Rows:	Export:	Wrap Cell Content:
Name	Population	
Berlin	3386667	
Hamburg	1704735	
Munich [München]	1194560	
Köln	962507	
Frankfurt am Main	643821	
Essen	599515	
Dortmund	590213	

Result 6 x

Read Only

We find the five smallest countries by surface area:

Query 1 world* x

Limit to 1000 rows

```
4  -----
5  -- Server version  8.0.19-debug
6  • SELECT Name, SurfaceArea
7  FROM Country
8  ORDER BY SurfaceArea ASC
9  LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch row

Name	SurfaceArea
Holy See (Vatican City State)	0.40
Monaco	1.50
Gibraltar	6.00
Tokelau	12.00
Cocos (Keeling) Islands	14.00

Country 7 x

Read Only

We search the countries with a population greater than 50 million:

Query 1 world* x

Limit to 1000 rows

```
4  -----
5  -- Server version  8.0.19-debug
6  • SELECT Name, Population
7  FROM Country
8  WHERE Population > 50000000
9  ORDER BY Population DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Name	Population
China	1277558000
India	1013662000
United States	278357000
Indonesia	212107000
Brazil	170115000
Pakistan	156483000
Russian Federation	146934000

Country 8 x

Read Only

And the average life expectancy per continent:

Query 1 world* x

Limit to 1000 rows

```

4  -----
5  -- Server version  8.0.19-debug
6  • SELECT Continent, AVG(LifeExpectancy) AS AvgLifeExpectancy
7  FROM Country
8  GROUP BY Continent;
9  • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Continent	AvgLifeExpectancy
North America	72.99189
Asia	67.44118
Africa	52.57193
Europe	75.14773
South America	70.94615
Oceania	69.71500
Antarctica	NULL

Result 9 x Read Only

The total population per region:

Query 1 world* x

Limit to 1000 rows

```

4  -----
5  -- Server version  8.0.19-debug
6  • SELECT Region, SUM(Population) AS TotalPopulation
7  FROM Country
8  GROUP BY Region;
9  • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Region	TotalPopulation
Caribbean	38140000
Southern and Central Asia	1490776000
Central Africa	95652000
Southern Europe	144674200
Middle East	188380700
South America	345780000
Polynesia	633050

Result 10 x Read Only

We look at the number of cities in each country, sorted by highest count:

Query 1 world* x

Limit to 1000 rows

```

4  -----
5  -- Server version  8.0.19-debug
6  • SELECT CountryCode, COUNT(*) AS NumberOfCities
7  FROM City
8  GROUP BY CountryCode
9  ORDER BY NumberOfCities DESC;

```

Result Grid

CountryCode	NumberOfCities
CHN	363
IND	341
USA	274
BRA	250
JPN	248
RUS	189
MEX	173

Result 11 x

Read Only

Search the top 10 largest cities and their country:

Query 1 world* x

Limit to 1000 rows

```

5  -- Server version  8.0.19-debug
6  • SELECT c.Name AS City, co.Name AS Country, c.Population
7  FROM City c
8  JOIN Country co ON c.CountryCode = co.Code
9  ORDER BY c.Population DESC
10 LIMIT 10;

```

Result Grid

City	Country	Population
Mumbai (Bombay)	India	10500000
Seoul	South Korea	9981619
São Paulo	Brazil	9968485
Shanghai	China	9696300
Jakarta	Indonesia	9604900
Karachi	Pakistan	9269265
Istanbul	Turkey	8787958

Result 12 x

Read Only

Which countries have French as an official language:

Query 1 world* x

Limit to 1000 rows

```

5  -- Server version 8.0.19-debug
6  • SELECT DISTINCT c.Name
7  FROM Country c
8  JOIN CountryLanguage cl ON c.Code = cl.CountryCode
9  WHERE cl.Language = 'French' AND cl.IsOfficial = 'T';
10 • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;

```

Result Grid

Name
Burundi
Belgium
Canada
Switzerland
France
Guadeloupe
Haiti

Result Grid

Form Editor

Countries where English is spoken but not official:

Query 1 world* x

Limit to 1000 rows

```

5  -- Server version 8.0.19-debug
6  • SELECT DISTINCT c.Name
7  FROM Country c
8  JOIN CountryLanguage cl ON c.Code = cl.CountryCode
9  WHERE cl.Language = 'English' AND cl.IsOfficial = 'F';
10 • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;

```

Result Grid

Name
Aruba
Netherlands Antilles
Bahrain
Brunei
Cook Islands
Denmark
Iceland

Result Grid

Form Editor

The code for obtaining the countries who have tripled their population in the last 50 years would be this one, but we have not enough data:

```

SELECT Name, Population
FROM Country
WHERE Population >= 3 * Population_50_Years_Ago;

```

To obtain a list of the richest and poorest countries in each continent based on GNP:

The screenshot shows a database query editor window titled "Query 1" with a tab labeled "world*". The query text is as follows:

```
3  -- Host: 127.0.0.1    Database: world
4  -----
5  -- Server version    8.0.19-debug
6  • SELECT Continent, Name, GNP
7  FROM Country
```

Below the query editor, there is a "Result Grid" section. It includes a "Filter Rows:" input field, an "Export:" button, and a "Wrap" checkbox. The results are displayed in a table with the following data:

	Continent	Name	GNP
▶	Antarctica	Antarctica	0.00
	Antarctica	French Southern territories	0.00
	Oceania	Australia	351182.00
	South America	Brazil	776739.00
	Antarctica	Bouvet Island	0.00

At the bottom of the window, it says "Result 15" and "Read Only".

Identify countries with a life expectancy below the global average:

Query 1 world* x SQLAdditions:.....

Limit to 1000 rows

```

5 -- Server version 8.0.19-debug
6 • SELECT Name, LifeExpectancy
7 FROM Country
8 WHERE LifeExpectancy < (SELECT AVG(LifeExpectancy) FROM
9 • /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_
10 • /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET
11 • /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONN
12 • /*!50503 SET NAMES utf8mb4 */;
13 • /*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;

```

Automatic content disabled. Use the manually get help current caret position toggle automatic

Result Grid Filter Rows: Export: Wrap

Name	LifeExpectancy
Afghanistan	45.9
Angola	38.3
Armenia	66.4
Azerbaijan	62.9
Burundi	46.2
Benin	50.2
Burkina Faso	46.7
Bangladesh	60.2
Bolivia	63.7
Brazil	62.9

Country 16 x Read Only Context Help Snippets

Retrieve the capital cities of countries with a population above 100 million:

Query 1 world × SQLAdditio

Limit to 1000 rows

```

5      -- Server version      8.0.19-debug
6      SELECT Country.Name AS Country, City.Name AS Capital
7      FROM Country
8      JOIN City ON Country.Capital = City.ID
9      WHERE Country.Population > 100000000;
10     /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_
11     /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET
12     /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONN
13     /*!50503 SET NAMES utf8mb4 */;

```

Result Grid | Filter Rows: | Export: | Wrap

	Country	Capital
▶	Bangladesh	Dhaka
	Brazil	Brasilia
	China	Peking
	Indonesia	Jakarta
	India	New Delhi
	Japan	Tokyo
	Nigeria	Abuja
	Pakistan	Islamabad
	Russian Federation	Moscow
	United States	Washington












Result 17 × Read Only Context Hel

Result Grid
Form Editor
Field Types





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Find the continent with the highest number of countries:




Query 1 world* x


Limit to 1000 rows 

```
2  --
3  -- Host: 127.0.0.1    Database: world
4  -----
5  -- Server version    8.0.19-debug
6  • SELECT Continent, COUNT(*) AS NumberOfCountries
7    FROM Country
8   GROUP BY Continent
9   ORDER BY NumberOfCountries DESC
10  LIMIT 1;
```

Result Grid   Filter Rows: Export:  Wrap 

	Continent	NumberOfCountries
▶	Africa	58

Form Editor
Field Types


Result 18 x  Read Only