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| World Database Exercise Book |
| module 7 – databases |

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## Module 7 – Databases

## Exercises Introduction

This Exercise Book makes use of the pre-loaded **World** database which comes with your **MySQL** installation.

These exercises should provide a good test for your knowledge of Structured Query Language (SQL). Please work through this book at your own pace: it is more important that you use this book to enhance your SQL abilities than to speed through it as fast as you can without retaining anything.

You may be tested on some of this material at the end of the week, so please bear this in mind when completing each Exercise.

You do not need to store the answers to each Exercise in this book, but you are free to use it as an extension of your notes, if you wish.

World database Exercises

Each Exercise should return at least one record, according to its individual specification. They are not listed in order of difficulty.

1. Using count, get the number of cities in the USA. - 274
2. Find out what the population and average life expectancy for people in Argentina (ARG) is.

Population is 37032000, Life expectancy is 75.1

1. Using IS NOT NULL, ORDER BY, LIMIT, what country has the highest life expectancy?

Andorra

1. Using LEFT JOIN, ON, what is the capital of Spain (ESP)?

Madrid

1. Using LEFT JOIN, ON, list all the languages spoken in the 'Southeast Asia' region.

A close up of a logo

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1. Select 25 cities around the world that start with the letter 'F' in a single SQL query.

Fagatogo, Florencia Varela, Formosa, Francistown, Fortaleza, Feira de Santana, Franca, Florianopolis, Foz da Iguacu, Ferraz de Vasconcelos, Francisco Morato, Franco da Rocha, Fuenlabrada, Faridabad, Firozabad, Farrukhabad-cum-Fategharh, Faizabad, Fatehpur, Firenze, Foggia, Ferrara, Forli, Fukuoka, Funabashi, Fukuyama.

1. Using COUNT, get the number of cities in China.

363

1. Using IS NOT NULL, ORDER BY, & LIMIT, what country has the lowest population?

Zambia

1. Using aggregation, return the number of countries in the database.

239

1. What are the top ten largest countries?

Russian Federation, Antarctica, Canada, China, United States, Brazil, Australia, India, Argentina, Kazakstan

1. List the top five largest cities in Japan

Tsuyama, Kashiwazaki, Narita, Mobara, Kameoka

1. A screenshot of text

   Description automatically generatedList the names and country codes of every country which has Elizabeth II as its Head of State.
2. List the top ten countries which have the smallest population-to-area ratio.

Greenland, Svalbard and Jan Mayen, Falkland Islands, Pitcairn, Western Sahara, Mongolia, French Guiana, Namibia, Australia, Suriname

1. List every unique world language, according to the World database.

select distinct Language from countrylanguage;

1. What are the top 10 richest countries by GDP?

US, Japan, Germany, France, UK, Italy, China, Brazil, Canada, Spain

1. What are the top 10 largest countries by surface area?

Russia, Antarctica, Canada, China, US, Brazil, Australia, India, Argentina, Kazakstan

1. List every country where over 50% of its population can speak French.

France

1. Which country has the worst life expectancy?

French Southern Territories

1. What is the most common government form?

Republic

1. How many countries have gained independence since records began?

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