Lab 1 Part 1
SQL Zoo

Overview

There is a **formative quiz** during the lab. The quiz is only open until the end of the week. This formative quiz is designed to improve your learning experience and your mark for this quiz won't be considered in your final mark.

Learning Aims

In this lab you will learn to:

- Execute some SQL statements to retrieve details about the schema and the data it contains.
- Query the database to retrieve a specific subset of the data.

Context

The database you are working on for this lab is from the SQLZoo tutorial. In each step, you will be directed to do an exercise and answer quiz questions.

Tasks

Task 1: SELECT basic

- Access the SELECT basic section of the SQLZoo tutorial.
- Do exercise 1 and then **answer question 1** of the quiz.
- You can also do exercises 2 and 3 if you like.

Task 2: SELECT from 'world'

- In this tutorial, you will use SELECT commands on a table called '**world'**.
- Read the notes about this table.
- Access SELECT from world section of the SQLZoo tutorial.
- Do exercises 1, 2, 5, and 7, and then **answer question 2** of the quiz.

Task 3: SELECT from Nobel

- In this task, you will use SELECT commands on a table called '**nobel'** including data related to Nobel prize winners.

      nobel(yr, subject, winner)

- Access SELECT from Nobel section of SQLZoo tutorial.
- Do exercises 1, 3, 5, and 8 and then **answer questions 3 and 4** of the quiz.

Task 4: SUM and COUNT

- Access SUM and COUNT section of SQLZoo tutorial.
- To answer questions 5 and 6, you need to perform a more advanced SQL query that utilises something called an `Aggregate function'.
- These are a special set of functions that perform operations on columns in a table, returning the result of the operation. For example, the COUNT function can be used to return the number of records matching a query, while the AVERAGE function will retrieve the average value in columns containing numerical data.

- Do exercises 1, 3, 4, 5, and 6 and then **answer questions 5 and 6** of the quiz.

Task 5: JOIN, 20 mins

- Access the JOIN section of the SQLZoo tutorial.
- In this task, you will use `JOIN` which allows you to use data from two or more tables. The tables contain all matches and goals from UEFA EURO 2012 Football Championship in Poland and Ukraine.

- Have a look at the Entity-Relationship Diagram at the beginning of the page.
- Do exercises 1, 3, 5, 7, and 8 then **answer questions 7 and 8** of the quiz.

Task 6: SELECT in SELECT

- To answer questions 9 and 10, you need to perform a more advanced SQL query that utilises something called a `SELECT in SELECT'.
- Access SELECT in SELECT section of SQLZoo tutorial.
- Do exercises 1, 3, and 4 then **answer questions 9 and 10** of the quiz.

Task 7: Review and submit your quiz, 20 mins

Review your answers to the quiz, you can also have another attempt, the Quiz will be closed at the end of your lab. This is a formative quiz designed to improve your learning experience and is not considered in your final mark.

END