# 06. MySQL - Database Query

# Selecting Unique Towns and their Continents

*Quality Assurance (QA) and databases play crucial roles in ensuring the reliability, functionality, and performance of software systems. QA professionals are responsible for ensuring that databases are designed, implemented, and maintained effectively to meet the required standards and deliver a high-quality user experience.*

## Problem Description:

* You have been provided with a **script file** named **create\_and\_populate.sql** that contains a **SQL script**. Your task is to **open this script file in MySQL Workbench** and **execute it to create a database** and populate it with sample data.
* Here are the steps to complete the task:
  + **Download** the script file **create\_and\_populate.sql** provided to you
  + Open **MySQL Workbench** on your computer
  + In the **toolbar at the top**, click on the **"File"** menu
  + Select **"Open SQL Script"** from the **dropdown menu**
  + **Navigate to the location** where you downloaded the **create\_and\_populate.sql** file
  + **Select the file** and click the **"Open"** button
* **MySQL Workbench** will open the script file in a **new SQL Editor tab:**
  + To **execute the script**, click the **"Execute"** button in the toolbar or press the keyboard shortcut **"Ctrl+Shift+Enter".**
* **MySQL Workbench** will now **run the SQL statements** from the script, **creating the database and inserting the sample data.**
* Your task is to **work with this existing database** and **perform basic SQL queries** using **MySQL Workbench**.
* The **addresses table** has the following schema:
  + **street\_number** (VARCHAR(20))
  + **street\_name** (VARCHAR(80))
  + **area** (VARCHAR(80))
  + **town** (VARCHAR(80))
  + **district** (VARCHAR(80))
  + **country** (VARCHAR(50))
  + **continent** (VARCHAR(50))
  + **isCapital** (BOOLEAN)
* The table is **already populated** with some sample data. Here is the code used to create the database and insert the initial records

## Simple SQL Query Task:

* You are required to write a SQL query based on the provided database structure and records to select **all unique towns with their continents**. Please ensure that you understand the table structure and the expected output before writing the query. **Pay attention to the column names and their respective data types** when referring to the table structure.

## How to Send Solutions in Judge?

* After writing the **correct SQL query**, **copy the entire query row** and **Submit it in Judge**.

*QA professionals focus on maintaining data integrity within databases. They verify that data is stored accurately, updated correctly, and retrieved reliably. This includes validating data types, constraints, and relationships to ensure consistency and correctness.*