

Homework: Databases

Problems for homework for the ["Software Technologies" course @ Software University](#).

Submit this document as your homework.

1. Address Database:

1. **CREATE DATABASE** named ``address_database`` and **USE** it:

The screenshot shows the SQL Server Enterprise Manager interface. In the left pane, the 'address_database' is listed under the 'first_database' server. The right pane shows the SQL script editor with the following commands:

```
1 CREATE database if not exists `address_database` ;
2 use `address_database`
```

The Output pane at the bottom shows the execution results:

#	Time	Action	Message
1	17:18:28	SELECT * FROM first_database.users LIMIT 0, 1000	9 row(s) returned
2	17:18:48	SELECT * FROM first_database.users LIMIT 0, 1000	9 row(s) returned
3	17:58:05	CREATE database if not exists `address_database`	1 row(s) affected
4	17:58:05	use `address_database`	0 row(s) affected

2. **CREATE TABLE** named ``addresses`` with the following columns:

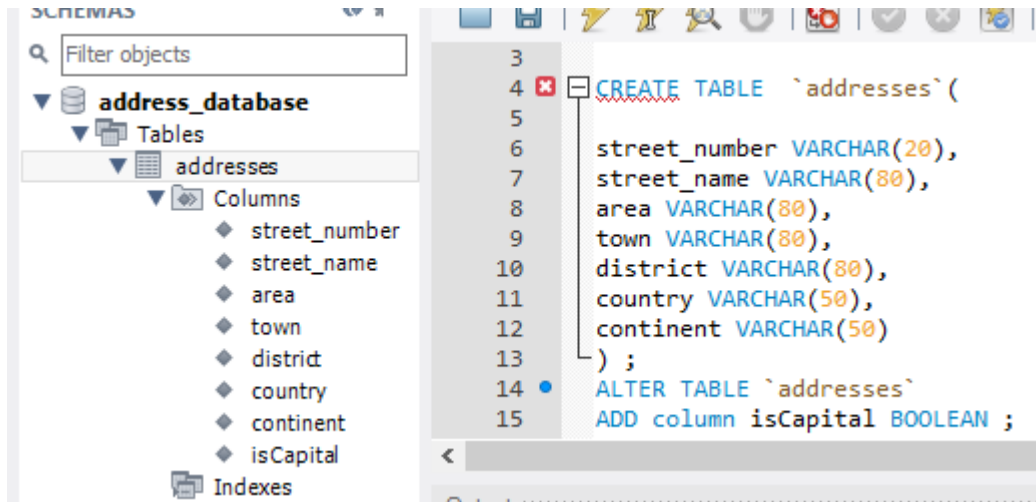
- **street_number**
- **street_name**
- **area**
- **town**
- **district**
- **country**
- **continent**

The screenshot shows the SQL Server Enterprise Manager interface. In the left pane, the 'addresses' table is listed under the 'address_database' server. The right pane shows the SQL script editor with the following commands:

```
1 CREATE database if not exists `address_datab
2 use `address_database`
3
4 CREATE TABLE `addresses` (
5
6     street_number VARCHAR(20),
7     street_name VARCHAR(80),
8     area VARCHAR(80),
9     town VARCHAR(80),
10    district VARCHAR(80),
11    country VARCHAR(50),
12    continent VARCHAR(50)
13 ) ;
```

The Output pane at the bottom is empty.

We forgot to add Boolean column, named `isCapital`:

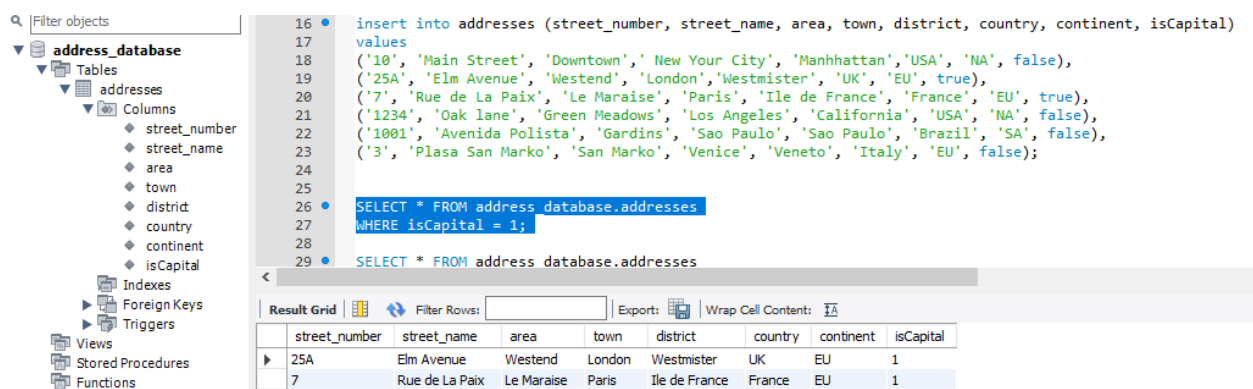


3. INSERT records INTO the `address` table and execute the SQL query:



4. Your task is to execute the proper queries in order to get the following results:

- SELECT all addresses from the `address` table that are located in a capital city.



- SELECT all addresses from the `address` table that are located in South America.

address_database

- Tables
 - addresses
 - Columns
 - street_number
 - street_name
 - area
 - town
 - district
 - country
 - continent
 - isCapital
 - Indexes
 - Foreign Keys
 - Triggers
 - Views
 - Stored Procedures
 - Functions
 - sys

```

18 ('10', 'Main Street', 'Downtown', 'New York City', 'Mannhattan', 'USA', 'NA', false),
19 ('25A', 'Elm Avenue', 'Westend', 'London', 'Westminster', 'UK', 'EU', true),
20 ('7', 'Rue de La Paix', 'Le Marais', 'Paris', 'Ile de France', 'France', 'EU', true),
21 ('1234', 'Oak lane', 'Green Meadows', 'Los Angeles', 'California', 'USA', 'NA', false),
22 ('1001', 'Avenida Polista', 'Gardins', 'Sao Paulo', 'Sao Paulo', 'Brazil', 'SA', false),
23 ('3', 'Plasa San Marko', 'San Marko', 'Venice', 'Veneto', 'Italy', 'EU', false);
24
25
26 • SELECT * FROM address_database.addresses
27 WHERE isCapital = 1;
28
29 • SELECT * FROM address_database.addresses
30 WHERE continent = 'SA';

```

Result Grid

	street_number	street_name	area	town	district	country	continent	isCapital
▶	1001	Avenida Polista	Gardins	Sao Paulo	Sao Paulo	Brazil	SA	0

- SELECT all addresses from the `address` table that are located in Europe, but only in NON Capital cities.

Limit to 1000 rows

```

21 ('1234', 'Oak lane', 'Green Meadows', 'Los Angeles', 'California', 'USA', 'NA', false),
22 ('1001', 'Avenida Polista', 'Gardins', 'Sao Paulo', 'Sao Paulo', 'Brazil', 'SA', false),
23 ('3', 'Plasa San Marko', 'San Marko', 'Venice', 'Veneto', 'Italy', 'EU', false);
24
25
26 • SELECT * FROM address_database.addresses
27 WHERE isCapital = 1;
28
29 • SELECT * FROM address_database.addresses
30 WHERE continent = 'SA';
31
32 • SELECT * FROM address_database.addresses
33 WHERE continent = 'EU' AND isCapital = 0;

```

Result Grid

	street_number	street_name	area	town	district	country	continent	isCapital
▶	3	Plasa San Marko	San Marko	Venice	Veneto	Italy	EU	0

! Create queries for each condition and place a screenshot after each query !