



















DBMS






Assessment

DBMS

1. create city table

```
CREATE TABLE city (
  id INT PRIMARY KEY,
  city_name VARCHAR(100),
  lat DECIMAL(9,6),
  longn DECIMAL(9,6),
  country_id INT
);
INSERT INTO city (id, city_name, lat, longn, country_id) VALUES
(1, 'Berlin', 52.520008, 13.404954, 1),
(2, 'Belgrade', 44.787197, 20.457273, 2),
(3, 'Zagreb', 45.815399, 15.966568, 3),
(4, 'New York', 40.730610, -73.935242, 4),
(5, 'Los Angeles', 34.052235, -118.243683, 4),
(6, 'Warsaw', 52.237049, 21.017532, 5);
```

					id	city_name	lat	longn	country_id
<input type="checkbox"/>					1	Berlin	52.520008	13.404954	1
<input type="checkbox"/>					2	Belgrade	44.787197	20.457273	2
<input type="checkbox"/>					3	Zagreb	45.815399	15.966568	3
<input type="checkbox"/>					4	New York	40.730610	-73.935242	4
<input type="checkbox"/>					5	Los Angeles	34.052235	-118.243683	4
<input type="checkbox"/>					6	Warsaw	52.237049	21.017532	5


☐ Check all
 With selected:
  Edit
  Copy
  Delete
  Export

2. create coustmer table

```
CREATE TABLE Customer (
  id INT PRIMARY KEY,
  customer_name VARCHAR(100),
  city_id INT,
  customer_address VARCHAR(255),
  next_call_date DATE,
  ts_inserted DATETIME
);
INSERT INTO Customer (id, customer_name, city_id, customer_address,
next_call_date, ts_inserted) VALUES
(1, 'Jewelry Store', 4, 'Long Street 120', '2020-01-21', '2020-01-09
14:01:20.000'),
(2, 'Bakery', 1, 'Kurfürstendamm 25', '2020-02-21', '2020-01-09
17:52:15.000'),
(3, 'Café', 1, 'Tauentzienstraße 44', '2020-01-21', '2020-01-10 08:02:49.000'),
(4, 'Restaurant', 3, 'Ulica lipa 15', '2020-01-21', '2020-01-10 09:20:21.000');
```

☐ Show all

Number of rows: 25

Filter rows:

Sort by key: None

Extra options

	id	customer_name	city_id	customer_address	next_call_date	ts_inserted
<input type="checkbox"/> Edit Copy Delete	1	Jewelry Store	4	Long Street 120	2020-01-21	2020-01-09 14:01:20
<input type="checkbox"/> Edit Copy Delete	2	Bakery	1	Kurfürstendamm 25	2020-02-21	2020-01-09 17:52:15
<input type="checkbox"/> Edit Copy Delete	3	Café	1	Tauentzienstraße 44	2020-01-21	2020-01-10 08:02:49
<input type="checkbox"/> Edit Copy Delete	4	Restaurant	3	Ulica lipa 15	2020-01-21	2020-01-10 09:20:21

☐ Check all

With selected:

Edit

Copy

Delete

Export

☐ Show all

Number of rows: 25

Filter rows:

Sort by key: None

3. create Country table

```
CREATE TABLE Country (
  id INT PRIMARY KEY,
  country_name VARCHAR(100),
  country_name_eng VARCHAR(100),
  country_code CHAR(5)
);
INSERT INTO Country (id, country_name, country_name_eng,
country_code) VALUES
(1, 'Deutschland', 'Germany', 'DEU'),
(2, 'Srbija', 'Serbia', 'SRB'),
(3, 'Hrvatska', 'Croatia', 'HRV'),
(4, 'United States of America', 'United States of America', 'USA'),
(5, 'Polska', 'Poland', 'POL'),
(6, 'España', 'Spain', 'ESP'),
(7, 'Rossiya', 'Russia', 'RUS');
```

<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	Sort by key: None
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Extra options

	id	country_name	country_name_eng	country_code
<input type="checkbox"/> Edit Copy Delete	1	Deutschland	Germany	DEU
<input type="checkbox"/> Edit Copy Delete	2	Srbija	Serbia	SRB
<input type="checkbox"/> Edit Copy Delete	3	Hrvatska	Croatia	HRV
<input type="checkbox"/> Edit Copy Delete	4	United States of America	United States of America	USA
<input type="checkbox"/> Edit Copy Delete	5	Polska	Poland	POL
<input type="checkbox"/> Edit Copy Delete	6	España	Spain	ESP
<input type="checkbox"/> Edit Copy Delete	7	Rossiya	Russia	RUS

☐ Check all
 With selected: Edit Copy Delete Export

<input type="checkbox"/> Show all	Number of rows: 25	Filter rows: Search this table	Sort by key: None
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4.add FOREIGN KEY in city table to country_id

```
ALTER TABLE city ADD INDEX(country_id)
```

5. add FOREIGN KEY in Customer table to city id

```
ALTER TABLE customer ADD INDEX(city_id)
```

Task 1:

```
SELECT
    country.country_name_eng AS country_name,
    city.city_name, customer.customer_name
FROM country
LEFT JOIN
    city ON country.id = city.country_id
LEFT JOIN
    customer ON city.id = customer.city_id;
```

country_name	city_name	customer_name
United States of America	New York	Jewelry Store
Germany	Berlin	Bakery
Germany	Berlin	Café
Croatia	Zagreb	Restaurant
Serbia	Belgrade	NULL
United States of America	Los Angeles	NULL
Poland	Warsaw	NULL
Spain	NULL	NULL
Russia	NULL	NULL

Task -2

```

SELECT
country.country_name_eng AS country_name,
city.city_name,
customer.customer_name
FROM country
INNER JOIN
city ON country.id = city.country_id
LEFT JOIN
customer ON city.id = customer.city_id;

```

country_name	city_name	customer_name
United States of America	New York	Jewelry Store
Germany	Berlin	Bakery
Germany	Berlin	Café
Croatia	Zagreb	Restaurant
Serbia	Belgrade	NULL
United States of America	Los Angeles	NULL
Poland	Warsaw	NULL