

# Assessment

Write SQL query to solve the problem given below

Consider three table named as city, customer and country

Create Table City:

```
1 CREATE TABLE city (  
2     id INT PRIMARY KEY,  
3     city_name VARCHAR(100),  
4     lat FLOAT,  
5     longe FLOAT,  
6     country_id INT  
7 );  
  
1 INSERT INTO city VALUES (1, 'Berlin', 52.520008, 13.404954, 1);  
2 INSERT INTO city VALUES (2, 'Belgrade', 44.787197, 20.457273, 2);  
3 INSERT INTO city VALUES (3, 'Zagreb', 45.815399, 15.966568, 3);  
4 INSERT INTO city VALUES (4, 'New York', 40.730610, -73.935242, 4);  
5 INSERT INTO city VALUES (5, 'Los Angeles', 34.052235, -118.243683, 4);  
6 INSERT INTO city VALUES (6, 'Warsaw', 52.237049, 21.017532, 5);
```

id	city_name	lat	longe	country_id
1	Berlin	52.52	13.405	1
2	Belgrade	44.7872	20.4573	2
3	Zagreb	45.8154	15.9666	3
4	New York	40.7306	-73.9352	4
5	Los Angeles	34.0522	-118.244	4
6	Warsaw	52.237	21.0175	5

Create Table Customer

```
1 CREATE TABLE customer (  
2     id INT PRIMARY KEY,  
3     customer_name VARCHAR(100),  
4     city_id INT,  
5     customer_address VARCHAR(200),  
6     next_call_date DATE,  
7     ts_inserted TIMESTAMP  
8 );  
  
1 INSERT INTO customer VALUES (1, 'Jewelry Store', 1, 'Long Street 120', '2020-01-21', '2020-01-19  
14:01:20.000');  
2 INSERT INTO customer VALUES (2, 'Bakery', 1, 'Kurfürstendamm 25', '2020-02-21', '2020-01-09 17:52:15.000');  
3 INSERT INTO customer VALUES (3, 'Café', 1, 'Tauentzienstraße 44', '2020-01-21', '2020-01-10 08:29:49.000');  
4 INSERT INTO customer VALUES (4, 'Restaurant', 3, 'Ulica Ipa 15', '2020-01-21', '2020-01-20 09:21:00.000');
```

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id	customer_name	city_id	customer_address	next_call_date	ts_inserted
1	Jewelry Store	1	Long Street 120	2020-01-21	2020-01-19 14:01:20
2	Bakery	1	Kurfürstendamm 25	2020-02-21	2020-01-09 17:52:15
3	Café	1	Tauentzienstraße 44	2020-01-21	2020-01-10 08:29:49
4	Restaurant	3	Ulica Ipa 15	2020-01-21	2020-01-20 09:21:00

## Create Table Country

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

id	country_name	country_name_eng	country_code
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

## Task 1

```
1 SELECT  
2     country.country_name_eng AS country_name,  
3     city.city_name,  
4     customer.customer_name  
5 FROM  
6     country  
7 LEFT JOIN  
8     city ON country.id = city.country_id  
9 LEFT JOIN  
10    customer ON city.id = customer.city_id;
```

# Assessment

## Output

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

## Task 2

```
1 SELECT
2     country.country_name_eng AS country_name,
3     city.city_name,
4     customer.customer_name
5 FROM
6     country
7 INNER JOIN
8     city ON country.id = city.country_id
9 LEFT JOIN
10    customer ON city.id = customer.city_id;
```

## Output

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