|  |  |
| --- | --- |
| **Task-1** |  |
|  | [create](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) city ( id int PRIMARY KEY, city\_name varchar(20), lat float, lon float, country\_id int );  [CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) customer ( id int PRIMARY KEY, customer\_name varchar(20), city\_id int, customer\_address text, next\_call\_date date, ts\_inserted timestamp, FOREIGN KEY(city\_id) REFERENCES city(id) );  [create](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/create-table.html) country ( id int PRIMARY KEY, country\_name varchar(20), country\_name\_eng varchar(30), country\_code varchar(10) ); |
|  | [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(1,'Berlin',52.520008,13.404954,1);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(2,'Belgrade',44.787197,20.457273,2);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(3,'Zagreb',45.815399,15.966568,3);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(4,'New York',40.730610,-73.935242,4);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(5,'Los Angeles',34.052235,-118.243683,4);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into city [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values)(6,'Warsaw',52.237049,21.017532,5);  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into customer [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) (1,'Jewelery Store',4,'Long Street 120','2020-01-21','2020-01-09 14:01:20');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into customer [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) (2,'Bakery',1,'Kufurstendamm 25','2020-02-21','2020-01-09 17:52:15');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into customer [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) (3,'Cafe',1,'Tauentzeinstrabe 44','2020-01-21','2020-01-10 08:02:49');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into customer [VALUES](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) (4,'Restaurant',3,'Ulica lipa 15','2020-01-21','2020-01-10 09:20:21');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 1, 'Deutschland','Germany','DEU');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 2, 'Srbija','Serbia','SRB');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 3, 'Hrvatska','Croatia','HRV');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 4, 'United States Of America','United States Of America','USA');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 5, 'Polska','Poland','POL');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 6, 'Esparia','Spain','ESP');  [insert](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/insert.html) into country [values](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/miscellaneous-functions.html%23function_values) ( 7, 'Rossiya','Russia','RUS');  [ALTER](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) [table](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/alter-table.html) city ADD FOREIGN KEY(country\_id) REFERENCES country(id); |
| **Q-1** | **List all Countries and customers related to these countries.** |
|  | [select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) country.country\_name\_eng,customer.customer\_name from country [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) OUTER JOIN customer on country.id=customer.id; |
|  |  |
| **Q-2** | **For each country displaying its name in English, the name of the city customer is located in as well as the name of the customer.** |
|  | [SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) country.country\_name\_eng,city.city\_name,customer.customer\_name from country [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) JOIN city on country.id=city.country\_id [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) JOIN customer ON city.country\_id=customer.city\_id; |
|  |  |
| **Q-3** | **Return even countries without related cities and customers** |
|  | [select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) id,country\_name\_eng from country where id%2 =0; |
|  |  |
| **Task-2** |  |
| **Q-1** | **Return the list of all countries that have pairs(exclude countries which are not referenced by any city). For such pairs return all customers.** |
|  | [select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) country.country\_name\_eng, customer.customer\_name from country INNER JOIN city ON country.id=city.country\_id [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) JOIN customer on country.id=customer.id; |
|  |  |
| **Q-2** | **Return even pairs of not having a single customer** |
|  | [select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) city.city\_name from city [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) JOIN customer on city.id=customer.city\_id WHERE customer.city\_id [is](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/comparison-operators.html%23operator_is) NULL [and](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/logical-operators.html%23operator_and) city.id%2=0; |
|  |  |