

MySQL

Instructions:

Do not use any aliases for table names while writing any query except for cases where aliases need to be used in select to get output with desired column names.

Do not use any subqueries while writing any of the queries. Use Joins instead.

travelers

id	traveller_name
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cities

id	city_name
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city_travel_history

id	traveller_id	city_id	from_date	to_date
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Write the following queries:

- 1) Names of cities which have not been visited by any traveler at all.

city_name

- 2) Against every traveler, number of distinct cities travelled during the month of Oct 2022

traveller_name	num_cities_travelled
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- 3) Query to find top five cities by number of distinct travellers based on overall travel history ordered by number of distinct travellers in descending order

city_name

- 4) Names of cities which have not been visited by any traveller during the month of Oct 2022

city_name

Laravel

Instructions:

Please make sure all validations are in place.

Create laravel apis for the following using the database schema provided in SQL section :

- 1) Returns the travel history of a user
user_id is a mandatory input
Optional parameters: from_date and to_date
Output: json encode of array of objects containing below details ordered by travel date
city_name, from_date, to_date
- 2) Returns the count of distinct travellers against every city for a given period
from_date and to_date are mandatory inputs
Output: json encode of array of objects containing below details ordered by traveller_count
city_name, traveller_count

PHP

Instructions:

Please avoid using inbuilt php functions unless it's necessary
Please write an error and notice free code.

1)

id	reg_num	engine_num	chassis_num	vin_num
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Considering a vehicle can be uniquely identified by one of the following three combinations:

- a) Registration number (reg_num).
- b) Engine number (engine_num) and Chassis Number (chassis_num) combination
- c) Vin number (vin_num)

Write a function in core PHP which will take these four identifiers of a vehicle as input and return the id of the vehicle it matches based on any one of the above three criterias (return the id on first matching criteria, no need to check further) or return false otherwise.

2) \$input_arr = ['apple', 'banana', 'custard', 'denmark', 'banana', 'apple', 'banana', 'denmark', 'apple'];

- a. Find the unique elements in the above array and print it one by one.
- b. Create an array with the unique elements as key and its corresponding value should be the number of times repeated in the above array

Expected Output Array : ['apple' => 3, 'banana' => 2, 'custard' => 1 , 'denmark' => 1];