1. Big Countries

https://leetcode.com/problems/big-countries/?envType=study-plan&id=sql-i

Input:

World table:

name	continent	area	population	gdp
Afghanistan	Asia	652230	25500100	20343000000
Albania	Europe	28748	2831741	12960000000
Algeria	Africa	2381741	37100000	188681000000
Andorra	Europe	468	78115	3712000000
Angola	Africa	1246700	20609294	100990000000

Output:

name	population	area
Afghanistan	25500100	652230
Algeria	37100000	2381741

Theme :
Write an SQL query to report the name, population, and area of the big countries.
Return the result table in any order.

- it has an area of at least three million (i.e., 3000000 km2), or
- it has a population of at least twenty-five million (i.e., 25000000).

Solution :

```
select name , population , area from World where population >=25000000
or  area >= 3000000;
```

2. Recyclable and Low Fat Products

https://leetcode.com/problems/recyclable-and-low-fat-products/?envType=study-plan&id=sql-i

Theme :

Write an SQL query to find the ids of products that are both low fat and recyclable.
Return the result table in any order.

Table: *Products*

Column Name	Type
product_id	int
low_fats	enum
recyclable	enum

product_id is the primary key for this table.
low_fats is an ENUM of type ('Y', 'N') where 'Y' means this product is low fat and 'N' means it is not.
recyclable is an ENUM of types ('Y', 'N') where 'Y' means this product is recyclable and 'N' means it is not.

Example :

Input:

Products table:

product_id	low_fats	recyclable
0	Y	N
1	Y	Y
2	N	Y
3	Y	Y
4	N	N

Output:

product_id
1
3

Explanation: Only products 1 and 3 are both low fat and recyclable.

Solution :

```
select product_id from Products where low_fats = 'Y' and recyclable ='Y';
```

3. Find Customer Referee

https://leetcode.com/problems/find-customer-referee/?envType=study-plan&id=sql-i

Theme :

Write an SQL query to report the names of the customer that are not referred by the customer with id = 2.
Return the result table in any order.

Table: Customer

Column Name	Type
id	int
name	varchar
referee_id	int

id is the primary key column for this table.
Each row of this table indicates the id of a customer, their name, and the id of the customer who referred them

Example :

Input:

Customer table:

id	name	referee_id
1	Will	null
2	Jane	null
3	Alex	2
4	Bill	null
5	Zack	1
6	Mark	2

Output:

name
Will
Jane
Bill
Zack

Solution :

```sql
select name from Customer where referee_id <> 2 or referee_id is null
```

4. Customers Who Never Order

https://leetcode.com/problems/customers-who-never-order/?envType=study-plan&id=sql-i

Theme :

Write an SQL query to report all customers who never order anything.
Return the result table in any order.

Table : Customers

Column Name	Type
id	int
name	varchar

id is the primary key column for this table.
Each row of this table indicates the ID and name of a customer

Table: Orders

Column Name	Type
id	int
customerId	int

id is the primary key column for this table.
customerId is a foreign key of the ID from the Customers table.
Each row of this table indicates the ID of an order and the ID of the customer who ordered it.

Example:

Input:

Customers table:

id	name
1	Joe
2	Henry
3	Sam
4	Max

Orders table:

id	**customerId**
1	3
2	1

Output:

Customers
Henry
Max

Solution :

```
select c.name as Customers from Customers c left join Orders o on c.id =
o.customerId where o.customerId is null;
```