

Big Countries



LeetCode

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Editorial

Solution

pandas

Approach: Filtering rows

Intuition

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

To determine whether a country is considered `big`, there are two conditions to verify, as stated in the description:

- The country must have an area of at least three million square kilometers, denoted as `area >= 3,000,000`.
- The population of the country should be a minimum of twenty-five million, expressed as `population >= 25,000,000`.

Algorithm

First, we apply row filtering to identify the countries that satisfy the conditions.

```
df = world[(world['area'] >= 3000000) | (world['population'] >= 25000000)]
```

This step filters out the rows representing countries that do not meet the conditions, leaving the remaining table as follows.

name	continent	area	population	gdp
Afghanistan	Asia	652230	25500100	20343000000
Algeria	Africa	2381741	37100000	188681000000

Noting that the table has five columns, we need to return three columns according to the requirements of the problem. Thus the next step is returning the three required columns with the relative order as: `name` , `population` , and `area` .

```
df = df[['name', 'population', 'area']]
```

name	population	area
Afghanistan	25500100	652230
Algeria	37100000	2381741

Implementation

Database

Approach: Filtering rows using `WHERE`

Algorithm

To determine whether a country is considered `big` , there are two conditions to verify, as stated in the description:

- The country must have an area of at least three million square kilometers, denoted as `area >= 3,000,000` .
- The population of the country should be a minimum of twenty-five million, expressed as `population >= 25,000,000` .

```
SELECT
    *
FROM
    world
WHERE
    area >= 3000000
    OR population >= 25000000
```

Noting that we need to return three columns according to the requirements of the problem. Thus the next step is selecting the three required columns with the relative order as: `name` , `population` , and `area` . The complete answer is as follows.

```
SELECT
    name, population, area
FROM
    world
WHERE
    area >= 3000000 OR population >= 25000000
;
```