

iFalo inc. PHP

應試人 _____

應試日期 _____

Database

1. There is a table `World`

1	+-----+-----+-----+-----+
2	name continent area population gdp
3	+-----+-----+-----+-----+
4	Afghanistan Asia 652230 25500100 20343000
5	Albania Europe 28748 2831741 12960000
6	Algeria Africa 2381741 37100000 188681000
7	Andorra Europe 468 78115 3712000
8	Angola Africa 1246700 20609294 100990000
9	+-----+-----+-----+-----+

A country is big if it has an area of bigger than 3 million square km or a population of more than 25 million.

Write a SQL solution to output big countries' name, population and area.

For example, according to the above table, we should output:

1	+-----+-----+-----+
2	name population area
3	+-----+-----+-----+
4	Afghanistan 25500100 652230
5	Algeria 37100000 2381741
6	+-----+-----+-----+

2. Write a SQL query to find all duplicate emails in a table named `Person` .

```

1 | +-----+-----+
2 | | Id | Email |
3 | +-----+-----+
4 | | 1 | a@b.com |
5 | | 2 | c@d.com |
6 | | 3 | a@b.com |
7 | +-----+-----+

```

For example, your query should return the following for the above table:

```

1 | +-----+
2 | | Email |
3 | +-----+
4 | | a@b.com |
5 | +-----+

```

Note: All emails are in lowercase.

PHP

1. Write a function that takes a string as input and returns the string reversed.

Example:

Given s = "hello", return "olleh".

2. Given an integer, write a function to determine if it is a power of three.

Follow up:

Could you do it without using any loop / recursion?