

# Assignment: 1

Scenario:

As a part of requirement, Frontend needs to show a tag control looks like matrix of 3x3 countries randomly (on every refresh the result would be different) where they are doing business out of 4 ["India", "Nepal", "Germany", "Finland"].

The matrix result would be

**Outcome:**

India	India	India
Nepal	Nepal	India
India	Finland	Germany

**Ranks:** India : 3 | Nepal : 2

From backend API: It is required to respond with 2-d array filled with random countries out of 4 mentioned.

For Rank is the count of occurrence of consecutive countries in a row starting from left most.

Example 1 : As shown above "India" in first row occurred 3 times so its rank is 3 and Nepal occurs 2 times consecutively in a row gets rank 2

Example 2:

Germany	Germany	Germany
India	India	India
Nepal	Nepal	Nepal

**Ranks:** Germany : 3 | Nepal : 3 | India: 3

Example 3:

Germany	India	Germany
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India	Nepal	India
Nepal	Finland	Nepal

**Ranks:**

Note: Rank is empty because no consecutive occurrence.

Example 4:

Finland	Finland	Germany
India	Nepal	India
Nepal	Finland	Nepal

**Ranks:** Finland : 2

Expected response from API would be:

// GET: /api/get-countries-tags

{

outcome: [[ ]], // 2-D matrix of countries

rank: {} // Object that have rank of different countries

}