Problem 1

Problem Description

Given a array of integers A of size N and an integer B.

Return number of non-empty subsequences of A of size B having sum <= 1000.

Problem Constraints

1 <= N <= 20

1 <= A[i] <= 1000

1 <= B <= N

Input Format

The first argument given is the integer array A.

The second argument given is the integer B.

Output Format

Return number of subsequences of A of size B having sum <= 1000.

Example Input

Input 1:

```
A = [1, 2, 8]
B = 2
```

Input 2:

```
A = [5, 17, 1000, 11]
B = 4
```

Example Output

Output 1: 3

Output 2: 0

Example Explanation

Explanation 1:

```
{1, 2}, {1, 8}, {2, 8}
```

Explanation 2:

```
No valid subsequence
```

Problem 2

Problem Description

Create a REST API's to get latest coronavirus cases summary for one or more countries.

Data Source: https://www.worldometers.info/coronavirus/

Expected fields in coronavirus cases summary: Country Name, Total Cases, Active Cases, Total Deaths, Recovery Rate(Total Recovered/Total Cases), Percentage of Population Infected (Total Cases/Population)

Note:

- Feel free to use any web scraping library to get data from website.
- Add filtering, sorting, and paging on fields wherever you feel required.
- Follow best practices to implement the REST API
- You can develop REST API using Flask or Django.

Please write code which is bug free, meet coding standards, and takes care of all the possible edge cases. So make sure that it is production ready