
Countries and provinces (1)

P90532_en

UN wants to store information about the organization of its member countries and the provinces that these contain, attached with their GDP (gross domestic product)

The information about a determined province is stored in the following struct:

```
struct Province {  
    string name;  
    string capital;  
    int population;  
    int area;  
    double gdp;  
};
```

The information about a determined country is stored in the following struct:

```
struct Country {  
    string name;  
    string capital;  
    vector<Province> provs;  
};
```

The information about all the countries is stored in a vector of countries:

```
typedef vector<Country> Countries;
```

Using the previous definitions, implement the function

```
double gdp(const Countries& p, char c, double d);
```

that returns the sum of the gross domestic products of all the provinces with density strictly greater than `d` of all the countries in `p` that starts with the letter `c`.

Observation

You only need to submit the required classes; your main program will be ignored. Strictly obey the type definitions of the statement.

Problem information

Author: Jordi Petit

Translator: Carlos Molina

Generation: 2026-01-25T11:51:16.936Z

© Jutge.org, 2006–2026.

<https://jutge.org>