The Virtual Learning Environment for Computer Programming

## 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 stricty 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**

```
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