The relational schema of the Mondial database

<u>Country:</u> the countries (and similar areas) of the world with some data. **name:** The country name **code:** The country code **capital:** The name of the capital **province:** The province where the capital belongs to **area:** the total area (square miles) **population:** the population number

Economy: economical information about the countries. **country:** the country code **GDP:** gross domestic product (in million \$) **agriculture:** percentage of agriculture of the GDP **service:** percentage of services of the GDP **industry:** percentage of industry of the GDP **inflation:** inflation rate (per annum)

Population: information about the population of the countries. **country:** the country code **population growth:** population growth rate (per annum) **infant mortality:** infant mortality (per thousand)

borders: information about neighboring countries. Note that in this relation, for every pair of neighboring countries (A,B), only one tuple is given – thus, the relation is not symmetric. **country1:** a country code **country2:** a country code **length:** length of the border between country1 and country2

<u>Continent:</u> Information about continents. name: name of the continent area: total area of the continent

<u>encompasses:</u> information to which continents a country belongs.
 country: the country code
 continent: the continent name
 percentage: percentage, how much of the area of a country belongs to the continent

<u>City:</u> information about cities. **name:** the name of the city **country:** the country code where it belongs to **province:** the name of the province where it belongs to **population:** population of the city **longitude:** geographic longitude **latitude:** geographic latitude

Province: information about administrative divisions. **name:** the name of the administrative division **country:** the country code where it belongs to **area:** the total area of the province **population:** the population of the province **capital:** the name of the capital **capprov:** the name of the province where the capital belongs to note that capprov is not necessarily equal to name. E.g., the municipality of Bogota (Columbia) is a province of its own, and Bogota is the capital of the surrounding province Cudinamarca. <u>Organization:</u> information about political and economical organizations. **name:** the full name of the organization **abbreviation:** its abbreviation **city:** the city where the headquarter is located **country:** the country code where the headquarter is located **province:** the province where the headquarter is located **established:** date of establishment

is_member: memberships in political and economical organizations. organization: the abbreviation of the organization country: the code of the member country type: the type of membership

River: information about rivers. **name:** the name of the river **length:** the length of the river **river:** the river where it flows to **lake:** the lake where it flows to **sea:** the sea where it flows to **source:** the coordinates of its source **sourceAltitude:** the altitude of its source **mountains:** the montains where its source is located **source:** the coordinates of its estuary

<u>Sea:</u> information about seas. name: the name of the sea depth: the maximal depth of the sea

<u>merges_with:</u> information about neighboring seas. Note that in this relation, for every pair of neighboring seas (A,B), only one tuple is given – thus, the relation is not symmetric. **sea1:** a sea **sea2:** a sea

located: information about cities located at rivers, lakes, and seas. **city:** the name of the city **country:** the country code where the city belongs to **province:** the province where the city belongs to **river:** the river where it is located at **lake:** the lake where it is located at **sea:** the sea where it is located at Note that for a given city, there can be several lakes/seas/rivers where it is located at.

geo_Sea: geographical information about seas
sea: the name of the sea
country: the country code where it is located
province: the province of this country

geo_River: geographical information about rivers **river:** the name of the river **country:** the country code where it is located **province:** the province of this country