Introduction to databases
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Connection to the database through the phpMyAdmin web interface :

— From a browser open the URI http ://kr.unige.ch/phpmyadmin
   or http ://129.194.69.202/phpmyadmin/

   — Username : etu

   — Password : x

— Once connected, select the Enviro database from the list on the
   left.

— Click the SQL tab to enter a SQL query or open a query window
   by clicking the "Query window" icon (in the middle above the list
   of bases).

— To execute the request click (GO) / (Execute).

— You can modify a query already executed by clicking [Edit] below
   right of the query

Questions

Write the SQL queries needed to complete the tasks below. The
schema of the database is the following :
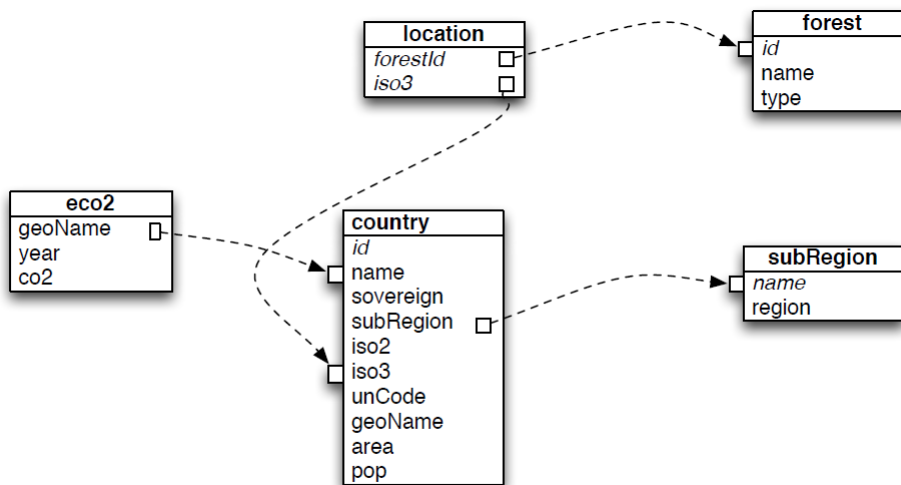
Selection operations

1. List information for countries with IDs less than 100

2. List countries that are not sovereign, i.e. those whose geographical name (geoName) is different from that of their sovereign.

3. List the CO_2 emission values of countries for the year 1990.

4. List information corresponding to 'Mangroves' type forests.

5. List countries whose geoName contains the word Republic.

Projection operations (and calculation)

1. List all regions.

2. What are the iso3 codes of countries with forests ?

3. Display country names and population density.

Selection + projection operations

1. Which subregions make up the 'Asia + Pacific' region ?

2. In which region does the 'Arctic' subregion belong ?

Join operations

1. What are the names (name) and geoName of countries in the *West Asia* region ?

2. Find Country Names that own Mangroves Forests.

3. Find all forest types of the country whose geoName is *Australia.*

4. Display for each country the number of tonnes of CO_2 emitted per capita for the year 2007.

Self joins

1. For each country calculate the difference between CO_2 emissions in 1989 and 2007.

2. Same question but we want the results in ascending order of difference.

Aggregation operations

1. Calculate the number of subregions in the 'Asia + Pacific' region.

2. Calculate the average value of CO_2 emissions in Brazil for the years listed in the database.

3. Find the average, minimum and maximum CO_2 emissions per capita in 2007.

Queries with grouping

1. List each year the cumulative CO_2 emission values of all countries.

2. List cumulative CO_2 emission values by country for the years 2000 to 2007.

Nested queries

1. List the countries (with year and CO_2 emission value) exceeding the average CO_2 emission value.

2. List the countries (with year and CO_2 emission value / inhabitant) exceeding the average CO_2 emission per capita.