Coursework C2:
SPARQL Queries over DBpedia

Goal

The intention of this coursework is to practice

1. the writing of SPARQL 1.1 queries.

SPARQL 1.1 Queries over DBpedia

Express the questions below as SPARQL 1.1 queries so that you can extract the requested information from DBpedia, using DBpedia's SPARQL endpoint.[1]

1. Who are the living actors starred in the movie "Reservoir Dogs" and what is their age? Write the query in such a way that it gives the correct answer, independently of the year when it is asked.

   Hints: Approximate the age as the difference between the current year and the birth year of the actor. Use the function `now()`.

2. Which of the two actors Steve Buscemi and Nicolas Cage has starred in the longest movie (measured in minutes runtime)?

3. Between David Mamet, Raymond Chandler and Pauline Kael, who influenced most people?

4. Which persons have the same last name as the author of book "The Little Sister"? (Assume that the name of a person is the last word of the `rdfs:label` of the resource corresponding to the person.)

   Hint: Use functions for manipulating strings and extracting substrings of a string.

5. Who are the ancestors of Elizabeth II?

6. Which ancestors of Elizabeth II were born in 18th century?

7. Who are the ancestors of Elizabeth II along the male line (that is, father, father's father, etc.)?

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[1]`http://dbpedia.org/sparql`

8. Who are most ancient ancestors of Elizabeth II, that is, ancestors for whom no ancestor is known by dbpedia? Return the most ancient ancestors with their name and, if possible, with their birth year and year of death.

9. Return all women novelists and classify them based on their productivity: A for authoring ¿ 15 books, B for authoring 5-15 books and C for authoring ¡ 5 books.

10. Find the name of Italy in all EU languages.

11. For each continent, find the country with the largest area.

12. Create a table of all countries, if possible with the continent on which the country is located, the area of the country, the population of the country, and the capital. Group the countries first by continent, then by area. If a country is located on more than one continent, let it appear in the groups of all continents on which it is located.

13. For Asian Games 2010, produce a table that lists for each participating country the number of medals it obtained and the number of medals per capita. Rank the countries according to the number of medals per capita.

Deliverables

Formulate each query in SPARQL 1.1, enter it into the query answer form on the course page, and return it to `fariz.darari@stud-inf.unibz.it` by 12 December 2014.