ISIT315 – TUTORIAL EXERCISES
WEEK 6

Instruction: Complete the following exercises while waiting for your assignment to be marked.

Useful link (you may need to refer to this link for SPARQL syntax):

https://www.w3.org/TR/rdf-sparql-query/

Question 1
Run the SPARQL example query 1 available from the website http://librdf.org/query, take note of the output.
Now do the following tasks:

- Modify the query such that the nickname is arranged in descending order.
- Modify the query such that the nickname is arranged in ascending order.
- Modify the query such that the name is arranged in ascending order.
- Modify the query such that duplicate nickname is not shown.
- Modify the query in Question 1 to find the nickname of Norm Walsh.

Question 2
Run the SPARQL example query 2 available from the website http://librdf.org/query, take note of the output.
Now do the following tasks:

- Modify the query to include the item column in output.
- Modify the query to find titles of RSS that contain the word W3C.

Question 3
Run the SPARQL example query 3 available from the website http://librdf.org/query, take note of the output.
Do you understand how this query work?

Question 4
Run the SPARQL example query 4 available from the website http://librdf.org/query, take note of the output.
Why is the OPTIONAL keyword used in this query?

Question 5
Run the SPARQL example query 5 available from the website http://librdf.org/query, take note of the output.
Now modify the query to find elements with weight less than 35.

Question 6
Run the SPARQL example query 6 available from the website http://librdf.org/query, take note of the output.
Why is the LIMIT keyword used in this query?

Question 7

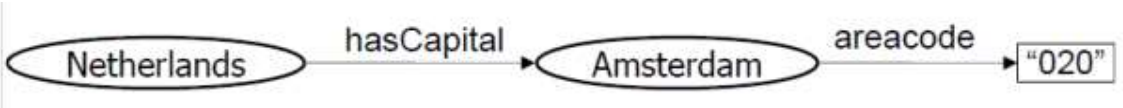
Run the SPARQL example query 6 available from the website http://librdf.org/query, take note of the output.
Now modify the query to find the date after 01/08/2017.

Question 8
Run the SPARQL example query 7 available from the website http://librdf.org/query, take note of the output.

Question 9 (note: this exercise is a written exercise, do not run it on the website http://librdf.org/query)

Given the following graph model, **write** SPARQL query that display city that has areacode with areacode = 020

(Use the following information
PREFIX geo:<http://example.org/geo/ >and dataset is geo:<http://example.org/geoData.rdf >



Question 10 (note: this exercise is a written exercise, do not run it on the website http://librdf.org/query)

Write a SPARQL query for the following:

a. Return the names of the authors and date of creation of any document having a date of creation.
b. Return the names of the authors and date of creation of any document having an author, optionally, a date of creation.

Assume the following PREFIX dc:http://purl.org/dc/elements/1.1/ and the dataset is geo:<http://example.org/geoData.rdf