Homework 10: SPARQL
INF 558 BUILDING KNOWLEDGE GRAPH

DUE DATE: Monday, 11/20/2017 @ 11:59pm on Blackboard

Ground Rules
This homework must be done individually. You can ask others for help with the tools, but the submitted homework needs to be your own work.

Summary
In this homework, you will learn how to write SPARQL to retrieve data from Dbpedia.

Task 1: SPARQL Query

Write queries to retrieve data on entities of the University class (http://dbpedia.org/ontology/University) in dbpedia according to the following specifications (All queries are limit to 10 results).

1. Get the names of all universities that has more than 4000 faculties and has campus in urban area in alphabetical order.
2. Get the names of all alumni from a university chosen by yourself with names in alphabetical order.
3. Get the names of all universities with more than 100 alumni sorted by the numbers of alumni (ascending).
4. Get the names of all universities that has more graduate students than undergraduate students sorted by the differences between number of graduate students and undergraduate students.
5. Get the names of all universities that locates in three largest states of the United States in reverse alphabetical order.
6. Get the names of all universities that has "of" in its name in ascending order in Oregon.

Task 2: SPARQL Query Endpoint

Run all 6 queries using Dbpedia SPARQL Endpoint: http://dbpedia.org/sparql and include the results (screenshots) of your queries in the reports.

Submission Instructions
You must submit the following files and folders in a single .zip archive named Firstname_Lastname_hw10.zip and submit it via Blackboard:
- query files:
    - Query1.sparql
    - Query2.sparql
    - ....

- Firstname_Lastname_hw10.pdf containing results from your queries and the explanation of your queries