

Assignment 3: Advanced set of SPARQL queries

Create the SPARQL query and the result for the following queries expressed in natural language. The endpoint that you can use for this exercise

is: <http://es.dbpedia.org/sparql>

- **Get all the properties that can be applied to instances of the Politician class (<<http://dbpedia.org/ontology/Politician>>)**

```
SELECT DISTINCT ?property
WHERE {
  ?politician a <http://dbpedia.org/ontology/Politician> .
  ?politician ?property ?value .
}
```

- **Get all the properties, except *rdf:type*, that can be applied to instances of the Politician class**

```
SELECT DISTINCT ?property
WHERE {
  ?politician a <http://dbpedia.org/ontology/Politician> .
  ?politician ?property ?value .
  FILTER (?property != rdf:type)
}
```

- **Which different values exist for the properties, except for *rdf:type*, applicable to the instances of Politician?**

```
SELECT DISTINCT ?property ?value
WHERE {
  ?politician a <http://dbpedia.org/ontology/Politician> .
  ?politician ?property ?value .
  FILTER (?property != rdf:type)
}
```

- **For each of these applicable properties, except for *rdf:type*, which different values do they take globally for all those instances?**

```
SELECT DISTINCT ?property (GROUP_CONCAT(DISTINCT ?value; SEPARATOR=", ") AS
?values)
```

```
WHERE {  
  ?politician a <http://dbpedia.org/ontology/Politician> .  
  ?politician ?property ?value .  
  FILTER (?property != rdf:type)  
}  
GROUP BY ?property
```

- ***For each of these applicable properties, except for rdf:type, how many distinct values do they take globally for all those instances?***

```
SELECT ?property (COUNT(DISTINCT ?value) AS ?numDistinctValues)  
WHERE {  
  ?politician a <http://dbpedia.org/ontology/Politician> .  
  ?politician ?property ?value .  
  FILTER (?property != rdf:type)  
}  
GROUP BY ?property  
ORDER BY DESC(?numDistinctValues)
```