ASSIGNMENT SPARQL – 27/09/22 Open Data And Knowledge Graph Natalia Bagnoli

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

```
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
SELECT ?prop where {
    dbo:Politician ?prop ?instance.
}
```

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

```
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
PREFIX rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
SELECT ?prop where {
    dbo:Politician ?prop ?instance
    filter (?prop not in (rdf:type)).
}
```

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

```
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
PREFIX rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
SELECT DISTINCT ?prop where {
    dbo:Politician ?prop ?instance
    filter (?prop not in (rdf:type)).
}
```

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

```
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
PREFIX rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
SELECT DISTINCT ?prop ?instance where {
    dbo:Politician ?prop ?instance
    filter (?prop not in (rdf:type)).
}
```

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

```
PREFIX dbo: <a href="http://dbpedia.org/ontology/">http://dbpedia.org/ontology/>
PREFIX rdf: <a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
SELECT DISTINCT ?prop COUNT(?instance) where {
    dbo:Politician ?prop ?instance
    filter (?prop not in (rdf:type)).
}
GROUP BY ?prop
```