Advanced SPARQL Queries

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1 Query 1: Get all the properties that can be applied to instances of the `dbo:Politician` class

```
PREFIX dbo: <http://dbpedia.org/ontology/>

SELECT DISTINCT ?property
WHERE {
  ?politician a dbo:Politician .
  ?politician ?property ?value .
}
```

Link to the results: Query 1

Output:

Property
http://www.w3.org/1999/02/22-rdf-syntax-ns#type
http://www.w3.org/2000/01/rdf-schema#label
http://www.w3.org/2000/01/rdf-schema#comment
http://www.w3.org/2002/07/owl#sameAs
http://xmlns.com/foaf/0.1/name
...

Table 1: Properties applicable to instances of the `dbo:Politician` class

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

```
PREFIX dbo: <http://dbpedia.org/ontology/>

SELECT DISTINCT ?property
WHERE {
  ?politician a dbo:Politician .
  ?politician ?property ?value .
  FILTER(?property != rdf:type)
}
```

Link to the query: Query 2

Output:

Property
http://www.w3.org/2000/01/rdf-schema#label
http://www.w3.org/2000/01/rdf-schema#comment
http://www.w3.org/2002/07/owl#sameAs
http://xmlns.com/foaf/0.1/name
http://xmlns.com/foaf/0.1/topic
...

Table 2: Properties applicable to instances of the `dbo:Politician` class

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

```
PREFIX dbo: <http://dbpedia.org/ontology/>

SELECT DISTINCT ?property ?value
WHERE {
  ?politician a dbo:Politician .
  ?politician ?property ?value .
  FILTER(?property != rdf:type)
}
```

Link to the query: Query 3

Output:

Property	Value
http://www.w3.org/2000/01/rdf-schema#label	"Adame Ba Konaré"@es
http://www.w3.org/2000/01/rdf-schema#label	"Adriano Sánchez Roa"@es
http://www.w3.org/2000/01/rdf-schema#label	"Adrián Ward"@es
http://www.w3.org/2000/01/rdf-schema#label	"Agustín Haya de la Torre de la Rosa"@es
http://www.w3.org/2000/01/rdf-schema#label	"Agustín Molina Martínez"@es
http://www.w3.org/2000/01/rdf-schema#label	"Ahmed Hilmi Pasha"@es
http://www.w3.org/2000/01/rdf-schema#label	"Aileen Baviera"@es
...	...

Table 3: Properties and their values applicable to instances of the `dbo:Politician` class

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

```
PREFIX dbo: <http://dbpedia.org/ontology/>

SELECT DISTINCT ?property ?value
WHERE {
  ?politician a dbo:Politician .
  ?politician ?property ?value .
  FILTER(?property != rdf:type)
} GROUP BY ?property
```

Link to the query: Query 4

Output:

Property	Value
http://es.dbpedia.org/property/ubicación	http://es.dbpedia.org/resource/Bruselas
http://dbpedia.org/ontology/wikiPageLength	"3882"‘http://www.w3.org/2001/XMLSchema#nonNegativeInteger
http://xmlns.com/foaf/0.1/name	"Laura Allende Gossens"@es
http://xmlns.com/foaf/0.1/topic	http://dbpedia.org/resource/Richard_Hatchett
http://xmlns.com/foaf/0.1/topic	http://es.dbpedia.org/resource/Simeon_de_Sajonia_Coburgo_Gotha
http://es.dbpedia.org/property/distrito	"la Provincia de San Luis"@es
...	...

Table 4: Properties and their values applicable to instances of the `dbo:Politician` class

5 Query 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: <http://dbpedia.org/ontology/>

SELECT DISTINCT ?property (COUNT(DISTINCT ?value) AS ?count)
WHERE {
  ?politician a dbo:Politician .
  ?politician ?property ?value .
  FILTER(?property != rdf:type)
} GROUP BY ?property
```

Link to the query: Query 5

Output:

Property	nValues
http://es.dbpedia.org/property/pieFoto	1
http://es.dbpedia.org/property/almamáter	2142
http://es.dbpedia.org/property/lugarMuerte	9
http://es.dbpedia.org/property/sitioInternet	1
http://es.dbpedia.org/property/fortuna	44
...	...