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# ADVANCED SET OF SPARQL QUERIES

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## Query 1

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

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

SELECT ?property

WHERE {

?politician rdf:type dbo:Politician.

?politician ?property ?x.

}

Results:

[es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3F%0D%0A%7D&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+](http://es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3F%0D%0A%7D&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+)

## Query 2

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

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

```
SELECT ?property
```

WHERE {

?politician rdf:type dbo:Politician.

?politician ?property ?x.

FILTER NOT EXISTS {?politician rdf:type ?x}

}

Results:

[es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3Adbo%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician%3A%3Atype%3Adbo%3A%3Apolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3Ffx.%0D%0A++++++FILTER+N](http://es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3Adbo%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician%3A%3Atype%3Adbo%3A%3Apolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3Ffx.%0D%0A++++++FILTER+N)

[OT+EXISTS+%7B%3Fpolitician+rdf%3Atype+%3Fx%7D%0D%0A%7D&should-  
sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+](#)

### Query 3

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

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

```
SELECT DISTINCT ?property
```

WHERE {

?politician rdf:type dbo:Politician.

?politician ?property ?x.

FILTER NOT EXISTS {?politician rdf:type ?x}

}

Results:

[es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3AAtype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3F%0D%0A++++++FILTERT+NOT+EXISTS+%7B%3Fpolitician+rdf%3Atype+%3F%7D%0D%0A%7D&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+](http://es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3AAtype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3F%0D%0A++++++FILTERT+NOT+EXISTS+%7B%3Fpolitician+rdf%3Atype+%3F%7D%0D%0A%7D&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+)

## 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 ?x
```

WHERE {

?politician rdf:type dbo:Politician.

?politician ?property ?x.

FILTER NOT EXISTS {?politician rdf:type ?x}

}

Results:

[es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3Adbo%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty+%3Ffx%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3Ffx.%0D%0A++++++FILTER+NOT+EXISTS+%7B%3Fpolitician+rdf%3Atype+%3Ffx%7D%0D%0A%7D%0D%0A&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+](http://es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX%3Adbo%3A<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty+%3Ffx%0D%0AWHERE+%7B%0D%0A++++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++++%3Fpolitician+%3Fproperty+%3Ffx.%0D%0A++++++FILTER+NOT+EXISTS+%7B%3Fpolitician+rdf%3Atype+%3Ffx%7D%0D%0A%7D%0D%0A&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=+Run+Query+)

## 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 ?x) as ?countvalues)
```

WHERE {

?politician rdf:type dbo:Politician.

?politician ?property ?x.

**FILTER NOT EXISTS {?politician rdf:type ?x}**

}

Results:

[es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX+dbo%3A+<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty+%28COUNT%28DISTINCT+%3Fx%29+as+%3Fcountvalues%29%0D%0AWHERE+%7B%0D%0A++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++%3Fpolitician+%3Fproperty+%3Fx.%0D%0A++++FILTER+NOT+EXISTS+%7B+%3Fpolitician+rdf%3Atype+%3Fx+%7D%0D%0A%7D%0D%0A&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=++Run+Query+](http://es.dbpedia.org/sparql?default-graph-uri=&query=PREFIX+dbo%3A+<http%3A%2F%2Fdbpedia.org%2Fontology%2F>%0D%0A%0D%0ASELECT+DISTINCT+%3Fproperty+%28COUNT%28DISTINCT+%3Fx%29+as+%3Fcountvalues%29%0D%0AWHERE+%7B%0D%0A++++%3Fpolitician+rdf%3Atype+dbo%3APolitician+.%0D%0A++++%3Fpolitician+%3Fproperty+%3Fx.%0D%0A++++FILTER+NOT+EXISTS+%7B+%3Fpolitician+rdf%3Atype+%3Fx+%7D%0D%0A%7D%0D%0A&should-sponge=&format=text%2Fhtml&timeout=0&debug=on&run=++Run+Query+)