



Universidad Politécnica de Madrid

ESCUELA TÉCNICA SUPERIOR DE INGENIEROS  
INFORMÁTICOS

# ADVANCED SET OF SPARQL QUERIES

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## 1 Query 1

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

```
1 SELECT DISTINCT ?property
2 WHERE {
3     ?politician a <http://dbpedia.org/ontology/Politician> .
4     ?politician ?property ?value
5 }
```

## 2 Query 2

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

```
1 PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
2
3 SELECT DISTINCT ?property
4 WHERE {
5     ?politician a <http://dbpedia.org/ontology/Politician> .
6     ?politician ?property ?value .
7     FILTER (?property != rdf:type)
8 }
```

## 3 Query 3

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

```
1 PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
2
3 SELECT DISTINCT ?value
4 WHERE {
5     ?politician a <http://dbpedia.org/ontology/Politician> .
6     ?politician ?property ?value .
7     FILTER (?property != rdf:type)
8 }
```

---

## 4 Query 4

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

```
1 PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
2
3 SELECT ?property (GROUP_CONCAT(DISTINCT ?value; SEPARATOR=", ") AS ?values)
4 WHERE {
5     ?politician a <http://dbpedia.org/ontology/Politician> .
6     ?politician ?property ?value .
7     FILTER (?property != rdf:type)
8 }
9 GROUP BY ?property
```

## 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?

```
1 PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
2
3 SELECT ?property (COUNT(DISTINCT ?value) AS ?count)
4 WHERE {
5     ?politician a <http://dbpedia.org/ontology/Politician> .
6     ?politician ?property ?value .
7     FILTER (?property != rdf:type)
8 }
9 GROUP BY ?property
```