Advanced set of SPARQL queries

Alumno: Zakaria Smaty

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

Resultado:

prop		
http://dbpedia.org/ontology/abstract		
http://dbpedia.org/ontology/almaMater		
http://dbpedia.org/ontology/award		
http://dbpedia.org/ontology/battle		
http://dbpedia.org/ontology/birthDate		
http://dbpedia.org/ontology/birthName		
http://dbpedia.org/ontology/birthPlace		
http://dbpedia.org/ontology/child		
http://dbpedia.org/ontology/citizenship		
http://dbpedia.org/ontology/country		
http://dbpedia.org/ontology/deathCause		
http://dbpedia.org/ontology/deathDate		
http://dbpedia.org/ontology/deathPlace		
http://dbpedia.org/ontology/education		
http://dbpedia.org/ontology/honours		
http://dbpedia.org/ontology/imdbId		
http://dbpedia.org/ontology/militaryBranch		
http://dbpedia.org/ontology/militaryCommand		

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 DISTINCT ?prop

WHERE {
    ?politician rdf:type dbo:Politician .
    ?politician ?prop ?value .
    FILTER ( ?prop != rdf:type )
}

ORDER BY ?prop
```

Resultado:

prop		
http://dbpedia.org/ontology/abstract		
http://dbpedia.org/ontology/almaMater		
http://dbpedia.org/ontology/award		
http://dbpedia.org/ontology/battle		
http://dbpedia.org/ontology/birthDate		
http://dbpedia.org/ontology/birthName		
http://dbpedia.org/ontology/birthPlace		
http://dbpedia.org/ontology/child		
http://dbpedia.org/ontology/citizenship		
http://dbpedia.org/ontology/country		
http://dbpedia.org/ontology/deathCause		
http://dbpedia.org/ontology/deathDate		
http://dbpedia.org/ontology/deathPlace		
http://dbpedia.org/ontology/education		
http://dbpedia.org/ontology/honours		
http://dbpedia.org/ontology/imdbId		
http://dbpedia.org/ontology/militaryBranch		
http://dbpedia.org/ontology/militaryCommand		
http://dbpedia.org/ontology/militaryService		
http://dbpedia.org/ontology/monarch		
http://dbpedia.org/ontology/nationality		
http://dbpedia.org/ontology/occupation		
http://dhpadia.org/optology/office		

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 ?value

WHERE {
    ?politician rdf:type dbo:Politician .
    ?politician ?prop ?value .

FILTER ( ?prop != rdf:type )
}

ORDER BY ?prop ?value
```

Resulado:

prop	
http://dbpedia.org/ontology/abstract	"Ahmed Hilmi Abd al-Baqi (Arabic: 1963 - 1883 - حلمي عبد الباقي 1883 - was a soldier, economist, and politician, who served in various post-Ottoman Empire governments
http://dbpedia.org/ontology/abstract	"Aisha Musa el-Said (also Asha, Ayesha, Mousa, Elsaid, El Said, Saeed, Arabic: عائشة موسى السعيد) is a Sudanese translator and politician who served as a member of
http://dbpedia.org/ontology/abstract	"Alain Vivien (born August 20, 1938) is a French Socialist Party (PS) politician, best known for chairing (1998—2002) the French Mission Interministérielle pour la
http://dbpedia.org/ontology/abstract	"Alaiza Pashkevich (or Ciotka; Belarusian: Алаіза Пашкевіч, Alaiza Paškievič; 15 July 1876 — 5 February 1916) was a Belarusian poet and political activist of Belar
http://dbpedia.org/ontology/abstract	*Archer Kent Blood (March 20, 1923 — September 3, 2004) was an American career diplomat and academic. He served as the last American Consul General to Dhaka, Bangl
http://dbpedia.org/ontology/abstract	"Asma Mohamed Abdalla (also: Asmaa, Abdallah, Abdullah; Arabic: أسماء محمد عبد الله) is a Sudanese diplomat. She became Sudan's first female Minister of Foreign Af
http://dbpedia.org/ontology/abstract	"Barack Hussein Obama II (/bəˈrɑːk huːˈseɪn oʊˈbɑːmə/ bə-RAHK hoo-SAYN oh-BAH-mə; born August 4, 1961) is an American politician who served as the 44th president o
http://dbpedia.org/ontology/abstract	"Fusajirō Yamauchi (山内 房治郎, Yamauchi Fusajirō, 22 November 1859 — 1 January 1940), born Fusajirō Fukui (福井 房治郎), was a Japanese entrepreneur who founded the
http://dbpedia.org/ontology/abstract	"Gustavo Francisco Petro Urrego ODB ODSC (Spanish pronunciation: [gus'taβo fɾanˈsisko ˈpetɾo uˈreɣo]; born 19 April 1960) is a Colombian economist, politician, and
http://dbpedia.org/ontology/abstract	"John Fitzgerald Kennedy (May 29, 1917 — November 22, 1963), often referred to by his initials JFK and the nickname Jack, was an American politician who served as
http://dbpedia.org/ontology/abstract	"Marcia Stephens Bloom Bernicat (born 1953) is an American diplomat who is the current Director General of the Foreign Service. She is a former United States Ambas
http://dbpedia.org/ontology/abstract	"Michelle LaVaughn Robinson Obama (born January 17, 1964) is an American attorney and author who served as first lady of the United States from 2009 to 2017. She w
http://dbpedia.org/ontology/abstract	"Thad William Allen (born 16 January 1949) is a former admiral of the United States Coast Guard who served as the 23rd commandant from 2006 to 2010. Allen is best
http://dbpedia.org/ontology/abstract	"Wenceslao Benitez Inglott OAX (30 April 1879 – 22 December 1954) was a distinguished Spanish navy officer, scientist, and engineer."@en
http://dbpedia.org/ontology/abstract	"Álvaro Uribe Vélez CYC (born 4 July 1952) is a Colombian politician who served as the 31st President of Colombia from 7 August 2002 to 7 August 2010. Uribe starte
http://dbpedia.org/ontology/abstract	
http://dbpedia.org/ontology/abstract	* Datos: Q946718"@es
http://dbpedia.org/ontology/abstract	wintimedia Comminis atberga una categoria muttimedia sobre chartes Adams Mosner. Chartes Adams Mosner (7 de mayor de 1900 – 10 de noviembre de 1904) rue un Repres
http://dbpedia.org/ontology/abstract	"' Anna Elizabeth Burke' AO (1 de enero de 1966) es una expolítica australiana y actual miembro del Tribunal de Apelaciones Administrativas. Fue miembro de la Cáma

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

```
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 ?value
WHERE {
    ?politician rdf:type dbo:Politician .
    ?politician ?prop ?value .
FILTER ( ?prop != rdf:type )
}
```

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

Resultado:

ORDER BY ?value

```
"-16.366666666666667 -60.95"
"-33.4328146 -70.6104986"
"15°"
"1682433"
"1° Jefe de Estado de Costa Rica"
"29th"
"39.447835 -0.397047"
"4° y 6º Jefe de Estado de Costa Rica"
"6th"
"9th"
"Barack Obama signature.svg"
"Chairman,MILS"
"Compositor musical de Costa Rica"
"Defensora General de Costa Rica"
"Diputado Propietario a la Asamblea Nacional Constituyente de la República de Costa Rica"
"Firma de Gustavo Petro.svg"
"GeneraldeXining"
"Jefe Supremo del Estado"
"Jefe de Estado de Costa Rica"
"John F Kennedy Signature 2.svg"
"Mayor"
"Michelle Obama signature.svg"
"Minister Plenipotentiary of Colombia to the Governments-in-exile of Belgium, the Netherlands
```

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 ?prop (COUNT(DISTINCT ?value) AS ?numDistinctValues)

WHERE {
    ?politician rdf:type dbo:Politician .
    ?politician ?prop ?value .
    FILTER ( ?prop != rdf:type )
}

GROUP BY ?prop

ORDER BY DESC(?numDistinctValues)
```

Resultado:

prop	numDistinctValues
http://xmlns.com/foaf/0.1/topic	33514
http://dbpedia.org/ontology/wikiPageExternalLink	29086
http://es.dbpedia.org/property/predecesor	27822
http://es.dbpedia.org/property/sucesor	27405
http://purl.org/dc/terms/subject	24283
http://xmlns.com/foaf/0.1/name	23968
http://www.w3.org/ns/prov#wasDerivedFrom	23702
http://dbpedia.org/ontology/wikiPageRevisionID	23702
http://www.w3.org/2000/01/rdf-schema#label	23578
http://xmlns.com/foaf/0.1/isPrimaryTopicOf	23439
http://dbpedia.org/ontology/wikiPageID	23439
http://dbpedia.org/ontology/abstract	23256
http://www.w3.org/2000/01/rdf-schema#comment	23256
http://es.dbpedia.org/property/nombre	20976
http://dbpedia.org/ontology/successor	20440
http://es.dbpedia.org/property/cargo	13757
http://es.dbpedia.org/property/título	13162
http://dbpedia.org/ontology/wikiPageLength	11998
http://es.dbpedia.org/property/imagen	11513
http://www.w3.org/2002/07/owl#sameAs	9573