SPARQL PRACTICE ASSIGNEMENT

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October 9, 2017

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1 EXERCISES

1.1 Exercise 1:

Select ?creator ?owner ?type ?homepage ?language
where{
dbr:Gmail dbo:author ?creator.
dbr:Gmail dbo:owner ?owner.
dbr:Gmail dbo:type ?type.
dbr:Gmail foaf:homepage ?homepage.
dbr:Gmail dbp:language ?language.
}

1.2 Exercise 2:

Select ?authorshipBuchheit where{
dbr:Gmail dbo:author ?author.
?author dbo:knownFor ?resource.
?resource foaf:homepage ?authorshipBuchheit.
}

1.3 Exercise 3:

Select ?abstract where {
dbr:Paul_Buchheit dbo:abstract ?abstract.
Filter (lang(?abstract) = 'en')
}

1.4 Exercise 4:

Select distinct ?creator ?dateOfBirth ?placeOfBirth where
?recurso dbo:author ?creator .
?creator dbo:birthPlace ?placeOfBirth.
?creator dbo:birthDate ?dateOfBirth.
} limit 6

1.5 Exercise 5:

Select distinct ?creator ?dateOfBirth ?placeOfBirth ?children
where {
?recurso dbo:author ?creator .
?creator dbo:birthPlace ?placeOfBirth.
?creator dbo:birthDate ?dateOfBirth.
?creator dbo:child ?children.
}

1.6 Exercise 6:

This code selects all the available resources in Dbpedia and shows all the attributes and values that those resources have.

1.7 Exercise 7:

Even though the purpose of the two queries is to obtain a list of countries that speak Spanish, the approach that they use differs from one another:

The first query uses a variable to extract all of the available resources in order to select those which officialLanguage corresponds to the value set Spanish_Language. However, the second query uses a direct resource named Spanish_Language to extract all the concepts contained in the subject.

Regarding the mistakes that we have observed in the data yield by the two queries, the first one returns not only countries but also other organizations such as the Organization and Cooperation in Europe which official Language is Spanish. The second query also returns some concepts that are not countries such as Fusional Languages or Spanish Language.

1.8 Exercise 8:

Select ?citizenLabel ?occupationLabel ?birthDate ?birthPlaceLabel
Where {
?citizen wdt:P27 wd:Q29.
?citizen wdt:P569 ?birthDate.
?citizen wdt:P19 ?birthPlace.
?citizen wdt:P106 ?occupation.
Service wikibase:label { bd:serviceParam wikibase:language "en". }
}

1.9   Exercise 9:

Ask {
?city rdfs:label "Paris"@en ;
a dbo:PopulatedPlace ;
dbo:country ?country .
?country a dbo:Country ;
dct:subject dbc:Member_states_of_the_United_Nations.
}

1.10   Excercise 10:

Prefix psv: http://www.wikidata.org/prop/statement/value/
Select ?citizen ?citizenLabel ?birth_date WHERE {
?citizen (p:P569/psv:P569) ?birth_date_node.
?birth_date_node wikibase:timeValue ?birth_date.
Service wikibase:label { bd:serviceParam wikibase:language "en". }
Filter((MONTH(?birth_date)) = 08)
Filter((DAY(?birth_date)) = 08)
}
Order by ?birth_date ?citizenLabel
Limit 100