

IIW-4 : SPARQL-RDF

1. Get the names of all Painter (10 points)

Query:

```
SELECT ?pname
WHERE {?name rdf:type dbo:Painter .
?name rdfs:label ?pname}
```

Top 10 Results:

pname
"Alice Mumford"@en
"Carlo Mazza"@en
"Christian Reder"@en
"Elmer Wachtel"@en
"Faustino Duranti"@en
"Fritz Janschka"@en
"George Cope (artist)"@en
"Giovanni Battista Cungi"@en
"Giovanni Nicola di Paolo Manni"@en
"Giovanni Stanchi"@fr

2. How many Painter are in dbpedia? (10 points)

Query:

```
SELECT count(?name) as ?Number_Of_Painter
WHERE {?name rdf:type dbo:Painter}
```

Top Results:

Number_Of_Painter
2882

3.What are the subclasses of Artist? (10points)

Query:

```
SELECT ?name
WHERE {?name rdfs:subClassOf dbo:Artist .
}
GROUP BY ?name
```

Top Results:

name
http://dbpedia.org/ontology/Actor
http://dbpedia.org/ontology/ComicsCreator
http://dbpedia.org/ontology/Dancer
http://dbpedia.org/ontology/Humorist
http://dbpedia.org/ontology/MusicalArtist
http://dbpedia.org/ontology/Painter
http://dbpedia.org/ontology/Comedian
http://dbpedia.org/ontology/FashionDesigner
http://dbpedia.org/ontology/Photographer
http://dbpedia.org/ontology/Sculptor

4.Get the English names of all Actor that starred in the movie “A Christmas Tale” sorted in ascending order by name. (15 points)

Query:

```
SELECT ?name
WHERE {
dbr:A_Christmas_Tale dbo:starring ?actors .
?actors rdf:type dbo:Actor ; rdfs:label ?name .
FILTER(lang(?name)="en")
}
ORDER BY ?name
```

Top Results

name
"Chiara Mastroianni"@en
"Melvil Poupaud"@en

5. Get the English names and the birth dates of all Artists born before the year 1800 with “David” in their name, sorted in descending order of their birth date. (15 points)

Query:

```
SELECT ?label, ?dop
WHERE {
  ?name rdf:type dbo:Artist .
  ?name dbo:birthDate ?dop .
  ?name rdfs:label ?label .
  filter (lang(?label) = 'en')
  filter( regex(?label, "David" ))
  filter (?dop < "1800-12-31"^^xsd:date)

}
ORDER BY DESC(?dop)
```

Top 10 Results:

label	dop
"David Claypoole Johnston"@en	1798-03-25
"David Roberts (painter)"@en	1796-10-24
"David Gee"@en	"1793"^^<http://www.w3.org/2001/XMLSchema#gYear>
"David Cox (artist)"@en	1783-04-29
"David Cusick"@en	"1780"^^<http://www.w3.org/2001/XMLSchema#gYear>
"David Edwin"@en	"1776"^^<http://www.w3.org/2001/XMLSchema#gYear>
"David Weller (painter)"@en	"1759"^^<http://www.w3.org/2001/XMLSchema#gYear>
"Jacques-Louis David"@en	1748-08-30
"François-Anne David"@en	"1741"^^<http://www.w3.org/2001/XMLSchema#gYear>
"David Martin (artist)"@en	1737-04-01

6. Get the English names of all Artists that play exactly 10 kinds of instruments, but does not play Guitar. Sort the results in ascending order of names. (20 points)

Query:

```
SELECT ?label, count(?i)
WHERE {
  ?name rdf:type dbo:Artist .
  ?name rdfs:label ?label .
  ?name dbo:instrument ?i .
  filter (lang(?label) = 'en')
  filter not exists {
    ?name rdf:type dbo:Artist .
    ?name rdfs:label ?label .
    ?name dbo:instrument dbr:Guitar .
  }
}
GROUP BY ?label
HAVING (count(?i) = 10)
ORDER BY ?label
```

Top 10 Result:

label	callret-1
"Benson Taylor"@en	10
"Bernard Sumner"@en	10
"Cary Hudson"@en	10
"Chris Leslie (folk musician)"@en	10
"Collin Leijenaar"@en	10
"Drew Shirley"@en	10
"Eric Johnson"@en	10
"Grant-Lee Phillips"@en	10
"Gregg Giuffria"@en	10
"Jeff Coffin"@en	10

7. Provide another interesting query related to the Artist class and list the returned results. This query should be substantially different from the previous. (20 points)

Description: Fetch all the names of the Artist born in United States currently living in Los Angeles doing more than 2 occupation and has a wiki page.

Query:

```

SELECT ?label, ?birthplace, ?ht, count(?occ)
WHERE {?name rdf:type dbo:Artist .
?name dbo:birthPlace ?birthplace.
?name dbo:hometown ?ht .
?name dbo:occupation ?occ .
?name dbo:wikiPageID ?wiki .
?name rdfs:label ?label .
filter (regex(?ht,"Los_Angeles")).
filter (regex(?birthplace,"United_States")) }
GROUP BY ?label ?ht ?birthplace
HAVING (count(?occ) > 2)
ORDER BY ?label

```

Top 10 Results:

label	birthplace	ht	callret-3
"Adriana Evans"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	3
"Ash Riser"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	7
"Barry Carl"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	5
"Bud'da"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	4
"C.P Dubb"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	3
"Colette Carr"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	4
"D Fuse"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	4
"DJ Heavygrinder"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	4
"Davetta Sherwood"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	3
"Dillon Francis"@en	http://dbpedia.org/resource/United_States	http://dbpedia.org/resource/Los_Angeles	3