

1. Get the names of all Painter

```
prefix dbo: <http://dbpedia.org/ontology/>
select ?painter_name
where {
    ?painter_res    rdf:type dbo:Painter;
                    rdfs:label ?name1
    BIND(str(?name1) as ?painter_name)
    FILTER(langmatches(lang(?name1),"en"))
}
```

First 10 Results:

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

2. How many Painter are in dbpedia?

```
prefix dbo: <http://dbpedia.org/ontology/>
select COUNT(?painter_name) as ?No_Of_Painters
where {
    ?painter_res    rdf:type dbo:Painter;
                    rdfs:label ?name1
    BIND(str(?name1) as ?painter_name)
    FILTER(langmatches(lang(?name1),"en"))
}
```

Results:

No_Of_Painters
2872

3. What are the subclasses of Artist?

```
prefix dbo: <http://dbpedia.org/ontology/>
SELECT *
WHERE{
?subclass rdfs:subClassOf dbo:Artist
}
```

First 10 Results:

subclass
http://dbpedia.org/ontology/Actor
http://dbpedia.org/ontology/Comedian
http://dbpedia.org/ontology/ComicsCreator
http://dbpedia.org/ontology/Dancer
http://dbpedia.org/ontology/FashionDesigner
http://dbpedia.org/ontology/Humorist
http://dbpedia.org/ontology/MusicalArtist
http://dbpedia.org/ontology/Painter
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” (http://dbpedia.org/resource/A_Christmas_Tale) sorted in ascending order by name.

Hint: You can use lang(?yourNameVariable) to get the language.

```
prefix dbp: <http://dbpedia.org/property/>
prefix dbo: <http://dbpedia.org/ontology/>
prefix dbr: <http://dbpedia.org/resource/>
SELECT ?actors
WHERE{
    dbr:A_Christmas_Tale dbp:starring ?stars.
    ?stars rdfs:label ?name1;
           rdf:type dbo:Actor
    FILTER(langmatches(lang(?name1),"en"))
    BIND(str(?name1) as ?actors)
}
ORDER BY ?actors
```

First 10 Results:

actors
Chiara Mastroianni
Melvil Poupaud

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

```
prefix dbo: <http://dbpedia.org/ontology/>
prefix dbp: <http://dbpedia.org/property/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
SELECT ?actor_name, ?birthDate
WHERE {
    ?artists rdf:type dbo:Artist;
             rdfs:label ?name1;
             dbo:birthDate ?birthDate1;
             dbo:birthYear ?birthYear .

    BIND(str(?birthDate1) as ?birthDate)
    FILTER( langmatches(lang(?name1),"en"))

    FILTER ( ?birthYear < "1800-01-01T00:00:00Z"^^xsd:dateTime )
    FILTER ( ?birthYear > "0031"^^xsd:gYear )

    BIND(str(?name1) as ?actor_name)
    FILTER ( regex(?actor_name, "David", "i") )
}
ORDER BY desc(?birthDate)
```

First 10 Results:

actor_name	birthDate
David Claypoole Johnston	1798-03-25
David Roberts (painter)	1796-10-24
David Gee	1793
David Cox (artist)	1783-04-29
David Cusick	1780
David Edwin	1776
David Weller (painter)	1759
Jacques-Louis David	1748-08-30
François-Anne David	1741
David Martin (artist)	1737-04-01

6. Get the English names of all Artist that plays exactly 10 kinds of instruments, but does not play Guitar (<http://dbpedia.org/resource/Guitar>). Sort the results in ascending order of names.

```

SELECT ?name
WHERE{
{
    select ?name (COUNT(?instrument) as ?no_of_instruments)
    WHERE{
        ?res    dbo:instrument ?instrument;
                rdfs:label ?name1
        BIND(str(?name1) as ?name)
        FILTER(langmatches(lang(?name1),"en"))
        FILTER NOT EXISTS{?res dbo:instrument dbr:Guitar}
    }
    group by ?name
}
FILTER(?no_of_instruments = 10)
}
order by asc(?name)

```

First 10 Results:

name
Benson Taylor
Bernard Sumner
Big band
Big beat
Canadian blues
Cary Hudson
Celtic punk

Chris Leslie (folk musician)
Collin Leijenaar
Digital hardcore

The following query 7_a was used in combination of Query 3 for reference in order to compose Query7

7_a) Query to fetch number of people who work for a profession

```
PREFIX dbp: <http://dbpedia.org/property/>
prefix dbo: <http://dbpedia.org/ontology/>
prefix dbr: <http://dbpedia.org/resource/>
SELECT *
WHERE
{
    {SELECT ?profession (COUNT(?people) as ?no_of_people)
    WHERE{
        ?people dbp:occupation ?profession1;
            dbo:occupation ?occupation.
        ?profession1 rdfs:label ?professionLabel
        FILTER(langmatches(lang(?professionLabel),"en"))
        BIND(str(?professionLabel) as ?profession)
    }
    group by ?profession
    ORDER by desc(?no_of_people)
    }
}
```

First 10 Results:

profession	no_of_people
Actor	35459
Singing	17996
Songwriter	12697
Film director	11782
Record producer	10785
Musician	9521
Screenwriter	9381
Composer	7425
Film producer	5535
Journalist	5488

Query7: To fetch number of people who work for a profession, which are subclasses of Artist

```
prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
prefix dbp: <http://dbpedia.org/property/>
prefix dbo: <http://dbpedia.org/ontology/>
prefix dbr: <http://dbpedia.org/resource/>
SELECT * WHERE
{
    {
        SELECT ?profession (COUNT(?people) as ?no_of_people)
        WHERE{
            ?people dbp:occupation ?profession1;
            dbo:occupation ?occupation.
            ?profession1 rdfs:label ?professionLabel
            FILTER(langmatches(lang(?professionLabel),"en"))
            BIND(str(?professionLabel) as ?profession)
        }
        group by ?profession
        ORDER by desc(?no_of_people)
    }
    FILTER (?profession in ("Actor", "Comedian", "Comics artist", "Dance", "Fashion", "List of
humorists", "Painting", "Photograph", "Sculpture"))
}
```

First 10 Results:

profession	no_of_people
Actor	35459
Dance	2201
Comedian	1949
Painting	793
Sculpture	257
List of humorists	100
Comics artist	20
Fashion	14
Photograph	3