

SELECT SECTION:

str(?name) AS ?Name
(CONCAT(?G, " ", ?S) AS ?name)
(sum(?x) as ?total)
(count(?s) as ?number) *(also: , min , max, avg, group_concat, sample)*
str(?birth_date)

WHERE SECTION:

{

- ?u dbo:numberOfStudents|dbp:students ?s
- ≠
- ?s :item/:price ?x

FILTER:

- FILTER(?z IN(dbr:Euro, dbr:Euro_sign))
- FILTER langMatches(lang(?name), "EN")
- FILTER(?price < 20) ?x dc:title ?title .
- FILTER (BOUND(?date))
- FILTER(!BOUND(?deathdate))
- FILTER regex(?name, "^ali", "i") *(^→Starts With, "i"→case insensitive)*

FILTER NOT EXISTS (nest in {}):

- FILTER NOT EXISTS{?member dbo:deathDate ?deathdate}

BIND:

- BIND ((?p*(1-?discount)) AS ?price)
- BIND(CONCAT(?G, " ", ?S) AS ?name)
- BIND(STRLANG(?actor_name, "en") AS ?actor_name_en)

OPTIONAL (nest in {}):

- OPTIONAL {?x foaf:mbox ?mbox}
- OPTIONAL {?x ns:price ?price . FILTER (?price < 30)}

}

GROUP BY

GROUP BY ?org

HAVING

HAVING (SUM(?lprice) > 10)

ORDER BY

ORDER BY DESC(?ratio)

Federated Queries

```
PREFIX movie: <http://data.linkedmdb.org/resource/movie/>
SELECT ?actor_name
FROM <http://dig.csail.mit.edu/2008/webdav/timbl/foaf.rdf> #dummy
WHERE {
  {
    SERVICE <http://data.linkedmdb.org/sparql> {
      <http://data.linkedmdb.org/resource/film/329> movie:actor ?actor.
      ?actor movie:actor_name ?actor_name.
    }
  }
}
```

Insert Data

```
INSERT DATA
{
  <http://example/book1> dc:title "A new book" ;
}
```

Delete Data

```
DELETE { ?book ?p ?v }
WHERE { ?book dc:date ?date .
  FILTER ( ?date > "1970-01-01T00:00:00-02:00"^^xsd:dateTime ) ?book ?p ?v
}
```

PREFIXES

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> (usually not required to be entered)
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX dc: <http://purl.org/dc/elements/1.1/>
          DBPEDIA (pre-loaded in dbpedia endpoint)
PREFIX dbo: < http://dbpedia.org/ontology/>
PREFIX dbp: < http://dbpedia.org/property/>
PREFIX dbr: < http://dbpedia.org/resource/>
```

rdf:type OR EQUIVALENT → a rdfs:label	dc:title dc:date
foaf:knows foaf:Person foaf:givenName foaf:surname foaf:mbox	dbo:Actor dbo:portrayer dbo:birthplace dbo:country dbo:currency dbo:populationTotal dbo:facultySize dbo:numberOfStudents
	dbpedia-owl:affiliation