Seminar 3 – SPARQL solutions

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# 1. IRI and label of all people
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT ?personIRI   ?personLabel
WHERE {
    ?personIRI rdf:type foaf:Person .
    ?personIRI rdfs:label ?personLabel  .
}

# 2. given name of all people with family name "Alighieri"
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT ?givenName
WHERE {
?personIRI rdf:type foaf:Person ;
    foaf:familyName "Alighieri" ;
    foaf:givenName ?givenName .
}

# 3. IRI and label of all Dante's texts in alphabetical order
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX dctypes: <http://purl.org/dc/dcmitype/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX wd: <http://www.wikidata.org/entity/>
SELECT ?textIRI ?textLabel
WHERE {
?textIRI a dctypes:Text ;
    dcterms:creator wd:Q1067 ;
    rdfs:label ?textLabel .
}   ORDER   BY  ?textLabel

# 4. label and date of first two Dante's texts in chronological order
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX dctypes: <http://purl.org/dc/dcmitype/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX wd: <http://www.wikidata.org/entity/>
SELECT ?textLabel   ?textDate
WHERE {
?textIRI a dctypes:Text ;
    dcterms:creator wd:Q1067 ;
    rdfs:label ?textLabel ;
    dcterms:issued ?textDate .
```

```sparql
}
ORDER   BY  ?textDate
LIMIT 2

# 5. family names of all people without duplicates
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT  DISTINCT ?familyName
WHERE {
?personIRI a foaf:Person    ;
    foaf:familyName ?familyName .
}

# 6. label and date of all Dante's texts created after 1310
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX dctypes: <http://purl.org/dc/dcmitype/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX wd: <http://www.wikidata.org/entity/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
SELECT ?textLabel   ?textDate
WHERE {
    ?textIRI a dctypes:Text ;
        dcterms:creator wd:Q1067 ;
        rdfs:label ?textLabel ;
        dcterms:issued ?textDate .
    FILTER  (?textDate  > "1310"^^xsd:date)
}

# 7. given names of all people, and optionally the family name of their
teacher
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX  : <http://example.org/>
SELECT ?personName   ?teacherName
WHERE {
    ?personIRI a foaf:Person    ;
    foaf:givenName ?personName .
    OPTIONAL {
        ?personIRI :hasTeacher ?teacher .
        ?teacher foaf:familyName ?teacherName   .
    }
}

# 8. IRIs and labels of the texts in Italian or French language
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX dctypes: <http://purl.org/dc/dcmitype/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX wd: <http://www.wikidata.org/entity/>
SELECT ?textIRI ?textLabel
WHERE {
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    ?textIRI a dctypes:Text ;
    rdfs:label ?textLabel .
    {   ?textIRI dcterms:language wd:Q652 . }
    UNION
    {   ?textIRI dcterms:language wd:Q150 . }
}

# 9. labels of all texts created by Dante Alighieri or Brunetto Latini with
date < 1300
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX dctypes: <http://purl.org/dc/dcmitype/>
PREFIX dcterms: <http://purl.org/dc/terms/>
PREFIX xsd:     <http://www.w3.org/2001/XMLSchema#>
PREFIX wd: <http://www.wikidata.org/entity/>
SELECT  ?textLabel
WHERE {
?textIRI a dctypes:Text ;
        rdfs:label ?textLabel ;
        dcterms:issued ?date .
    {   ?textIRI dcterms:creator wd:Q1067 . }
    UNION
    {   ?textIRI dcterms:creator wd:Q366328 . }
    FILTER  (?date < "1300"^^xsd:date)
}
```