

04 - Assignment Knowledge Representation (Group 5)

SPARQL Queries

a. Which genres exists

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

SELECT ?id ?name
WHERE {
    ?genre a :Genre ;
           :id ?id ;
           :name ?name .
}
```

id	name
1"35"^^<http://www.w3.org/2001/XMLSchema#integer>	Comedy
2"18"^^<http://www.w3.org/2001/XMLSchema#integer>	Drama
3"10751"^^<http://www.w3.org/2001/XMLSchema#integer>	Family
4"10749"^^<http://www.w3.org/2001/XMLSchema#integer>	Romance
5"53"^^<http://www.w3.org/2001/XMLSchema#integer>	Thriller
6"28"^^<http://www.w3.org/2001/XMLSchema#integer>	Action
7"16"^^<http://www.w3.org/2001/XMLSchema#integer>	Animation
8"12"^^<http://www.w3.org/2001/XMLSchema#integer>	Adventure
9"27"^^<http://www.w3.org/2001/XMLSchema#integer>	Horror
10"99"^^<http://www.w3.org/2001/XMLSchema#integer>	Documentary
11"10402"^^<http://www.w3.org/2001/XMLSchema#integer>	Music
12"80"^^<http://www.w3.org/2001/XMLSchema#integer>	Crime
13"878"^^<http://www.w3.org/2001/XMLSchema#integer>	Science Fiction
14"9648"^^<http://www.w3.org/2001/XMLSchema#integer>	Mystery
15"10769"^^<http://www.w3.org/2001/XMLSchema#integer>	Foreign
16"14"^^<http://www.w3.org/2001/XMLSchema#integer>	Fantasy
17"10752"^^<http://www.w3.org/2001/XMLSchema#integer>	War
18"37"^^<http://www.w3.org/2001/XMLSchema#integer>	Western
19"36"^^<http://www.w3.org/2001/XMLSchema#integer>	History
20"10770"^^<http://www.w3.org/2001/XMLSchema#integer>	TV Movie

b. Which departments exist for crews?

```

SELECT DISTINCT ?department
WHERE {
    ?Crew a :Crew;
        :department ?department .
}

```

department
1Production
2Visual Effects
3Editing
4Crew
5Sound
6Art
7Writing
8Lighting
9Camera
10Costume & Make-Up
11Directing
12Actors

Showing 1 to 12 of 12 entries

c. How many companies are listed?

```
SELECT (COUNT(DISTINCT ?company) AS ?companyCount)
WHERE {
    ?company a :Company;
}
```

companyCount

1"3712"^^<http://www.w3.org/2001/XMLSchema#integer>

Showing 1 to 1 of 1 entry

d. Show all collections

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
```

```
SELECT *
WHERE {
    ?collection a :Collection ;
               :id ?id ;
               :name ?name .
}
```

Table Response 422 results in 0.255 seconds

Simple view Ellipse Filter query results Page size

collection	id	name
1<https://www.themoviedb.o...	"313576"^^<http://www.w3.org/2...	Hot Tub Time Machine Colle...
2<https://www.themoviedb.o...	"107674"^^<http://www.w3.org/2...	The Princess Diaries Collecti...
3<https://www.themoviedb.o...	"256377"^^<http://www.w3.org/2...	The Muppet Collection
4<https://www.themoviedb.o...	"1575"^^<http://www.w3.org/2001...	Rocky Collection
5<https://www.themoviedb.o...	"48190"^^<http://www.w3.org/20...	Revenge of the Nerds Collec...
6<https://www.themoviedb.o...	"91698"^^<http://www.w3.org/20...	Chili Palmer Collection
7<https://www.themoviedb.o...	"9518"^^<http://www.w3.org/2001...	The Transporter Collection
8<https://www.themoviedb.o...	"9735"^^<http://www.w3.org/2001...	Friday the 13th Collection
9<https://www.themoviedb.o...	"207621"^^<http://www.w3.org/2...	V/H/S Collection
10<https://www.themoviedb.o...	"207632"^^<http://www.w3.org/2...	The ABCs of Death Collection

e. List German movies

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
```

```
SELECT *
WHERE {
    ?movie a :Movie ;
           :id ?id ;
           :original_title ?title ;
           :original_language "de" .
}
```

Table Response 18 results in 0.045 seconds

Simple view ☐ Ellipse ☒ Filter query results Page 5

movie	id	title
1	<https://www.themoviedb.or...>"248"	<http://www.w3.org/2001/X...>Der Untergang
2	<https://www.themoviedb.or...>"727"	<http://www.w3.org/2001/X...>Barbara
3	<https://www.themoviedb.or...>"763"	<http://www.w3.org/2001/X...>Das Leben der Anderen
4	<https://www.themoviedb.or...>"872"	<http://www.w3.org/2001/X...>Zweiohrküken
5	<https://www.themoviedb.or...>"961"	<http://www.w3.org/2001/X...>Fack ju Göhte 2
6	<https://www.themoviedb.or...>"1105"	<http://www.w3.org/2001...> Robinson Crusoe
7	<https://www.themoviedb.or...>"1132"	<http://www.w3.org/2001...> Toni Erdmann
8	<https://www.themoviedb.or...>"1186"	<http://www.w3.org/2001...> In weiter Ferne, so nah!
9	<https://www.themoviedb.or...>"1277"	<http://www.w3.org/2001...> Der rote Baron
10	<https://www.themoviedb.or...>"1380"	<http://www.w3.org/2001...> Auf der anderen Seite
11	<https://www.themoviedb.or...>"2026"	<http://www.w3.org/2001...> Er ist wieder da

f. Show movies in which Julius Caesar is depicted

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
```

```
SELECT *
WHERE {
    ?movie a :Movie ;
```

```

        :id ?id ;
        :original_title ?title ;
        :Keywords ?keyword .
?keyword :id 194576 .
}

```

Table Response 4 results in 0.03 seconds Simple view Ellipse Filter query results Page size: 50

movie	id	title	keyword
1	<https://www.themoviedb.org/kaggle-export/M... "368"^^<http://www.w3.org/2001/XMLSchema#integer>	Astérix & Obélix contre César	<https://www.themoviedb.org/kaggle-export/K...
2	<https://www.themoviedb.org/kaggle-export/M... "1923"^^<http://www.w3.org/2001/XMLSchema#integer>	Cleopatra	<https://www.themoviedb.org/kaggle-export/K...
3	<https://www.themoviedb.org/kaggle-export/M... "2094"^^<http://www.w3.org/2001/XMLSchema#integer>	The Last Legion	<https://www.themoviedb.org/kaggle-export/K...
4	<https://www.themoviedb.org/kaggle-export/M... "2121"^^<http://www.w3.org/2001/XMLSchema#integer>	Spartacus	<https://www.themoviedb.org/kaggle-export/K...

g. Which movie actors also directed a movie?

```

SELECT DISTINCT ?name
WHERE {
    ?person :job "Producer" ;
            :name ?name ;
            rdf:type :Crew .
    ?cast :name ?name ;
          rdf:type :Cast .
}

```

name
1Allen Covert
2Barbet Schroeder
3Steve Martin
4Kevin James
5Alex Gibney
6Shane Carruth
7Ernst Lubitsch
8Judd Apatow
9Martin Ritt
10Wim Wenders

Showing 1 to 10 of 426 entries

h. All roles of your favorite actor

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

SELECT *
WHERE {
    ?movie a :Movie ;
           :original_title ?title ;
           :cast ?cast .
    ?cast :name "Tom Hanks" ;
          :character ?character
}
```

Table Response 18 results in 0.078 seconds

Simple view ☐ Ellipse ☒ Filter query results Page size: 50

movie	title	cast	character
1	<https://www.themo... The Simpsons Movie	<https://www.themo... Himself (voice)	
2	<https://www.themo... You've Got Mail	<https://www.themo... Joe Fox	
3	<https://www.themo... The Great Buck How...	<https://www.themo... Mr. Gable	
4	<https://www.themo... Inferno	<https://www.themo... Robert Langdon	
5	<https://www.themo... Larry Crowne	<https://www.themo... Larry Crowne	
6	<https://www.themo... Punchline	<https://www.themo... Steven Gold	
7	<https://www.themo... Toy Story	<https://www.themo... Woody (voice)	
8	<https://www.themo... Captain Phillips	<https://www.themo... Captain Richard Philli...	
9	<https://www.themo... Apollo 13	<https://www.themo... Jim Lovell	
10	<https://www.themo... The Circle	<https://www.themo... Eamon Bailey	
11	<https://www.themo... The Bonfire of the Va...	<https://www.themo... Sherman McCoy	
12	<https://www.themo... That Thing You Do!	<https://www.themo... Mr. White	

i. All details about your favourite movie

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX : <https://www.themoviedb.org/kaggle-export/>
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
```

```
SELECT *
WHERE {
    ?movie a :Movie ;
        :id ?id ;
        :budget ?budget ;
        :genres ?genres ;
        :original_language ?original_language ;
        :original_title "Whiplash" ;
        :overview ?overview ;
        :release_date ?release_date ;
        :runtime ?runtime ;
        :revenue ?revenue .
}
```

Table Response 1 result in 0.033 seconds

Simple view ☐ Ellipse ☒ Filter query results Pag

movie	id	budget	genres	original_language	overview	release_date	runtime	revenue
1	<https://www.them... "3"><http://www.w3.org... "3300000"><http://w...><https://www.them... en				Under the direction ...	10/10/14	"105.0"><http://www... "13092000"><http://...	