

## Assignment 4 -- Question 2

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2.

- a. Retrieve the name of all the movies that have a director with the last name as "Shetty". If present, retrieve the name of the co-director as well.

SPARQL Query :

```
prefix Netflix: <http://netflix.org/Question/>

select ?t ?d ?cod

where {
    ?t Netflix:directorIs ?d.
    FILTER (regex(?d,"Shetty")).
    OPTIONAL { ?t Netflix:directorIs ?cod.
    FILTER (!regex( ?cod, "Shetty" )) }
}
```

- b. Retrieve the names of all the movies that are categorized as either a comedy or a drama or both.

SPARQL Query :

```
prefix Netflix: <http://netflix.org/Question/>

select ?title
Where{
    ?title Netflix:listed_inIs ?genres.
    FILTER ( regex(?genres,"Comedy") ||
    regex(?genres,"Comedies") || regex(?genres, "Dramas"))
}
```

- c. Retrieve the names of all the movies that are released in the United States between the year 2010 and 2020 and that have the word "couple" in their description.

SPARQL Query :

```
prefix Netflix: <http://netflix.org/Question/>
```

```

select ?title ?genres ?state ?des
where{
    ?title Netflix:release_yearIs ?genres.
    ?title Netflix:countryIs ?state.
    ?title Netflix:descriptionIs ?des.
    FILTER ( ?genres >= 2010 && ?genres <= 2020
&& ?state = "United States" && regex(?des,"couple") )
}

```

- d. Write a SPARQL query involving property paths to retrieve two movies that have at least one director in common and have a run time of greater than or equal to 60 minutes.

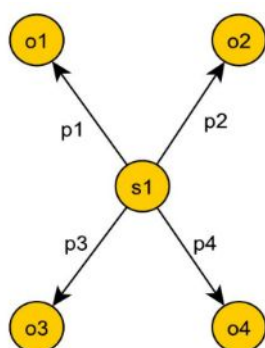
SPARQL Query:

```

prefix Netflix: <http://netflix.org/Question/>
select distinct ?title1 ?title2
WHERE {
    ?title1 Netflix:directorIs ?director1.
    OPTIONAL { ?title2 Netflix:directorIs ?director2
    FILTER( ?director1 = ?director2 && ?title1 != ?title2
&& ?director1 != "" && ?director2 != "")}
    ?title1 Netflix:directorIs ?duration FILTER( ?duration >=
"60 mins" && ?title1 != " && ?title2 != ")
}

```

- e. Construct a SPARQL query of your choice on your movie dataset that satisfies the following star pattern (join on the subject).



SPARQL QUERY :

prefix Netflix: <http://netflix.org//Question//>

```
select distinct ?title ?director ?release ?duration
where{
  ?title Netflix:countryIs ?country . FILTER(regex(?country,"India"))
  ?title Netflix:directorIs ?director.
  ?title Netflix:release_yearIs ?release.
  ?title Netflix:durationIs ?duration.
}
```

All the above queries were run on RUBY.

Output file is attached.