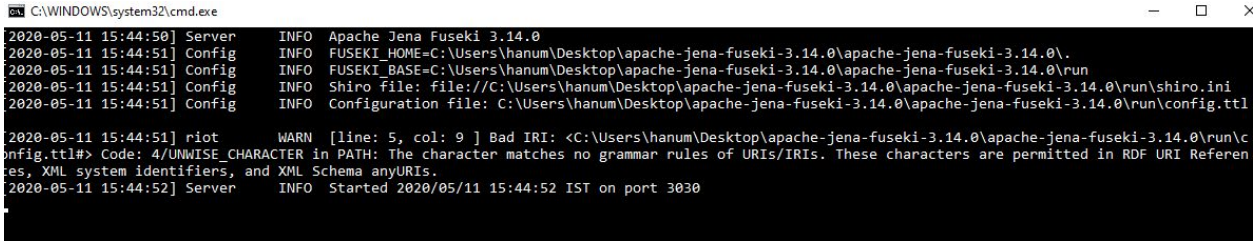
Semantic Web - Winter 2020 Assignment 4

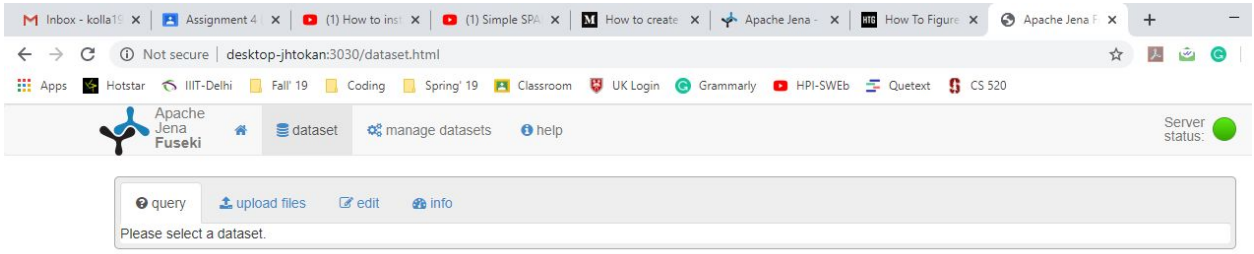
Q1)

(a) The code for this part is in CSVtoTriples.java . OpenCSV parser is used for reading the csv file and making triples. All the triples are made with title as subject and remaining all as properties and objects. For handing the spaces in the title names, replace() method from String class is used.

(b) Fuseki installation

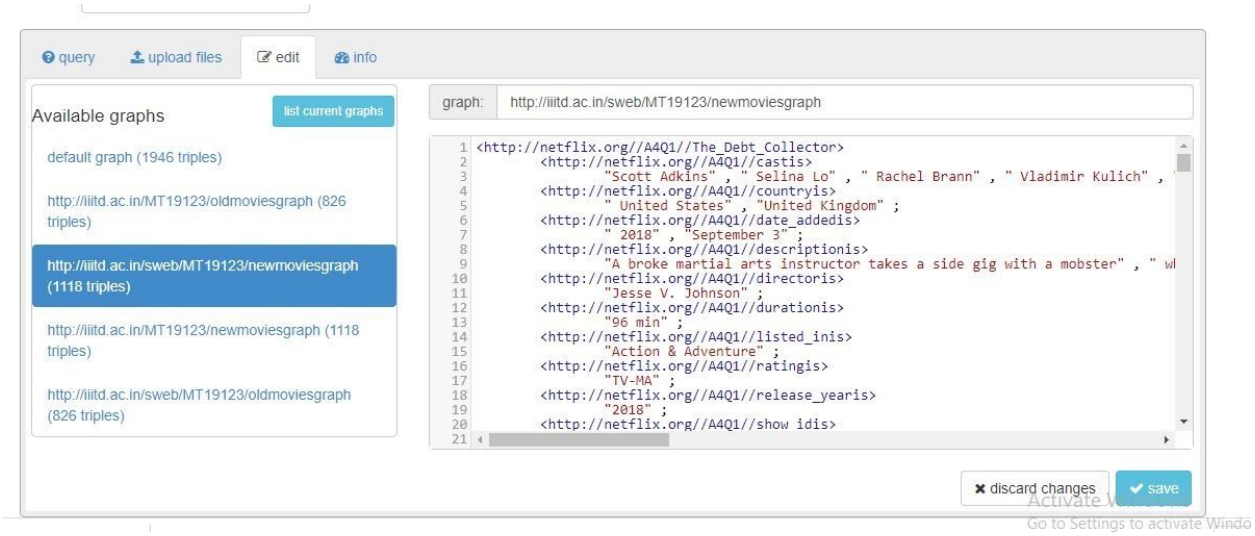


Accessing fuseki server with host name



Configuration file

(c) Default graphs and required named graphs are created.



Q2)

a) We use filter here for getting the names which contains Shetty and for getting codirectors we use OPTIONAL.

Query:-

prefix Netflix: <http://netflix.org//A4Q1//>

SELECT DISTINCT ?title ?director ?coDirector FROM <http://iiitd.ac.in/sweb/MT19123/newmoviesgraph>
FROM <http://iiitd.ac.in/sweb/MT19123/oldmoviesgraph>
Where {
?title Netflix:directoris ?director . FILTER regex(?director,"Shetty") .
OPTIONAL { ?title Netflix:directoris ?coDirector . FILTER (!regex(?coDirector,"Shetty")).}
}
LIMIT 500

Query Command:-

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netflix.csv --query=C:\Users\hanum\Desktop\2a.rq>Q2-a.txt

(b) FILTER is used to retrieve the movies of comedy and drama genre.

Query:-

```
prefix Netflix: <http://netflix.org//A4Q1//>

SELECT ?title ?genere FROM
<http://iiitd.ac.in/sweb/MT19123/newmoviesgraph>
FROM <http://iiitd.ac.in/sweb/MT19123/oldmoviesgraph>
WHERE {
?title Netflix:listed_inis ?genere
        FILTER
(regex(?genere,"Comedies")||regex(?genere,"Dramas")||regex(?genere,"Comedy
"))
}
LIMIT 500
```

Query command:-

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netflix.csv --query=C:\Users\hanum\Desktop\2b.rq>Q2-b.txt

(c) Query

```
prefix Netflix: <http://netflix.org//A4Q1//>

SELECT ?title ?releaseDate ?country ?description FROM
<http://iiitd.ac.in/sweb/MT19123/newmoviesgraph>
FROM <http://iiitd.ac.in/sweb/MT19123/oldmoviesgraph>
WHERE {
  ?title Netflix:release_yearis ?releaseDate .
  ?title Netflix:countryis ?country .
  ?title Netflix:descriptionis ?description .
     FILTER ( ?releaseDate >= "2010" && ?releaseDate <= "2020" &&
regex(?country,"United States")  && regex(?description,"couple"))
}
LIMIT 500
```

Query command

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netflix.csv --query=C:\Users\hanum\Desktop\2c.rq>Q2-c.txt

(d) Query

```
prefix Netflix: <http://netflix.org//A4Q1//>
SELECT distinct ?movie1 ?movie2 ?director1 ?director2 ?duration FROM <http://iiitd.ac.in/sweb/MT19123/newmoviesgraph>
FROM <http://iiitd.ac.in/sweb/MT19123/oldmoviesgraph>
Where {
 ?movie1 Netflix:directoris ?director1.
      OPTIONAL { ?movie2 Netflix:directoris ?director2 FILTER ((?director2=?director1) && (?movie1 != ?movie2) && ?director1!="" && ?director2!="") }
  ?movie1 Netflix:durationis ?duration Filter ( ?duration>="60" && ?movie1 !=" && ?movie2 !=")
}
```

Query command:-

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netflix.csv --query=C:\Users\hanum\Desktop\2d.rq>Q2-d.txt

(e) Query

```
prefix Netflix: <http://netflix.org//A4Q1//>

SELECT DISTINCT ?Movie ?Country ?Rating ?genere ?duration FROM <http://iiitd.ac.in/sweb/MT19123/newmoviesgraph>
FROM <http://iiitd.ac.in/sweb/MT19123/oldmoviesgraph>
Where {
            ?Movie Netflix:countryis ?Country . FILTER (regex(?Country,"India")||regex(?Country,"United Kingdom")).
 ?Movie Netflix:ratingis ?Rating . FILTER regex(?Rating,"TV") .
            ?Movie Netflix:listed_inis ?genere . FILTER (regex(?genere,"Documentaries")||regex(?genere,"Dramas")) .
 ?Movie Netflix:durationis ?duration . FILTER regex(?duration,"102 min") .
}
LIMIT 500
```

Query command:-

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netflix.csv --query=C:\Users\hanum\Desktop\2e.rq>Q2-e.txt

```
C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netfl
ix.csv --query=C:\Users\hanum\Desktop\2d.rq>Q2-d.txt

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netfl
ix.csv --query=C:\Users\hanum\Desktop\2a.rq>Q2-a.txt

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netfl
ix.csv --query=C:\Users\hanum\Desktop\2b.rq>Q2-b.txt

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netfl
ix.csv --query=C:\Users\hanum\Desktop\2c.rq>Q2-c.txt

C:\Users\hanum\Desktop\fuseki\bin>ruby s-query --service=http://DESKTOP-JHTOKAN:3030/Netfl
ix.csv --query=C:\Users\hanum\Desktop\2e.rq>Q2-e.txt

C:\Users\hanum\Desktop\fuseki\bin>
```