For my final assignment, I chose to visualize some of my RDF triples using the SPARQL and ggplot2 packages in R.

I chose to make 5 visualizations that I felt would best represent the work that I had done to reconcile the dataset.

Most of the data manipulation was carried out in the R Scripts that I have stored in this GitHub repository:

https://github.com/jtornberg97/INLS-620-Final-Project

The SPARQL queries that I ran to retrieve the data for each visualization are listed below:

Normalized Average Home Runs Allowed Per Team 1960-2015

```
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX MLB: <http://localhost:3333/>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT ?TeamSeason ?TeamName ?HRA ?yearID
WHERE {
 ?TeamSeason MLB:HomeRunsAllowed ?HRA .
 ?TeamSeason MLB:TeamName ?TeamName .
 ?TeamSeason MLB:Year ?yearID .
  FILTER (?yearID > 1960).
}
```

Normalized Earned Run Average Per Team 1960-2015

```
PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>
PREFIX MLB: <http://localhost:3333/>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
SELECT ?TeamSeason ?TeamName ?ERA ?yearID
WHERE {
 ?TeamSeason MLB:EarnedRunAverage ?ERA .
 ?TeamSeason MLB:TeamName ?TeamName .
 ?TeamSeason MLB:Year ?yearID .
   FILTER (?yearID > 1960).
}
```

Home Runs Per Team 1980 v.s. 2000

```
SELECT ?TeamName ?HR ?yearID
WHERE {
 ?TeamSeason MLB:HomeRuns ?HR .
```

```
   ?TeamSeason MLB:TeamName ?TeamName .
   ?TeamSeason MLB:Year ?yearID .
      FILTER(?yearID = 1980)
  }
```

Total Home Runs Per Season 1900-2015

```
  SELECT ?TeamSeason ?HR ?yearID
  WHERE {
   ?TeamSeason MLB:HomeRuns ?HR .
   ?TeamSeason MLB:Year ?yearID .
      FILTER ((?yearID > 1900) && (?yearID < 2016))
  }
```

Chicago Cubs Home Runs Per Year 1980-2000

```
  SELECT ?TeamName ?HR ?yearID
  WHERE {
   ?TeamSeason MLB:HomeRuns ?HR .
   ?TeamSeason MLB:TeamName ?TeamName .
      FILTER (?TeamName = 'Chicago Cubs')
   ?TeamSeason MLB:Year ?yearID .
      FILTER (?yearID > 1989 && ?yearID < 2001) .
}
```