DASC 1104 Project Proposal

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My blog is available at https://dasc1104-blog-project.netlify.app

```
##    season episode              title imdb_rating total_votes  air_date
## 1       1       1              Pilot         7.6        3706 2005-03-24
## 2       1       2      Diversity Day         8.3        3566 2005-03-29
## 3       1       3        Health Care         7.9        2983 2005-04-05
## 4       1       4       The Alliance         8.1        2886 2005-04-12
## 5       1       5         Basketball         8.4        3179 2005-04-19
## 6       1       6           Hot Girl         7.8        2852 2005-04-26
## 7       2       1        The Dundies         8.7        3213 2005-09-20
## 8       2       2  Sexual Harassment         8.2        2736 2005-09-27
## 9       2       3     Office Olympics         8.4        2742 2005-10-04
## 10      2       4           The Fire         8.4        2713 2005-10-11
```

For this project, I am going to be looking at Office Ratings data set contained in the office_ratings.csv file on Tidy Tuesdays website. This data set contains ratings of each episode from the famous US adapted sitcom television series. The data has 188 observation and 6 variables. The variable season tells us which season of the show is being selected from. The variable episode tells us which episode of the season is being selected. The variable title tells us the title of the episode being selected. The variable imdb_rating tell us the rating given for the episode by imdb. The variable total_votes tells us how many people contributed to the imdb_rating; and finally, the variable air_data tells us when that specific episode was aired.

Question 1: What is the highest rated episode? Question 2: Have the ratings of the episodes changed over time? Question 3: Which season contains the highest average rating?

```
## Observations: 3,370
## Variables: 5
## $ broad_field <fct> Life sciences, Life sciences, Life sciences, Life sciences, Li...
## $ major_field <fct> Agricultural sciences and natural resources, Agricultural scie...
## $ field       <fct> "Agricultural economics", "Agricultural and horticultural plan...
## $ year        <int> 2008, 2008, 2008, 2008, 2008, 2008, 2008, 2008, 2008, 2008, 20...
## $ n_phds      <int> 111, 28, 3, 68, 41, 18, 77, 182, 52, 96, 41, 32, 44, 17, 50, N...
```

Using the data from TidyTuesdays website, I am going to look at mortgage rates, times in which there was a recession in the United States, and the housing price index over time. The first data set contains 2,492 observations and 9 variables. The second data set contains 14 observations and 7 variables. The third data set contains 26,877 observations and 5 variables. From these data sets I can compare the how mortgage rates and the housing price index compare to times in which the United States was in a recession, or was not in a recession.

Question 1: Is there a trend for housing price index during a recession? Question 2: Which recession was the worst in terms of mortgage rates and housing price index? Question 3: Is there a trend for mortgage rates during a recession?