Problem 1

Scripts:

1. aniredn_Fetch_Twitter.R – To fetch data from twitter and store in JSON format
2. aniredn_JSON_Reader.R – To read the JSON formatted file into R and create a dataframe

Packages Used:

1. **twitteR** – The twitteR package provides an interface to connect with the Twitter web API.
    a) *setup_twitter_oauth()* – This function takes the consumer key, consumer secret key, access token and access secret token as input and establishes a connection with Twitter.
    b) *searchTwitter()* – This function takes the search query, number of tweets and other criteria such as geocode and returns the tweets based on the search query. The tweets are returned as a list.
    c) *twListToDF()* – This function takes the tweets list as input and returns a data frame with the respective columns.
2. **jsonlite** – The jsonlite package provides functions to manage and process JSON objects.
    a) *toJSON()* – This function takes a data frame as input and returns a JSON object as output. When 'pretty' parameter is set to 'TRUE', the function returns the JSON object in an indented format.
    b) *fromJSON()* – This function takes as input a JSON file and outputs a dataframe.
3. **Other functions used** –
    a) *write()* – This function takes as input the R objects and saves them as a file in the path specified.

Details about Data collected:

1. Apartment Rental Data: This data was collected using keywords such as "houses", "apartments", etc., from Twitter using the twitteR package. The data is stored in separate files with the file name set to the keywords used to search. The data was collected during 28th – 1st March 2016.

2. Election Data: This data was collected using a combination of keywords such as "US+elections",etc., from Twitter using the twitteR package. The data is stored in separate files with the file name set to the keywords used to search. The data was collected during 21st February and 1st March 2016.