Anamitra Bhattacharyya Predict 420-DL, Section 55 Assignment 4 (May 16, 2016)

1) Python Code

```
import pandas as pd #import panda
import numpy as np
#all files are in the current working directory
from pandas import DataFrame
from pandas import Series
#Load 100506.json into a dictionary of dictionaries
with open('100506.json') as input_file:
jsondat=json.load(input file)
jsondat.keys()
#Parse data from 'Reviews' dictionary
reviews = []#create an empty reviews list
Reviews = jsondat["Reviews"]
for review in Reviews:
review_dict = {}#create empty review_dict
review_dict['Author'] = review['Author']
review_dict['Date'] = review['Date']
review_dict['Ratings'] = review['Ratings']
reviews.append(review dict)
len(reviews)#48 line entries
#import reviews list into a dataframe (Author, Date, Ratings)
df = pd.DataFrame(reviews)
df.shape#df has the right size (48 x 3)
#Parse comments from Reviews and add to new dataframe, comments
comments=[]
for review in Reviews:
comment_dict = {}#create empty comment_dict
comment_dict['Author'] = review['Author']
comment dict['Date'] = review['Date']
comment_dict['Content'] = review['Content']
comments.append(comment_dict)
len(comments)#48 line entries, two columns Author and Content
#import comments list into a dataframe
df1 = pd.DataFrame(comments)
dfl.shape#df has the right size (48 x 3)
#Archiving data: pickle and text files
#Pickle the dataframes created
import cPickle as pickle
pickle.dump(df,open('reviewslist.p', 'wb'))
pickle.dump(df1,open('commentslist.p', 'wb'))
#Create csv file for df1 (comments)
df1.to_csv("commentslist.csv")
```

Example output:

Reviews data frame (df)

In [874]: df.head() Out[874]:

Author	Date	Ratings	
0 luvsroadtrips	January 3, 2012	{u'Service': u'1', u'Cleanliness': u'1', u'Ove	
1 estelle e	December 29, 2011	{u'Service': u'4', u'Cleanliness': u'4', u'Ove	
2 RobertEddy	December 20, 2011	{u'Service': u'1', u'Cleanliness': u'2', u'Ove	
3 James R	October 30, 2011	{u'Service': u'1', u'Cleanliness': u'1', u'Ove	
4 Shobha49	September 14, 2011	{u'Service': u'1', u'Overall': u'1.0', u'Locat	

Comments data frame (df1)

In [873]: df1.head() Out[873]:

	Author	Content	Date
0	luvsroadtrips	This place is not even suitable for the homele	January 3, 2012
1	estelle e	We stayed in downtown hotel Seattle for two ni	December 29, 2011
2	RobertEddy	i made reservations and when i showed up, i qu	December 20, 2011
3	James R	This hotel is so bad it's a joke. I could bare	October 30, 2011
4	Shobha49	My husband and I stayed at this hotel from 16t	September 14, 2011