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IS 340
M & W 11:00am-12:15pm

Extra Credit Assignment 2

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from csv import *
from textblob import TextBlob
from statistics import *

#import csv file
infile = open('applebees.csv', 'r')
#to be able to read it, have a csv reader
csvReader = reader(infile, delimiter=',')

#have stars and text be able to be read from csv and be put into a list
stars=[]
text=[]

i=0
for row in csvReader:
    if i>0:
        star= float(row[6])
        stars.append(star)

#get the polarity from the text in each row
        textReview=(row[8])
        b=TextBlob(textReview)
        polarity=b.sentiment.polarity
        text.append(polarity)

#make sure the list will keep going till the end
    i = i + 1
#print to make the list for stars and the polarity for the text
print(stars)
print(text)

infile.close()
#make a function for finding average of stars
def avgStars (stars):
    starRating=0
    total=0
    for i in stars:
        starRating= starRating +i
        total=total + 1
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    avg= starRating / total
    return avg
starsAvg=avgStars(stars)
print("The stars average is: ", "%.2f" %starsAvg)

#make a function for stars min
def starsMin (stars):
    min_value= None
    for i in stars:
        if not min_value:
            min_value = i
        elif i < min_value:
            min_value = i
    return min_value
minimumStars=starsMin(stars)
print("The minimum rating for stars is: ", minimumStars)
#Find the max rating of stars
def starsMax (stars):
    max_value= None
    for i in stars:
        if not max_value:
            max_value = i
        elif i > max_value:
            max_value = i
    return max_value
maximumStars=starsMax(stars)
print("The max rating of stars are: ", maximumStars)
#find the range between the highest and lowest rated star while using a function
def starsRange (stars):
    min_value= None
    for i in stars:
        if not min_value:
            min_value = i
        elif i < min_value:
            min_value = i
    max_value= None
    for i in stars:
        if not max_value:
            max_value = i
        elif i > max_value:
            max_value = i
    rangedValue = max_value - min_value
    return rangedValue
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rangeStars = starsRange (stars)
print("The range of star rating is: ", rangeStars)
#find the standard deviation of the stars
starsStdev = stdev(stars)
print("The standard deviation for stars is: ", "%.2f" %starsStdev)

#make a function for finding the average polarity
def avgPolarity (text):
    total=0
    polNum=0
    for i in text:
        total=total+1
        polNum=polNum+i
    avg=polNum/total
    return avg
polarityAvg=avgPolarity(text)
print("The polarity average is: ", "%.2f" %polarityAvg)
#make function for polarity min
def polMin (text):
    min_value= None
    for i in text:
        if not min_value:
            min_value = i
        elif i < min_value:
            min_value = i
    return min_value
minimumPol = polMin(text)
print("The minimum rating for polarity is: ", "%.2f" %minimumPol)
#make a function to find max polarity rating
def polMax (text):
    max_value= None
    for i in text:
        if not max_value:
            max_value = i
        elif i > max_value:
            max_value = i
    return max_value
maximumPol = polMax(text)
print("The maximum rating for polarity is: ", "%.2f" %maximumPol)
#find the range between the highest and lowest rating polarity while using a function
def polRange (text):
    min_value= None
    for i in text:
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        if not min_value:
            min_value = i
        elif i < min_value:
            min_value = i
    max_value= None
    for i in text:
        if not max_value:
            max_value = i
        elif i > max_value:
            max_value = i
    rangedValue = max_value - min_value
    return rangedValue
rangePol = polRange (text)
print("The range of polarity is: ", "%.2f" %rangePol)
#find the standard deviation of the polarity from the text
polStdev = stdev(text)
print("The standard deviation for polarity is: ", "%.2f" %polStdev)
```

What can be said about Applebee's performance is that the average rating for the restaurant is a 2.5 stars out of 5. That could be considered mediocre in the fast food business. While the sentiment polarity taken from the reviews have an average of 0.08 meaning that the reviews were kind of slightly positive but because there were also some negative reviews, that's why it is kind of on the neutral side.