Plan for Data Retrieval and analysis

With the Yelp API, I want to discover the sentiment analysis using VaderSentiment of the ramen places in Pittsburgh, Pennsylvania, since when I went this past summer I saw many places that looked promising but I didn't get to try.

I used the search term 'ramen' and the location 'Pittsburgh, PA' in my search query.

The business insight I want to discover in addition to personal curiosity, is to gauge the interest in ramen(japanese/korean) restaurants in this city based on the overall sentiment from the yelp reviews.

In [ ]:
```python
import pandas as pd
from yelpapi import YelpAPI

api_key="I1IOqaJO_GmgvsxusTF7udhYmBMKPTkGYRvTfCymqfp_epg-CJOkrd9HzSk7Ga4HY
yelp_api = YelpAPI(api_key)
search_term = "ramen"
location_term = "Pittsburgh, PA"
search_results = yelp_api.search_query(term=search_term, location=location
# List of results in search_results['businesses']
print(search_results)

result_df = pd.DataFrame.from_dict(search_results['businesses'])
result_df.to_csv("yelpapi_businesses_results.csv")
```

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w/o.jpg', 'is_closed': False, 'url': 'https://www.yelp.com/biz/yuzu-kitchen
-pittsburgh-2?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&utm_campaign=yelp_api_
v3&utm_medium=api_v3_business_search&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'r
eview_count': 309, 'categories': [{'alias': 'ramen', 'title': 'Ramen'}, {'a
lias': 'cocktailbars', 'title': 'Cocktail Bars'}, {'alias': 'venues', 'titl
e': 'Venues & Event Spaces'}], 'rating': 4.0, 'coordinates': {'latitude': 4
0.439707, 'longitude': -80.001261}, 'transactions': ['delivery'], 'price':
'$$', 'location': {'address1': '409 Wood St', 'address2': '', 'address3': N
one, 'city': 'Pittsburgh', 'zip_code': '15222', 'country': 'US', 'state':
'PA', 'display_address': ['409 Wood St', 'Pittsburgh, PA 15222']}, 'phone':

'+14122889900', 'display_phone': '(412) 288-9900', 'distance': 1955.4031260
498014}], 'total': 106, 'region': {'center': {'longitude': -79.979095458984
38, 'latitude': 40.44467404448069}}}

In [ ]:
```python
id_for_reviews = "ramen-king-canonsburg-3" #use alias from data
review_response = yelp_api.reviews_query(id=id_for_reviews) # List of revi
print(review_response)
#Text is in element (review) text
for review in review_response['reviews']:
    print(review['text'])
#Converting list of json objects to Pandas Data Frame
result_df = pd.DataFrame.from_dict (review_response['reviews'])
print(result_df)
result_df.to_csv(f"{id_for_reviews}_yelpapi_businesses_results.csv")
```

{'reviews': [{'id': 'ocWOdKiy1ytweN9Znf6CLg', 'url': 'https://www.yelp.com/biz/ramen-king-canonsburg-3?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=ocWOdKiy1ytweN9Znf6CLg&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'The food was delicious!!! Staff was very friendly and helpful. And if you want to do takeout, they have the BEST takeout containers for their soups!!!\n\nThe...', 'rating': 5, 'time_created': '2023-08-19 14:12:47', 'user': {'id': 'BWID32vBEJ86jp5vtc2H0A', 'profile_url': 'https://www.yelp.com/user_details?userid=BWID32vBEJ86jp5vtc2H0A', 'image_url': 'https://s3-media3.fl.yelpcdn.com/photo/oO7r7xmwir_Sba_nUCCisQ/o.jpg', 'name': 'Amy S.'}}, {'id': '2s-Q449EJLjynsOw7D36Dg', 'url': 'https://www.yelp.com/biz/ramen-king-canonsburg-3?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=2s-Q449EJLjynsOw7D36Dg&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'We ordered delivery from Ramen King, and everything was delicious! The to-go bowls for their soup are genius - noodles up top separated from the broth...', 'rating': 5, 'time_created': '2023-11-27 17:03:35', 'user': {'id': 'oosXR1ENqMWC18Y1yRJxOg', 'profile_url': 'https://www.yelp.com/user_details?userid=oosXR1ENqMWC18Y1yRJxOg', 'image_url': 'https://s3-media1.fl.yelpcdn.com/photo/-01Pm6aM643MLIaCT8_7yQ/o.jpg', 'name': 'Jaclyn K.'}}, {'id': 'P7ilz6X_dJsirmzIVdcoVw', 'url': 'https://www.yelp.com/biz/ramen-king-canonsburg-3?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=P7ilz6X_dJsirmzIVdcoVw&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'NOW KNOWN AS RAMEN KING\n\n\nDefinitely the best sushi in the area by a long shot! Yes, you will pay a few dollars more, but the quality is double of what you...', 'rating': 5, 'time_created': '2023-02-04 06:27:43', 'user': {'id': 'royL3mfw4TOy76BRJDj8qg', 'profile_url': 'https://www.yelp.com/user_details?userid=royL3mfw4TOy76BRJDj8qg', 'image_url': 'https://s3-media3.fl.yelpcdn.com/photo/G2dNrfoHQwQymd2Fbm5lQQ/o.jpg', 'name': 'Kara B.'}}], 'total': 30, 'possible_languages': ['en', 'zh']}
The food was delicious!!! Staff was very friendly and helpful. And if you want to do takeout, they have the BEST takeout containers for their soups!!!

The...
We ordered delivery from Ramen King, and everything was delicious! The to-go bowls for their soup are genius - noodles up top separated from the broth...
NOW KNOWN AS RAMEN KING

Definitely the best sushi in the area by a long shot! Yes, you will pay a few dollars more, but the quality is double of what you...

```
                          id                                                 url \
0  ocWOdKiy1ytweN9Znf6CLg  https://www.yelp.com/biz/ramen-king-canonsbur
g...
1  2s-Q449EJLjynsOw7D36Dg  https://www.yelp.com/biz/ramen-king-canonsbur
g...
2  P7ilz6X_dJsirmzIVdcoVw  https://www.yelp.com/biz/ramen-king-canonsbur
g...

                                                text  rating  \
```

```
0  The food was delicious!!! Staff was very frien...        5
1  We ordered delivery from Ramen King, and every...        5
2  NOW KNOWN AS RAMEN KING\n\n\nDefinitely the be...        5

            time_created                                                user
0  2023-08-19 14:12:47  {'id': 'BWID32vBEJ86jp5vtc2H0A', 'profile_url'...
1  2023-11-27 17:03:35  {'id': 'oosXR1ENqMWC18Y1yRJxOg', 'profile_url'...
2  2023-02-04 06:27:43  {'id': 'royL3mfw4TOy76BRJDj8qg', 'profile_url'...
```

In [ ]:
```python
id_for_reviews = "little-tokyo-pittsburgh" #use alias from data
review_response = yelp_api.reviews_query(id=id_for_reviews) # List of revi
print(review_response)
#Text is in element (review) text
for review in review_response['reviews']:
    print(review['text'])
#Converting list of json objects to Pandas Data Frame
result_df = pd.DataFrame.from_dict (review_response['reviews'])
print(result_df)
result_df.to_csv(f"{id_for_reviews}_yelpapi_businesses_results.csv")
```

{'reviews': [{'id': 'M68kfz5LNP12dKTl6m9nUA', 'url': 'https://www.yelp.com/biz/little-tokyo-pittsburgh?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=M68kfz5LNP12dKTl6m9nUA&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': "| Mt. Lebo - Pittsburgh, PA | \nLittle Tokyo \n\n we're a family that loves little Tokyo! They have something for everyone. Hibachi for me, sushi for the rest...", 'rating': 5, 'time_created': '2023-11-19 05:48:32', 'user': {'id': 'R5iKNIjsVPV5S6tVUaJbvg', 'profile_url': 'https://www.yelp.com/user_details?userid=R5iKNIjsVPV5S6tVUaJbvg', 'image_url': 'https://s3-media1.fl.yelpcdn.com/photo/zCvbnqDvw4bScsF8Tg_eOQ/o.jpg', 'name': 'Lisa S.'}}, {'id': 'XnOVD7KceuavqYHPtSH2kg', 'url': 'https://www.yelp.com/biz/little-tokyo-pittsburgh?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=XnOVD7KceuavqYHPtSH2kg&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'Little Tokyo was an unexpected find. We were passing by and randomly decided to drop in for dinner because it looked interesting. The restaurant gives me...', 'rating': 4, 'time_created': '2023-09-23 08:52:52', 'user': {'id': 'W67UcQn8-BIHcifPwFM2ow', 'profile_url': 'https://www.yelp.com/user_details?userid=W67UcQn8-BIHcifPwFM2ow', 'image_url': 'https://s3-media2.fl.yelpcdn.com/photo/ojQThZb6435DD6twRBQxXg/o.jpg', 'name': 'Kaylie W.'}}, {'id': 'EF77cap4AwyEq6j-ihyWxA', 'url': 'https://www.yelp.com/biz/little-tokyo-pittsburgh?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=EF77cap4AwyEq6j-ihyWxA&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'I love Little Tokyo! I recommend the miso soup it was straight bussin. A little pricey but you get your moneys worth with taste.', 'rating': 4, 'time_created': '2023-11-06 16:55:05', 'user': {'id': 'DD73vnQayOXJ38u2YEByRA', 'profile_url': 'https://www.yelp.com/user_details?userid=DD73vnQayOXJ38u2YEByRA', 'image_url': 'https://s3-media2.fl.yelpcdn.com/photo/3svlmgHWeqIVOr8wy5SBbg/o.jpg', 'name': 'Otto M.'}}], 'total': 277, 'possible_languages': ['en', 'fr']}

```
| Mt. Lebo - Pittsburgh, PA |
Little Tokyo

 we're a family that loves little Tokyo! They have something for everyone.
Hibachi for me, sushi for the rest...
Little Tokyo was an unexpected find. We were passing by and randomly decide
d to drop in for dinner because it looked interesting. The restaurant gives
me...
I love Little Tokyo! I recommend the miso soup it was straight bussin. A li
ttle pricey but you get your moneys worth with taste.
                        id                                            ur
l  \
0  M68kfz5LNP12dKTl6m9nUA  https://www.yelp.com/biz/little-tokyo-pittsbu
r...
1  XnOVD7KceuavqYHPtSH2kg  https://www.yelp.com/biz/little-tokyo-pittsbu
r...
2  EF77cap4AwyEq6j-ihyWxA  https://www.yelp.com/biz/little-tokyo-pittsbu
r...


                                                text  rating  \
0  | Mt. Lebo - Pittsburgh, PA | \nLittle Tokyo \...       5
1  Little Tokyo was an unexpected find. We were p...       4
```

```
2  I love Little Tokyo! I recommend the miso soup...        4

              time_created                                              user
0  2023-11-19 05:48:32  {'id': 'R5iKNIjsVPV5S6tVUaJbvg', 'profile_url'...
1  2023-09-23 08:52:52  {'id': 'W67UcQn8-BIHcifPwFM2ow', 'profile_url'...
2  2023-11-06 16:55:05  {'id': 'DD73vnQayOXJ38u2YEByRA', 'profile_url'...
```

In [ ]:
```python
id_for_reviews = "fujiya-ramen-pittsburgh-2" #use alias from data
review_response = yelp_api.reviews_query(id=id_for_reviews) # List of revi
print(review_response)
#Text is in element (review) text
for review in review_response['reviews']:
    print(review['text'])
#Converting list of json objects to Pandas Data Frame
result_df = pd.DataFrame.from_dict (review_response['reviews'])
print(result_df)
result_df.to_csv(f"{id_for_reviews}_yelpapi_businesses_results.csv")
```

{'reviews': [{'id': 'Pl75NFuN6fgSsaZHzBXE5w', 'url': 'https://www.yelp.com/biz/fujiya-ramen-pittsburgh-2?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=Pl75NFuN6fgSsaZHzBXE5w&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'Just around the corner from Walnut Street in Squirrel Hill is this treasure of a ramen restaurant like finding a pearl in an oyster! \nWe were hungry and...', 'rating': 5, 'time_created': '2023-10-23 14:06:29', 'user': {'id': '5FZvKqbyF2GKc16IK9kTlg', 'profile_url': 'https://www.yelp.com/user_details?userid=5FZvKqbyF2GKc16IK9kTlg', 'image_url': 'https://s3-media2.fl.yelpcdn.com/photo/YRX8XWrqDNA7odW6a8UoBw/o.jpg', 'name': 'Einas S.'}}, {'id': 'E8ic2My3JP6T_B-bRXdrNA', 'url': 'https://www.yelp.com/biz/fujiya-ramen-pittsburgh-2?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=E8ic2My3JP6T_B-bRXdrNA&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': "According to Fujiya Ramen's website, this restaurant is run by a Japanese father and son who strive to serve authentic Japanese cuisine. In addition to...", 'rating': 4, 'time_created': '2023-11-17 13:13:49', 'user': {'id': 'FW5F5QzzMoeRdIib1OyNOw', 'profile_url': 'https://www.yelp.com/user_details?userid=FW5F5QzzMoeRdIib1OyNOw', 'image_url': 'https://s3-media4.fl.yelpcdn.com/photo/wBtiQXMbokTkG0WhcTwkEg/o.jpg', 'name': 'Tiffany Y.'}}, {'id': 'Or7E8XgJGPQ_-rto-H5oDg', 'url': 'https://www.yelp.com/biz/fujiya-ramen-pittsburgh-2?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=Or7E8XgJGPQ_-rto-H5oDg&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'My daughter was craving ramen so we found this gem on Yelp. Everything was delicious and the service was great. The sake menu is extensive. We ordered:\n-...', 'rating': 5, 'time_created': '2023-08-25 06:53:03', 'user': {'id': 'MjbSNoaPW1i6GzVVOG6Hfg', 'profile_url': 'https://www.yelp.com/user_details?userid=MjbSNoaPW1i6GzVVOG6Hfg', 'image_url': 'https://s3-media3.fl.yelpcdn.com/photo/VMCYGMxQbfvdrWgkYcHSUw/o.jpg', 'name': 'M S.'}}], 'total': 234, 'possible_languages': ['en', 'de', 'ja', 'es', 'fr']}
Just around the corner from Walnut Street in Squirrel Hill is this treasure of a ramen restaurant like finding a pearl in an oyster!
We were hungry and...
According to Fujiya Ramen's website, this restaurant is run by a Japanese father and son who strive to serve authentic Japanese cuisine. In addition to...
My daughter was craving ramen so we found this gem on Yelp. Everything was delicious and the service was great. The sake menu is extensive. We ordered:
-...

```
                        id                                                ur
l  \
0  Pl75NFuN6fgSsaZHzBXE5w  https://www.yelp.com/biz/fujiya-ramen-pittsbu
r...
1  E8ic2My3JP6T_B-bRXdrNA  https://www.yelp.com/biz/fujiya-ramen-pittsbu
r...
2  Or7E8XgJGPQ_-rto-H5oDg  https://www.yelp.com/biz/fujiya-ramen-pittsbu
r...

                                                text  rating  \
0  Just around the corner from Walnut Street in S...       5
```

```
      1  According to Fujiya Ramen's website, this rest...         4
      2  My daughter was craving ramen so we found this...         5

                time_created                                                  user
      0  2023-10-23 14:06:29  {'id': '5FZvKqbyF2GKc16IK9kTlg', 'profile_url'...
      1  2023-11-17 13:13:49  {'id': 'FW5F5QzzMoeRdIib1OyNOw', 'profile_url'...
      2  2023-08-25 06:53:03  {'id': 'MjbSNoaPW1i6GzVVOG6Hfg', 'profile_url'...
```

```python
id_for_reviews = "eiwa-japanese-ramen-and-bar-pittsburgh" #use alias from
review_response = yelp_api.reviews_query(id=id_for_reviews) # List of revi
print(review_response)
#Text is in element (review) text
for review in review_response['reviews']:
    print(review['text'])
#Converting list of json objects to Pandas Data Frame
result_df = pd.DataFrame.from_dict (review_response['reviews'])
print(result_df)
result_df.to_csv(f"{id_for_reviews}_yelpapi_businesses_results.csv")
```

{'reviews': [{'id': '5Gz3XJGyVV2pa1hNEuNLUQ', 'url': 'https://www.yelp.com/
biz/eiwa-japanese-ramen-and-bar-pittsburgh?adjust_creative=riGs9HFJ8WOkIw6X
Yd7onA&hrid=5Gz3XJGyVV2pa1hNEuNLUQ&utm_campaign=yelp_api_v3&utm_medium=api_
v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': '4.5 stars
overall.\n\nEiwa is a restaurant that opened in June 2023 and serves mostly
Japanese and some other Asian foods. Please see my attached photos for...',
'rating': 5, 'time_created': '2023-07-09 12:44:44', 'user': {'id': 'FW5F5Qz
zMoeRdIib1OyNOw', 'profile_url': 'https://www.yelp.com/user_details?userid=
FW5F5QzzMoeRdIib1OyNOw', 'image_url': 'https://s3-media4.fl.yelpcdn.com/pho
to/wBtiQXMbokTkG0WhcTwkEg/o.jpg', 'name': 'Tiffany Y.'}}, {'id': 'ZU6yUh1HL
V3_S8I9mIQ0fQ', 'url': 'https://www.yelp.com/biz/eiwa-japanese-ramen-and-ba
r-pittsburgh?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=ZU6yUh1HLV3_S8I9mI
Q0fQ&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_source
=riGs9HFJ8WOkIw6XYd7onA', 'text': "We came in for pho and were told the 'ch
ef is off today' and I had to pick something else. So I did, and was told
'we don't have that, the chef is off...", 'rating': 1, 'time_created': '202
3-10-04 08:44:46', 'user': {'id': 'H5g9ejAiNIBEvVfAf0RdMg', 'profile_url':
'https://www.yelp.com/user_details?userid=H5g9ejAiNIBEvVfAf0RdMg', 'image_u
rl': 'https://s3-media3.fl.yelpcdn.com/photo/r8vnx8WuIIQk0rdJ0Tdw_w/o.jpg',
'name': 'Jason P.'}}, {'id': 'aP5KtDudGXiG44u8f1S8ww', 'url': 'https://www.
yelp.com/biz/eiwa-japanese-ramen-and-bar-pittsburgh?adjust_creative=riGs9HF
J8WOkIw6XYd7onA&hrid=aP5KtDudGXiG44u8f1S8ww&utm_campaign=yelp_api_v3&utm_me
dium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': "P
retty decent food I had from here. I tried the place that used to be here,
and I'm a bit sad they closed down. Personally I preferred the last restaur
ant....", 'rating': 3, 'time_created': '2023-09-01 16:40:03', 'user': {'i
d': 'o-Td0BfrYdYt-SsexsV8nA', 'profile_url': 'https://www.yelp.com/user_det
ails?userid=o-Td0BfrYdYt-SsexsV8nA', 'image_url': 'https://s3-media2.fl.yel
pcdn.com/photo/9z87e0r--1Esn5E871gVvA/o.jpg', 'name': 'Ulyana K.'}}], 'tota
l': 31, 'possible_languages': ['en']}
4.5 stars overall.

Eiwa is a restaurant that opened in June 2023 and serves mostly Japanese an
d some other Asian foods. Please see my attached photos for...
We came in for pho and were told the 'chef is off today' and I had to pick
something else. So I did, and was told 'we don't have that, the chef is of
f...
Pretty decent food I had from here. I tried the place that used to be here,
and I'm a bit sad they closed down. Personally I preferred the last restaur
ant....
                          id   ur
l \
0 5Gz3XJGyVV2pa1hNEuNLUQ https://www.yelp.com/biz/eiwa-japanese-ramen-
a...
1 ZU6yUh1HLV3_S8I9mIQ0fQ https://www.yelp.com/biz/eiwa-japanese-ramen-
a...
2 aP5KtDudGXiG44u8f1S8ww https://www.yelp.com/biz/eiwa-japanese-ramen-
a...

                                              text rating \
0 4.5 stars overall.\n\nEiwa is a restaurant tha...   5

```
1  We came in for pho and were told the 'chef is ...        1
2  Pretty decent food I had from here. I tried th...        3

         time_created                                                    user
0  2023-07-09 12:44:44  {'id': 'FW5F5QzzMoeRdIib1OyNOw', 'profile_url'...
1  2023-10-04 08:44:46  {'id': 'H5g9ejAiNIBEvVfAf0RdMg', 'profile_url'...
2  2023-09-01 16:40:03  {'id': 'o-Td0BfrYdYt-SsexsV8nA', 'profile_url'...
```

```python
id_for_reviews = "love-ramen-pittsburgh-7" #use alias from data
review_response = yelp_api.reviews_query(id=id_for_reviews) # List of revi
print(review_response)
#Text is in element (review) text
for review in review_response['reviews']:
    print(review['text'])
#Converting list of json objects to Pandas Data Frame
result_df = pd.DataFrame.from_dict (review_response['reviews'])
print(result_df)
result_df.to_csv(f"{id_for_reviews}_yelpapi_businesses_results.csv")
```

{'reviews': [{'id': 'BYcLQsbyMPH03Xo-Yha3-g', 'url': 'https://www.yelp.com/
biz/love-ramen-pittsburgh-7?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=BYc
LQsbyMPH03Xo-Yha3-g&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_rev
iews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'text': 'Very good food, as a coll
ege student on a budget the "weigh your meal for the price" system works we
ll. Definitely plan on coming back in the future. Only...', 'rating': 4, 't
ime_created': '2022-03-15 20:31:59', 'user': {'id': 'VD7yhJxp4CHVJLrXiKDhY
w', 'profile_url': 'https://www.yelp.com/user_details?userid=VD7yhJxp4CHVJL
rXiKDhYw', 'image_url': 'https://s3-media4.fl.yelpcdn.com/photo/0ZtyrC3RQrh
ps3qRBCmyMg/o.jpg', 'name': 'Katy K.'}}, {'id': 'c3WsbbL-oo5-o5plEn8QWw',
'url': 'https://www.yelp.com/biz/love-ramen-pittsburgh-7?adjust_creative=ri
Gs9HFJ8WOkIw6XYd7onA&hrid=c3WsbbL-oo5-o5plEn8QWw&utm_campaign=yelp_api_v3&u
tm_medium=api_v3_business_reviews&utm_source=riGs9HFJ8WOkIw6XYd7onA', 'tex
t': 'Basics to Love Ramen:\n\n1) Hard to find since sign really is not visi
ble! Look for Chinese wording of Fifth Street and inside has a reddish the
me.\n\n2) Not...', 'rating': 4, 'time_created': '2019-10-13 19:52:51', 'use
r': {'id': '6tbXpUIU6upoeqWNDo9k_A', 'profile_url': 'https://www.yelp.com/u
ser_details?userid=6tbXpUIU6upoeqWNDo9k_A', 'image_url': 'https://s3-media
4.fl.yelpcdn.com/photo/jCsDYTvL6WHwH9F49um9pA/o.jpg', 'name': 'Ken L.'}},
{'id': 'jxv2kLDcqJek7lEOd442jQ', 'url': 'https://www.yelp.com/biz/love-rame
n-pittsburgh-7?adjust_creative=riGs9HFJ8WOkIw6XYd7onA&hrid=jxv2kLDcqJek7lEO
d442jQ&utm_campaign=yelp_api_v3&utm_medium=api_v3_business_reviews&utm_sour
ce=riGs9HFJ8WOkIw6XYd7onA', 'text': 'This is my go-to place after a day of
work/school! You could choose from their menu or make your own bowl of nood
les which you would pay by weight. If you...', 'rating': 5, 'time_created':
'2021-07-29 14:19:22', 'user': {'id': 'jAyFotJCNFkHeHQQyJBRLg', 'profile_ur
l': 'https://www.yelp.com/user_details?userid=jAyFotJCNFkHeHQQyJBRLg', 'ima
ge_url': 'https://s3-media3.fl.yelpcdn.com/photo/b51Sk6qYz1mk6v_FneQO5g/o.j
pg', 'name': 'James P.'}}], 'total': 7, 'possible_languages': ['en']}
Very good food, as a college student on a budget the "weigh your meal for t
he price" system works well. Definitely plan on coming back in the future.
Only...
Basics to Love Ramen:

1) Hard to find since sign really is not visible! Look for Chinese wording
of Fifth Street and inside has a reddish theme.

2) Not...
This is my go-to place after a day of work/school! You could choose from th
eir menu or make your own bowl of noodles which you would pay by weight. If
you...
                           id   ur
l \
0 BYcLQsbyMPH03Xo-Yha3-g https://www.yelp.com/biz/love-ramen-pittsburg
h...
1 c3WsbbL-oo5-o5plEn8QWw https://www.yelp.com/biz/love-ramen-pittsburg
h...
2 jxv2kLDcqJek7lEOd442jQ https://www.yelp.com/biz/love-ramen-pittsburg
h...

                                                text rating \

```
0  Very good food, as a college student on a budg...      4
1  Basics to Love Ramen:\n\n1) Hard to find since...      4
2  This is my go-to place after a day of work/sch...      5

            time_created                                              user
0  2022-03-15 20:31:59  {'id': 'VD7yhJxp4CHVJLrXiKDhYw', 'profile_url'...
1  2019-10-13 19:52:51  {'id': '6tbXpUIU6upoeqWNDo9k_A', 'profile_url'...
2  2021-07-29 14:19:22  {'id': 'jAyFotJCNFkHeHQQyJBRLg', 'profile_url'...
```

Sentiment Analysis Starts

In [ ]:
```python
from vaderSentiment.vaderSentiment import SentimentIntensityAnalyzer

analyzer = SentimentIntensityAnalyzer()
review_response = pd.read_csv('ramen-king-canonsburg-3_yelpapi_businesses_

for review in review_response['text']:
    sentiment_score = analyzer.polarity_scores(review)
    print(review)
    print(sentiment_score)
    print('\n')
```

```
The food was delicious!!! Staff was very friendly and helpful. And if you w
ant to do takeout, they have the BEST takeout containers for their soups!!!

The...
{'neg': 0.0, 'neu': 0.555, 'pos': 0.445, 'compound': 0.9562}


We ordered delivery from Ramen King, and everything was delicious! The to-g
o bowls for their soup are genius - noodles up top separated from the brot
h...
{'neg': 0.0, 'neu': 0.806, 'pos': 0.194, 'compound': 0.6996}


NOW KNOWN AS RAMEN KING


Definitely the best sushi in the area by a long shot! Yes, you will pay a f
ew dollars more, but the quality is double of what you...
{'neg': 0.034, 'neu': 0.782, 'pos': 0.184, 'compound': 0.6588}
```

In [ ]:
```python
analyzer = SentimentIntensityAnalyzer()
review_response = pd.read_csv('love-ramen-pittsburgh-7_yelpapi_businesses_

for review in review_response['text']:
    sentiment_score = analyzer.polarity_scores(review)
    print(review)
```

```
        print(sentiment_score)
        print('\n')
```

Very good food as a college student on a budget the ""weigh your meal for t
he price"" system works well. Definitely plan on coming back in the future.
Only
{'neg': 0.0, 'neu': 0.765, 'pos': 0.235, 'compound': 0.7902}

Basics to Love Ramen: Not
{'neg': 0.0, 'neu': 0.488, 'pos': 0.512, 'compound': 0.6369}

This is my go-to place after a day of work/school! You could choose from th
eir menu or make your own bowl of noodles which you would pay by weight. If
you
{'neg': 0.053, 'neu': 0.947, 'pos': 0.0, 'compound': -0.1759}

In [ ]:
```
analyzer = SentimentIntensityAnalyzer()
review_response = pd.read_csv('little-tokyo-pittsburgh_yelpapi_businesses_

for review in review_response['text']:
    sentiment_score = analyzer.polarity_scores(review)
    print(review)
    print(sentiment_score)
    print('\n')
```

| Mt. Lebo - Pittsburgh, PA |
Little Tokyo

 we're a family that loves little Tokyo! They have something for everyone.
Hibachi for me, sushi for the rest...
{'neg': 0.0, 'neu': 0.871, 'pos': 0.129, 'compound': 0.6114}

Little Tokyo was an unexpected find. We were passing by and randomly decide
d to drop in for dinner because it looked interesting. The restaurant gives
me...
{'neg': 0.073, 'neu': 0.833, 'pos': 0.094, 'compound': 0.1531}

I love Little Tokyo! I recommend the miso soup it was straight bussin. A li
ttle pricey but you get your moneys worth with taste.
{'neg': 0.0, 'neu': 0.706, 'pos': 0.294, 'compound': 0.7438}

In [ ]:
```
analyzer = SentimentIntensityAnalyzer()
review_response = pd.read_csv('fujiya-ramen-pittsburgh-2_yelpapi_businesse
```

```python
for review in review_response['text']:
    sentiment_score = analyzer.polarity_scores(review)
    print(review)
    print(sentiment_score)
    print('\n')
```

```
Just around the corner from Walnut Street in Squirrel Hill is this treasure
of a ramen restaurant like finding a pearl in an oyster!
We were hungry and...
{'neg': 0.0, 'neu': 0.831, 'pos': 0.169, 'compound': 0.6476}


According to Fujiya Ramen's website, this restaurant is run by a Japanese f
ather and son who strive to serve authentic Japanese cuisine. In addition t
o...
{'neg': 0.0, 'neu': 1.0, 'pos': 0.0, 'compound': 0.0}


My daughter was craving ramen so we found this gem on Yelp. Everything was
delicious and the service was great. The sake menu is extensive. We ordere
d:
-...
{'neg': 0.0, 'neu': 0.769, 'pos': 0.231, 'compound': 0.8316}
```

In [ ]:
```python
analyzer = SentimentIntensityAnalyzer()
review_response = pd.read_csv('eiwa-japanese-ramen-and-bar-pittsburgh_yelp

for review in review_response['text']:
    sentiment_score = analyzer.polarity_scores(review)
    print(review)
    print(sentiment_score)
    print('\n')
```

```
4.5 stars overall.

Eiwa is a restaurant that opened in June 2023 and serves mostly Japanese an
d some other Asian foods. Please see my attached photos for...
{'neg': 0.0, 'neu': 0.919, 'pos': 0.081, 'compound': 0.3182}


We came in for pho and were told the 'chef is off today' and I had to pick
something else. So I did, and was told 'we don't have that, the chef is of
f...
{'neg': 0.0, 'neu': 1.0, 'pos': 0.0, 'compound': 0.0}


Pretty decent food I had from here. I tried the place that used to be here,
and I'm a bit sad they closed down. Personally I preferred the last restaur
ant....
{'neg': 0.09, 'neu': 0.816, 'pos': 0.093, 'compound': 0.0258}
```

Text Insights Section/Report

Based on a cumulative amount of 15 reviews across 5 ramen restaurants, the overall consensus was positive. There were only a few completely neutral or very slightly negative sentiment scores from the Vader algorithm. If I were to go back to Pittsburgh, I would go to Ramen King since they had the most positive sentiment scores; and if I were to open or cater some service or business to fans of asian food, I would certainly consider this city's population as a customer.