

```
In [199... import numpy as np
import pandas as pd
import re

In [200... data = pd.read_csv('McDonald_s_Reviews.csv', encoding='ISO-8859-1')

In [201... data.dropna(inplace = True)

In [202... pat1 = r'(\d\2)+'
errored_rows = data['review'].str.contains(pat)
data = data[~errored_rows]
data = data.reset_index(drop=True)

In [203... pat2 = r' stars?'
data['rating'] = data['rating'].str.replace(pat2, '', regex=True)
data['rating'] = data['rating'].astype(int)

In [204... # reviews are all within a year
pat3 = r' (hour|day|week|month|year)s? ago'
data['review_time'] = data['review_time'].str.replace(pat3, '', regex=True)
data['review_time'] = data['review_time'].str.replace('a', '1', regex=True)
data['review_time'] = data['review_time'].astype(int)

In [205... data = data[data['rating'] == 5]

In [206... data['rating_count'] = data['rating_count'].str.replace(',', '', regex=True)
data['rating_count'] = data['rating_count'].astype(int)

In [207... data = data.sort_values(by='rating_count', ascending=False)
data = data[data['rating_count'] > 15000]

In [208... data = data.reset_index(drop=True)

In [209... # count the frequency of a list of words that represent good mc and filters
good_mc = ['best', 'clean', 'great', 'love', 'only', 'fresh', 'fun', 'friend
data['word_count'] = 0
for i in np.arange(0, data.shape[0]):
    for word in good_mc:
        if word in data.iloc[i]['review']:
            data.loc[i, 'word_count'] += 1 # loc directly modifies the value

In [210... for i in np.arange(0, data.shape[0]):
    if data['review'].str.contains(r'!\{2,\}') [0]:
        data.loc[i, 'word_count'] += 1

In [211... data = data[data['word_count'] > 4] # max // 2 + 1
pd.reset_option('display.max_colwidth')
data
```

Out [211]:

	reviewer_id	store_name	category	store_address	latitude	longitude	rating
0	26500	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
10	13705	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
49	13578	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
116	13986	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
131	13808	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
145	13905	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	
149	13895	McDonald's	Fast food restaurant	6875 Sand Lake Rd, Orlando, FL 32819, United S...	28.450387	-81.471414	

In [212]:

```
pd.set_option('display.max_colwidth', None)
data[['review']]
```

Out [212]:

review

0 Hands down best McDonald's ever!! We loved the game room.\n\nThe prices were so reasonable, \$25 was more than enough chips to play for as long as we wanted.\n\nThey restaurant was clean, the food was fresh and staff was friendly. It also had an elevator that goes to and from the game room and restaurant.

10 The traditional burgers and fries were served Luke warm. As busy as the restaurant was, I was truly expecting hot and fresh. Perhaps had I ordered the pizza or pasta my experience would have been different. The service was nothing out of the ordinary, however, the staff was friendly. The best part of the visit was the arcade and play area, my kids absolutely love it, we were there for hours and hours.

49 Hands down best McDonald's ever!! We loved the game room.\n\nThe prices were so reasonable, \$25 was more than enough chips to play for as long as we wanted.\n\nThey restaurant was clean, the food was fresh and staff was friendly. It also had an elevator that goes to and from the game room and restaurant.

116 This is a great family place you can let the little ones run around the place is so clean and sanitized. This McDonald's has a pizza restaurant within the same building as well so I find that to be a bonus. McDonald's service was friendly and fast and fresh so thanks.

131 Awesome McDonald's to visit and eat. The food was delicious and the customer service was great. You place your order at the machine and they will deliver the food anywhere you are. I love the arcade area and there was plenty of seating. The atmosphere was relaxing and restrooms, food area, drink area and arcade were clean. They have 2 stories and both were very well maintained. I definitely recommend visiting this McDonald's with your children. They will have lots of fun.

145 First of all keep on mind this is McDonald's a very upscale McDonald's but it is it. My family and I really enjoyed it here. It was very clean although crowded assistance was given with processing our order and the employee explained how I can get a discount through the McDonald's app, he was very patient. It is very large and the game room was great! The other employees were very nice and took our trays and trash. The was McDonald's flavor, but the pizza was good. The cookies were so fresh and warm, very delicious. More than the regular McDonald's food options. Overall a great visit!

149 One of the world's largest and most interesting McDonald's. Located in the busy area right in the hub of Orlando off of iDrive.\n\n\nThis is a two-story McDonald's hosting some of the world's rarest menu items including both pasta and pizza and a ton of cakes and other amazing trees.\n\n\nA great place to visit if you're looking for something fun and interesting in Orlando. If you're a fan of McDonald's, this is the one you're going to want to check out. Although it is always very busy because it is in the downtown tourist hub right near Universal Orlando, I drive, and many other great tourist destinations.\n\n\nThis McDonald's features both counter service and has multiple kiosks of available so you can go up and order easily. There is a drive-thru available.\n\n\nThis is currently the only place in the world serving McPizza with several options available as well as customizations. This is also one of three places in the world including the Philippines and Italy that are currently serving McDonald's pasta. Definitely an interesting menu item to try out if you're looking for something a little different. They also have a full ice cream and cake shop with plenty of dessert choices.\n\n\nUpstairs host a full gaming arcade with air hockey, skiball, arcade games, and a ticket area to collect prizes once you're all done.\n\n\nIf you're looking for an interesting affair and a little bit of a different McDonald's experience, this is the place to visit.

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In [213... data.reset_index(inplace=True)
data = data.sort_values(by='word_count', ascending=False)
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```
In [217... best_mc = data.iloc[0]
```

```
In [218... best_mc
```

```
Out[218]: index
0
reviewer_id
26500
store_name
McDonald's
category
Fast food restaurant
store_address
6875 Sand Lake Rd, Orlando, FL 32819, United States
latitude
28.450387
longitude
-81.471414
rating_count
19682
review_time
1
review      Hands down best McDonald's ever!! We loved the game room.
The prices were so reasonable, $25 was more than enough chips to play
for as long as we wanted.
The restaurant was clean, the food was fresh and staff was friendly.
It also had an elevator that goes to and from the game room and restaurant.
rating
5
word_count
7
Name: 0, dtype: object
```