

In [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px
```

DATA PRE-PROCESSING

In [2]:

```
dataset=pd.read_csv("Zomato.csv",delimiter="|")
```

In [3]:

```
dataset
```

Out[3]:

	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	Mumbai	First International Financial Centre--Bandra ...	https://www.zomato.
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mumbai	Mahim	https://www.zomato.
2	Chin Chin Chu	1800	Asian,Chinese	Mumbai	Juhu	https://www.zomato.co
3	Butterfly High	1000	Modern Indian	Mumbai	Bandra Kurla Complex	https://www.zomato.co
4	BKC DIVE	1200	North Indian,Chinese,Continental	Mumbai	Bandra Kurla Complex	https://www.zomato.cc
...
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Mumbai	Kandivali West	https://www.zomato.c
15077	PitaBurg	400	Fast Food,Lebanese	Mumbai	Lower Parel	https://www.zomato.cc
15078	Uncha Otlawala	300	Desserts,Ice Cream	Mumbai	Kandivali West	https://www.zomato.
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Mumbai	Malad West	https://www.zomato.cor
15080		NaN	NaN	NaN	NaN	

15081 rows × 12 columns

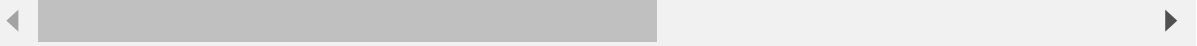


In [4]:

```
dataset.head(10)
```

Out[4]:

	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	Mumbai	First International Financial Centre--Bandra ...	https://www.zomato.com/n
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mumbai	Mahim	https://www.zomato.com/
2	Chin Chin Chu	1800	Asian,Chinese	Mumbai	Juhu	https://www.zomato.com/mur
3	Butterfly High	1000	Modern Indian	Mumbai	Bandra Kurla Complex	https://www.zomato.com/mu
4	BKC DIVE	1200	North Indian,Chinese,Continental	Mumbai	Bandra Kurla Complex	https://www.zomato.com/mu
5	Flea Bazaar Café	800	American,Asian,Street Food,North Indian,Luckno...	Mumbai	Flea Bazaar Café	https://www.zomato.com/fleat
6	Persian Darbar	1300	Biryani,North Indian,Chinese,Mughlai	Mumbai	Marol	https://www.zomato.com/m
7	Tanatan	1500	Modern Indian	Mumbai	Juhu	https://www.zomato.com/mi
8	Cafe Safar	600	Chinese,North Indian,Biryani	Mumbai	Oshiwara--Andheri West	https://www.zomato.com/r
9	Plum by Bent Chair	1800	Asian	Mumbai	Kamala Mills Compound	https://www.zomato.com/mu



In [5]:

```
dataset.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 15081 entries, 0 to 15080
Data columns (total 12 columns):
NAME                15081 non-null object
PRICE               15080 non-null object
CUSINE_CATEGORY     15079 non-null object
CITY                15080 non-null object
REGION              15080 non-null object
URL                 15080 non-null object
PAGE_NO             15080 non-null object
CUSINE_TYPE         15080 non-null object
TIMING              15015 non-null object
RATING_TYPE         15080 non-null object
RATING              15080 non-null object
VOTES               15080 non-null object
dtypes: object(12)
memory usage: 1.4+ MB
```

In [6]:

```
dataset.describe()
```

Out[6]:

	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE_NO	CUSINE_TYPE	TIMING
count	15081	15080	15079	15080	15080	15080	15080	15080	15015
unique	12720	67	3183	2	241	13823	944	23	251
top	NAME	400	CUSINE_CATEGORY	Mumbai	REGION	URL	PAGE_NO	Quick Bites	11am-11pm(Mon-Sun)
freq	942	2042	942	14138	942	942	942	5262	11am-11pm

In [7]:

```
Wrong_entries=dataset["NAME"] == "NAME"
```

In [8]:

```
dataset[Wrong_entries]
```

Out[8]:

	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
15	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
31	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
47	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
63	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
79	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
...
15000	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
15016	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
15032	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
15048	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT
15064	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	URL	PAGE NO	CUSINE TYPE	TIMING	RAT

942 rows × 12 columns



In [9]:

```
dataset=dataset[~Wrong_entries]
```

In [10]:

dataset.describe()

Out[10]:

	NAME	PRICE	CUSINE_CATEGORY	CITY	REGION	
count	14139	14138	14137	14138	14138	1
unique	12719	66	3182	1	240	1
top	China Town	400	North Indian,Chinese	Mumbai	Mira Road	https://www.zomato.com/mumbai/murmughal
freq	16	2042	841	14138	552	

In [11]:

dataset.shape

Out[11]:

(14139, 12)

In [12]:

dataset.drop(["PAGE NO", "URL", "CITY"],axis=1,inplace=True)

C:\Users\athis\Anaconda3\lib\site-packages\pandas\core\frame.py:4102: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)
errors=errors,

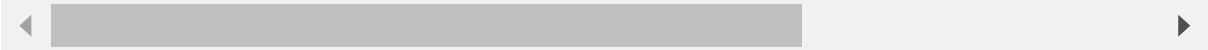
In [13]:

dataset

Out[13]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	First International Financial Centre-- Bandra ...	Casual Dining	12noon to 130:
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mahim	Dessert Parlor	2pm to 1:
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1:
3	Butterfly High	1000	Modern Indian	Bandra Kurla Complex	Bar	12noon to 130:
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra Kurla Complex	Bar	1130am to 1:
...	
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Kandivali West	Quick Bites	11am to 230:
15077	PitaBurg	400	Fast Food,Lebanese	Lower Parel	none	11pm(Mon,Tue,Wed,TI
15078	Uncha Otlawala	300	Desserts,Ice Cream	Kandivali West	Dessert Parlor	9am to 1230/
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Malad West	none	12noon to 330pm,7pm
15080		NaN	NaN	NaN	NaN	

14139 rows × 9 columns



In [14]:

```
dataset.isnull().sum()
```

Out[14]:

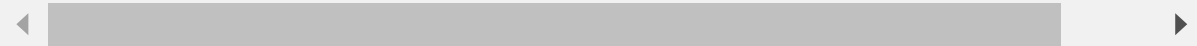
```
NAME          0
PRICE         1
CUSINE_CATEGORY 2
REGION        1
CUSINE_TYPE    1
TIMING        66
RATING_TYPE    1
RATING         1
VOTES         1
dtype: int64
```

In [15]:

```
dataset[dataset["RATING"].isnull()]
```

Out[15]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	RATING
15080		NaN	NaN	NaN	NaN	NaN	NaN	NaN



In [16]:

```
dataset.drop(labels=15080,axis=0,inplace=True)
```


In [17]:

```
dataset
```

Out[17]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	First International Financial Centre-- Bandra ...	Casual Dining	12noon to 130:
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mahim	Dessert Parlor	2pm to 1:
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1:
3	Butterfly High	1000	Modern Indian	Bandra Kurla Complex	Bar	12noon to 130:
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra Kurla Complex	Bar	1130am to 1:
...	
15075	Tirupati Balaji	500	Chinese,Fast Food,North Indian	Oshiwara-- Andheri West	Casual Dining	8am to 11pm, 115:
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Kandivali West	Quick Bites	11am to 230:
15077	PitaBurg	400	Fast Food,Lebanese	Lower Parel	none	11pm(Mon,Tue,Wed,TI
15078	Uncha Otlawala	300	Desserts,Ice Cream	Kandivali West	Dessert Parlor	9am to 1230,
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Malad West	none	12noon to 330pm,7pm

14138 rows × 9 columns



In [18]:

```
dataset.isnull().sum()
```

Out[18]:

```
NAME          0
PRICE         0
CUSINE_CATEGORY  1
REGION        0
CUSINE_TYPE    0
TIMING        65
RATING_TYPE    0
RATING         0
VOTES         0
dtype: int64
```

In [19]:

```
dataset[dataset["CUSINE_CATEGORY"].isnull()]
```

Out[19]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	RATI
7338	Mother's Taste	400	NaN	Bhandup	none	11am to 11pm(Mon- Sun)	Good	

In [20]:

```
dataset.fillna("NA",inplace=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\pandas\core\frame.py:4244: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)
**kwargs

In [21]:

```
dataset[dataset["CUSINE_CATEGORY"]=="NA"]
```

Out[21]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	RATI
7338	Mother's Taste	400	NA	Bhandup	none	11am to 11pm(Mon- Sun)	Good	

In [22]:

```
dataset.isnull().sum()
```

Out[22]:

```
NAME          0
PRICE         0
CUSINE_CATEGORY  0
REGION        0
CUSINE TYPE    0
TIMING        0
RATING_TYPE    0
RATING         0
VOTES         0
dtype: int64
```

In [23]:

```
dataset["PRICE"].dtype
```

Out[23]:

```
dtype('O')
```

In [24]:

```
dataset["PRICE"].value_counts()
```

Out[24]:

```
400      2042
500      1954
300      1936
200      1177
600      1062
...
160         1
580         1
2600        1
340         1
3500        1
Name: PRICE, Length: 66, dtype: int64
```

In [25]:

```
dataset["PRICE"]=dataset["PRICE"].astype("int64")
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [26]:

```
dataset["PRICE"].dtype
```

Out[26]:

```
dtype('int64')
```

In [27]:

```
dataset["RATING"]=dataset["RATING"].astype("float64")
```

```
-----
--
ValueError
```

```
Traceback (most recent call last)
```

```
<ipython-input-27-63b04b41afe7> in <module>
```

```
----> 1 dataset["RATING"]=dataset["RATING"].astype("float64")
```

```
~\Anaconda3\lib\site-packages\pandas\core\generic.py in astype(self, dtype, copy, errors, **kwargs)
```

```
5880         # else, only a single dtype is given
5881         new_data = self._data.astype(
-> 5882             dtype=dtype, copy=copy, errors=errors, **kwargs
5883         )
5884         return self._constructor(new_data).__finalize__(self)
```

```
~\Anaconda3\lib\site-packages\pandas\core\internals\managers.py in astype(self, dtype, **kwargs)
```

```
579
580     def astype(self, dtype, **kwargs):
--> 581         return self.apply("astype", dtype=dtype, **kwargs)
582
583     def convert(self, **kwargs):
```

```
~\Anaconda3\lib\site-packages\pandas\core\internals\managers.py in apply(self, f, axes, filter, do_integrity_check, consolidate, **kwargs)
```

```
436         kwargs[k] = obj.reindex(b_items, axis=axis, copy=align_copy)
437
--> 438         applied = getattr(b, f)(**kwargs)
439         result_blocks = _extend_blocks(applied, result_blocks)
440
```

```
~\Anaconda3\lib\site-packages\pandas\core\internals\blocks.py in astype(self, dtype, copy, errors, values, **kwargs)
```

```
557
558     def astype(self, dtype, copy=False, errors="raise", values=None, **kwargs):
--> 559         return self._astype(dtype, copy=copy, errors=errors, values=values, **kwargs)
560
561     def _astype(self, dtype, copy=False, errors="raise", values=None, **kwargs):
```

```
~\Anaconda3\lib\site-packages\pandas\core\internals\blocks.py in _astype(self, dtype, copy, errors, values, **kwargs)
```

```
641         # _astype_nansafe works fine with 1-d only
642         vals1d = values.ravel()
--> 643         values = astype_nansafe(vals1d, dtype, copy=True, **kwargs)
644
645         # TODO(extension)
```

```
~\Anaconda3\lib\site-packages\pandas\core\dtypes\cast.py in astype_nansafe(arr, dtype, copy, skipna)
```

```
727     if copy or is_object_dtype(arr) or is_object_dtype(dtype):
```

```
728         # Explicit copy, or required since NumPy can't view from
/ to object.
--> 729         return arr.astype(dtype, copy=True)
730
731         return arr.view(dtype)
```

ValueError: could not convert string to float: '-'

In [28]:

```
dataset["RATING"].value_counts()
```

Out[28]:

-	2360
3.5	1094
3.4	1036
3.6	960
NEW	953
3.3	926
3.7	917
3.2	801
3.8	782
3.1	734
3.0	622
3.9	596
2.9	409
4.0	408
2.8	309
4.1	298
4.2	199
2.7	170
4.3	148
4.4	99
2.6	77
Opening	57
4.5	46
2.5	39
4.6	32
2.4	26
4.7	13
2.3	10
2.1	5
4.8	4
2.2	4
4.9	2
2.0	1
1.8	1

Name: RATING, dtype: int64

In [29]:

```
dataset["RATING"].replace(to_replace=["-", "Opening", "NEW"], value="0.0", inplace=True)
dataset["RATING"] = dataset["RATING"].astype("float64")
```

C:\Users\athis\Anaconda3\lib\site-packages\pandas\core\generic.py:6786: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

```
self._update_inplace(new_data)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.
Try using `.loc[row_indexer, col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

In [30]:

```
dataset["RATING"].value_counts()
```

Out[30]:

0.0	3370
3.5	1094
3.4	1036
3.6	960
3.3	926
3.7	917
3.2	801
3.8	782
3.1	734
3.0	622
3.9	596
2.9	409
4.0	408
2.8	309
4.1	298
4.2	199
2.7	170
4.3	148
4.4	99
2.6	77
4.5	46
2.5	39
4.6	32
2.4	26
4.7	13
2.3	10
2.1	5
2.2	4
4.8	4
4.9	2
2.0	1
1.8	1

Name: RATING, dtype: int64

In [31]:

```
useless=dataset["RATING"]==0.0
```


In [32]:

dataset[useless]

Out[32]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING
32	Hotel Annapoorna Refreshments	400	Maharashtrian,Mughlai,Chinese	Ghansoli	Quick Bites	1030am to 1230AM(Mon-Sun)
34	Biryani 9	600	Biryani,North Indian	Near Andheri East Station	none	11am to 3am(Mon-Sun)
36	D Fusion Flavours	350	Chinese	Goregaon East	none	12noon to 330pm,7pm to 3am(Mon-Sun)
39	Nation Tadka	400	North Indian,South Indian,Chinese,Fast Food	Worli	none	12noon to 1230AM(Mon-Sun)
83	Link Way Restaurant	500	North Indian,Chinese	Jogeshwari	Quick Bites	12noon to 4pm,8pm to 1am(Mon-Sun)
...
14998	Foodies House	0	Chinese	Goregaon East	none	12noon to 4am(Mon-Sun)
14999	Khansama	0	Biryani	Lower Parel	none	12noon to 3am(Mon-Sun)
15010	Earth Cafe @ Waterfield	800	Cafe,Healthy Food,Italian,Pizza,Beverages	Linking Road--Bandra West	Café	10am to 10pm(Mon-Thu),10am to 11pm(Fri-Sun)
15023	How About Some Cream	200	Beverages	Mumbai Central	Beverage Shop	12noon to 3am(Mon-Sun)
15046	Food And Taste Theory	800	Continental,Italian	Phoenix Marketcity- Kurla	Casual Dining	9am to 12midnight(Mon-Fri),9am to 1230AM(Sat-Sun)

3370 rows × 9 columns



In [33]:

```
dataset["VOTES"].value_counts()
```

Out[33]:

```
-      2360
NEW    953
4      364
5      320
6      288
...
1381     1
2998     1
688      1
5805     1
672      1
Name: VOTES, Length: 1123, dtype: int64
```

In [34]:

```
dataset["VOTES"].replace(to_replace=["-", "Opening", "NEW"], value="0", inplace=True)
```

In [35]:

```
dataset["VOTES"].value_counts()
```

Out[35]:

```
0      3371
4      364
5      320
6      288
7      277
...
3529     1
1437     1
1983     1
969      1
676      1
Name: VOTES, Length: 1120, dtype: int64
```

In [36]:

```
dataset["VOTES"].dtype
```

Out[36]:

```
dtype('O')
```

In [37]:

```
dataset["VOTES"]=dataset["VOTES"].astype("int64")
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [38]:

```
dataset["VOTES"].dtype
```

Out[38]:

```
dtype('int64')
```

In [39]:

```
useless_data=(dataset["RATING"]==0.0) | (dataset["VOTES"]==0)
```

In [40]:

```
dataset[useless_data]
```

Out[40]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING
32	Hotel Annapoorna Refreshments	400	Maharashtrian,Mughlai,Chinese	Ghansoli	Quick Bites	1030am to 1230AM(Mon-Sun)
34	Biryani 9	600	Biryani,North Indian	Near Andheri East Station	none	11am to 3am(Mon-Sun)
36	D Fusion Flavours	350	Chinese	Goregaon East	none	12noon to 330pm,7pm to 3am(Mon-Sun)
39	Nation Tadka	400	North Indian,South Indian,Chinese,Fast Food	Worli	none	12noon to 1230AM(Mon-Sun)
83	Link Way Restaurant	500	North Indian,Chinese	Jogeshwari	Quick Bites	12noon to 4pm,8pm to 1am(Mon-Sun)
...
14998	Foodies House	0	Chinese	Goregaon East	none	12noon to 4am(Mon-Sun)
14999	Khansama	0	Biryani	Lower Parel	none	12noon to 3am(Mon-Sun)
15010	Earth Cafe @ Waterfield	800	Cafe,Healthy Food,Italian,Pizza,Beverages	Linking Road-- Bandra West	Café	10am to 10pm(Mon- Thu),10am to 11pm(Fri-Sun)
15023	How About Some Cream	200	Beverages	Mumbai Central	Beverage Shop	12noon to 3am(Mon-Sun)
15046	Food And Taste Theory	800	Continental,Italian	Phoenix Marketcity- Kurla	Casual Dining	9am to 12midnight(Mon- Fri),9am to 1230AM(Sat- Sun)

3371 rows × 9 columns

In [41]:

```
dataset.shape
```

Out[41]:

(14138, 9)

In [42]:

```
dataset=dataset[~useless_data]
```

In [43]:

```
dataset.shape
```

Out[43]:

```
(10767, 9)
```

In [44]:

```
dataset["TIMING"].value_counts()
```

Out[44]:

11am to 11pm(Mon-Sun)	718
11am to 12midnight(Mon-Sun)	488
12noon to 12midnight(Mon-Sun)	366
11am to 1130pm(Mon-Sun)	228
10am to 12midnight(Mon-Sun)	170
...	
10pm to 5am(Mon-Sun)	1
Closed(Mon,Thu,Fri),1230pm to 1130pm(Tue...	1
12noon to 4pm,7pm to 2am(Mon-Sat),7pm to 2am(Sun)	1
1150am to 330pm,630pm to 12midnight...	1
12noon to 4pm,645pm to 1150pm(Mon-Sun)	1

Name: TIMING, Length: 2251, dtype: int64

In [45]:

```
temp_dataset=dataset["TIMING"].str.split("(",n=1,expand=True)
```

In [46]:

temp_dataset

Out[46]:

	0	1
0	12noon to 130am	Mon-Sun)
1	2pm to 1am	Mon-Sun)
2	12noon to 1am	Mon-Sun)
3	12noon to 130am	Mon-Sun)
4	1130am to 1am	Mon-Sun)
...
15075	8am to 11pm,12midnight to 115am	Mon-Sun)
15076	11am to 230am	Mon-Sun)
15077	11am to 11pm	Mon,Tue,Wed,Thu,Sun),11am to ...
15078	9am to 1230AM	Mon-Sun)
15079	12noon to 330pm,7pm to 1am	Mon-Sun)

10767 rows × 2 columns

In [47]:

dataset["TIMING"]=temp_dataset[0]

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [48]:

dataset["DAYS OPEN"]=temp_dataset[1]

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [49]:

dataset

Out[49]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RA
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	First International Financial Centre-- Bandra ...	Casual Dining	12noon to 130am	
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mahim	Dessert Parlor	2pm to 1am	
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1am	
3	Butterfly High	1000	Modern Indian	Bandra Kurla Complex	Bar	12noon to 130am	
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra Kurla Complex	Bar	1130am to 1am	
...	
15075	Tirupati Balaji	500	Chinese,Fast Food,North Indian	Oshiwara-- Andheri West	Casual Dining	8am to 11pm,12midnight to 115am	
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Kandivali West	Quick Bites	11am to 230am	
15077	PitaBurg	400	Fast Food,Lebanese	Lower Parel	none	11am to 11pm	
15078	Uncha Otlawala	300	Desserts,Ice Cream	Kandivali West	Dessert Parlor	9am to 1230AM	
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Malad West	none	12noon to 330pm,7pm to 1am	

10767 rows × 10 columns

In [50]:

```
dataset["DAYS OPEN"]=dataset["DAYS OPEN"].str.replace(")","",regex=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [51]:

```
dataset.head()
```

Out[51]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	First International Financial Centre-- Bandra ...	Casual Dining	12noon to 130am	Excellent	
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mahim	Dessert Parlor	2pm to 1am	Very Good	
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1am	Very Good	
3	Butterfly High	1000	Modern Indian	Bandra Kurla Complex	Bar	12noon to 130am	Very Good	
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra Kurla Complex	Bar	1130am to 1am	Veľmi dobré	

In [52]:

```
dataset.isnull().sum()
```

Out[52]:

```
NAME          0
PRICE         0
CUSINE_CATEGORY  0
REGION        0
CUSINE TYPE   0
TIMING        0
RATING_TYPE   0
RATING        0
VOTES         0
DAYS OPEN     85
dtype: int64
```

In [53]:

```
dataset.fillna("NA",inplace=True)
```


In [54]:

```
dataset.isnull().sum()
```

Out[54]:

```
NAME                0
PRICE               0
CUSINE_CATEGORY     0
REGION             0
CUSINE TYPE         0
TIMING              0
RATING_TYPE         0
RATING              0
VOTES               0
DAYS_OPEN           0
dtype: int64
```

In [55]:

```
dataset.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 10767 entries, 0 to 15079
Data columns (total 10 columns):
NAME                10767 non-null object
PRICE               10767 non-null int64
CUSINE_CATEGORY     10767 non-null object
REGION             10767 non-null object
CUSINE TYPE         10767 non-null object
TIMING              10767 non-null object
RATING_TYPE         10767 non-null object
RATING              10767 non-null float64
VOTES               10767 non-null int64
DAYS_OPEN           10767 non-null object
dtypes: float64(1), int64(2), object(7)
memory usage: 925.3+ KB
```

In [56]:

```
dataset["RATING_TYPE"].value_counts()
```

Out[56]:

Average	5111
Good	4330
Very Good	1137
Excellent	95
Poor	47
Velmi dobré	6
Skvělá volba	4
Dobrze	4
Bardzo dobrze	3
Priemer	2
Muito Bom	2
İyi	2
Průměr	2
Ortalama	2
Dobré	2
Promedio	2
Bueno	2
Buono	2
Bom	2
Çok iyi	1
Velmi dobré	1
Excelente	1
Baik	1
Biasa	1
Muy Bueno	1
Sangat Baik	1
Media	1
Skvělé	1
Média	1

Name: RATING_TYPE, dtype: int64

In [57]:

```
dataset["RATING_TYPE"].replace(to_replace="Excelente",value="Excellent",inplace=True)
```

In [58]:

```
dataset["RATING_TYPE"].value_counts()
```

Out[58]:

Average	5111
Good	4330
Very Good	1137
Excellent	96
Poor	47
Velmi dobré	6
Skvělá volba	4
Dobrze	4
Bardzo dobrze	3
İyi	2
Muito Bom	2
Priemer	2
Buono	2
Bom	2
Průměr	2
Bueno	2
Ortalama	2
Dobré	2
Promedio	2
Çok iyi	1
Velmi dobré	1
Muy Bueno	1
Media	1
Biasa	1
Baik	1
Skvělé	1
Média	1
Sangat Baik	1

Name: RATING_TYPE, dtype: int64

In [59]:

```
dataset["RATING_TYPE"].replace(to_replace=['Velmi dobré','Bardzo dobrze','Muy Bueno','Velmi
dataset["RATING_TYPE"].replace(to_replace=['Skvělá volba','Dobrze','Bueno','Buono','Dobré'],
dataset["RATING_TYPE"].replace(to_replace=['Priemer','Média','Çok iyi'],value="Average",in
dataset["RATING_TYPE"].replace(to_replace=['Průměr','Promedio','Ortalama','Muito Bom','İyi'
dataset["RATING_TYPE"].replace(to_replace=['Baik','Biasa','Media','Sangat Baik'],value="Ver
```

In [60]:

```
dataset["RATING_TYPE"].value_counts()
```

Out[60]:

Average	5115
Good	4347
Very Good	1148
Excellent	96
Poor	57
Very Poor	4

Name: RATING_TYPE, dtype: int64

In [61]:

```
dataset["REGION"]
```

Out[61]:

```
0      First International Financial Centre-- Bandra ...
1                                          Mahim
2                                          Juhu
3      Bandra Kurla Complex
4      Bandra Kurla Complex
...
15075      Oshiwara-- Andheri West
15076      Kandivali West
15077      Lower Parel
15078      Kandivali West
15079      Malad West
Name: REGION, Length: 10767, dtype: object
```

In [62]:

```
dataset["REGION"].value_counts()
```

Out[62]:

```
Mira Road      405
Malad West     308
Chembur        277
Kharghar       268
Borivali West  264
...
Fun Republic Mall-- Veera Desai Area      1
Hotel Jewel of Chembur-- Chembur          1
Fariyas Hotel-- Colaba                    1
Haiko Mall-- Powai                       1
Grand Mookambika-- Kopar Khairane         1
Name: REGION, Length: 237, dtype: int64
```

In [63]:

```
dataset["REGION"]=dataset["REGION"].str.replace("[a-zA-Z].+-- ", "", regex=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy

"""Entry point for launching an IPython kernel.

In [64]:

```
dataset["REGION"].value_counts()
```

Out[64]:

```
Thane West          712
Mira Road           412
Andheri West        407
Malad West          316
Bandra West         282
...
Kalyan West         2
CBD Belapur         1
Goregaon            1
Girgaon Chowpatty   1
Dadar              1
Name: REGION, Length: 120, dtype: int64
```

In [65]:

```
dataset["REGION"]=dataset["REGION"].str.replace(" West| west| East| east","",regex=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

In [66]:

```
dataset["REGION"].value_counts()
```

Out[66]:

```
Thane          726
Mira Road      412
Andheri        409
Malad          378
Kandivali     377
...
Majiwada       3
Flea Bazaar Café 3
Panvel         2
Girgaon Chowpatty 1
CBD Belapur    1
Name: REGION, Length: 101, dtype: int64
```

In [67]:

```
dataset['REGION'] = dataset['REGION'].str.replace('4 Bungalows|7 Andheri|Azad Nagar|Near An
dataset['REGION'] = dataset['REGION'].str.replace('Bandra Kurla Complex', 'Bandra', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('CBD-Belapur', 'CBD Belapur', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('Girgaon Chowpatty', 'Chowpatty', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('Dadar Shivaji Park', 'Dadar', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('Flea Bazaar Café|Kamala Mills Compound',
dataset['REGION'] = dataset['REGION'].str.replace('Runwal Green', 'Mulund', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('Mumbai CST Area', 'Mumbai Central', regex=
dataset['REGION'] = dataset['REGION'].str.replace('Kopar Khairane|Seawoods|Turbhe|Ulwe', 'Na
dataset['REGION'] = dataset['REGION'].str.replace('New Panvel|Old Panvel', 'Panvel', regex=Tr
dataset['REGION'] = dataset['REGION'].str.replace('Kamothe', 'Sion', regex=True)
dataset['REGION'] = dataset['REGION'].str.replace('Ghodbunder Road|Majiwada', 'Thane', regex=
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: SettingW
ithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""Entry point for launching an IPython kernel.

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: SettingW
ithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:3: SettingW
ithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

This is separate from the ipykernel package so we can avoid doing imports
until

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:4: SettingW
ithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

after removing the cwd from sys.path.

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:5: SettingW
ithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

"""

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:6: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:7: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

import sys

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:8: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:9: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

if __name__ == '__main__':

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:10: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

Remove the CWD from sys.path while we load stuff.

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:11: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame.

Try using `.loc[row_indexer,col_indexer] = value` instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

```
# This is added back by InteractiveShellApp.init_path()
C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:12: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead
```

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

```
if sys.path[0] == '':
```

In [68]:

```
dataset["REGION"].value_counts()
```

Out[68]:

```
Andheri      904
Thane        770
Mira Road    412
Malad        378
Kandivali    377
...
Malabar Hill  14
Sewri        12
Alibaug      10
Gorai        7
Peddar Road   4
Name: REGION, Length: 79, dtype: int64
```

In [69]:

```
dataset["REGION"]
```

Out[69]:

```
0      Bandra
1      Mahim
2      Juhu
3      Bandra
4      Bandra
...
15075  Andheri
15076  Kandivali
15077  Lower Parel
15078  Kandivali
15079  Malad
Name: REGION, Length: 10767, dtype: object
```

In [70]:

```
dupli_data=dataset.duplicated()
```


In [71]:

```
dataset[dupli_data]
```

Out[71]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RA
4064	Sai Sannidhi Restaurant & Bar	1000	North Indian,Konkan	Dahisar	Casual Dining	11am to 12midnight	
4068	Konkan Katta	400	Seafood,Maharashtrian,Malwani	Andheri	Quick Bites	11am to 330pm,630pm to 1130pm	
4082	Usmaniya Hotel	600	Mughlai	Fort	Casual Dining	1030am to 1130pm	
4083	Gina's Cakes	450	Bakery	Dombivali	none	11am to 11pm	
4084	Konkanastha Lunch Home	400	Seafood,Malwani	Chakala	Casual Dining	12noon to 3pm,730pm to 1030pm	
...	
14200	Mezbaan Family Restaurant	350	Chinese,Mughlai	Mumbra	Dhaba	12noon to 1230AM	
14204	Jyoti Lunch Home	650	Chinese,North Indian,Seafood,Mughlai	Mulund	Casual Dining	11am to 1230AM	
14253	On Toes	900	Italian,North Indian,Chinese	Malad	Casual Dining	12noon to 3pm,7pm to 1230AM	
14761	Frosty Farm	400	Ice Cream,Desserts,Fast Food	Malad	Dessert Parlor	1pm to 1215AM	
14928	Shree Manu Sagar	300	North Indian,Chinese,Indian	Ghansoli	Quick Bites	1130am to 415pm,7pm to 1215AM	

220 rows × 10 columns



In [72]:

```
dataset[dataset["NAME"]=="Sai Sannidhi Restaurant & Bar"]
```

Out[72]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	RA
4050	Sai Sannidhi Restaurant & Bar	1000	North Indian,Konkan	Dahisar	Casual Dining	11am to 12midnight	Good	
4064	Sai Sannidhi Restaurant & Bar	1000	North Indian,Konkan	Dahisar	Casual Dining	11am to 12midnight	Good	

In [73]:

```
dataset.shape
```

Out[73]:

```
(10767, 10)
```

In [74]:

```
dataset=dataset[~dupli_data]
```

In [75]:

```
dataset.shape
```

Out[75]:

```
(10547, 10)
```

In [76]:

```
dataset.to_csv("Pre_Processed-Zomato dataset.csv",index=False)
```

In [77]:

```
Final_dataset=dataset.copy()
```

In [78]:

```
Final_dataset
```

Out[78]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATIN
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	Bandra	Casual Dining	12noon to 130am	
1	Baba Falooda	400	Desserts,Ice Cream,Beverages	Mahim	Dessert Parlor	2pm to 1am	V
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1am	V
3	Butterfly High	1000	Modern Indian	Bandra	Bar	12noon to 130am	V
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra	Bar	1130am to 1am	V
...	
15075	Tirupati Balaji	500	Chinese,Fast Food,North Indian	Andheri	Casual Dining	8am to 11pm,12midnight to 115am	
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Kandivali	Quick Bites	11am to 230am	
15077	PitaBurg	400	Fast Food,Lebanese	Lower Parel	none	11am to 11pm	
15078	Uncha Otlawala	300	Desserts,Ice Cream	Kandivali	Dessert Parlor	9am to 1230AM	
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Malad	none	12noon to 330pm,7pm to 1am	

10547 rows × 10 columns



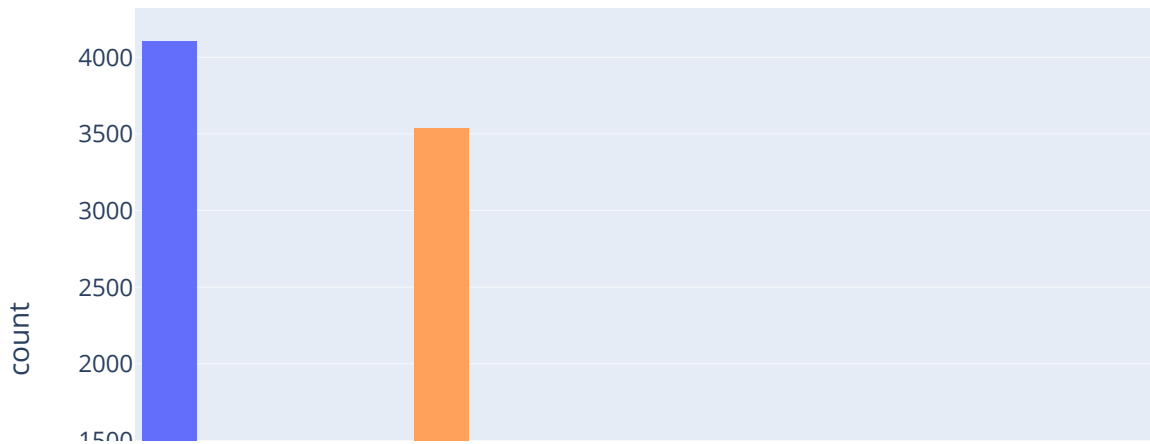
DATA ANALYSIS

Q1) How many restaurants are in Mumbai for each type of cuisine?

In [79]:

```
fig=px.histogram(Final_dataset,x="CUSINE TYPE",color='CUSINE TYPE',title= 'Number of Restau  
fig.show()
```

Number of Restaurants by Cusine Type



Q2) What are the percentage of restaurants by Rating Type in Mumbai?

In [80]:

```
rating_dataset=Final_dataset["RATING_TYPE"].value_counts().reset_index()  
rating_dataset.rename(columns={"index":"RATING TYPE","RATING_TYPE":"COUNT OF RESTAURANTS"},
```

In [81]:

```
rating_dataset
```

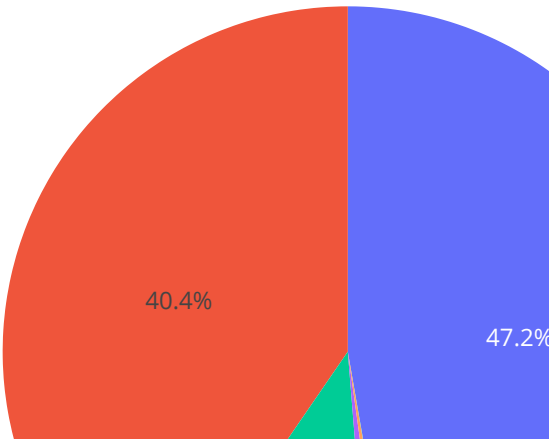
Out[81]:

	RATING TYPE	COUNT OF RESTAURANTS
0	Average	4983
1	Good	4263
2	Very Good	1145
3	Excellent	96
4	Poor	56
5	Very Poor	4

In [82]:

```
fig=px.pie(rating_dataset,names="RATING TYPE",values="COUNT OF RESTAURANTS",title="Pie char
fig.show()
```

Pie chart for Rating type of restaurants



Q3) Which are the Top 10 highest rated Seafood Restaurant in Mumbai?

In [83]:

```
seafood_dataset=Final_dataset[Final_dataset["CUSINE_CATEGORY"].str.contains("Seafood")]
```

In [84]:

```
seafood_dataset
```

Out[84]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RA
11	Raasta	1200	Continental,Seafood,Fast Food,Desserts,Italian...	Khar	Casual Dining	12noon to 1am	
18	Cafe Maaz	350	Chinese,North Indian,Mughlai,Biryani,Seafood	Bhandup	Quick Bites	8am to 1230AM	
24	Kasbah Grand	1400	Indian,Mughlai,Chinese,Thai,Seafood	Goregaon	Casual Dining	12noon to 130am	
76	Ceremonial Kitchen & Co	1000	Seafood,Maharashtrian,North Indian,Chinese	Thane	Casual Dining	1130am to 1130pm	
85	Rajyog	800	North Indian,Chinese,Seafood	Bandra	Casual Dining	1130am to 1230AM	
...	
15025	Mahesh Lunch Home & Bar	550	Indian,Chinese,Seafood,Mughlai	Kurla	Casual Dining	1130am to 1230AM	
15026	Suyog Dinning Bar	600	Chinese,North Indian,Seafood,Fast Food	Dahisar	Casual Dining	11am to 1am	
15031	Shark Bite	400	Seafood,Rolls,BBQ	Mumbai Central	Quick Bites	6pm to 2am	
15045	Soul Fry	1000	Goan,Seafood	Bandra	Casual Dining	12noon to 3pm,7pm to 1am	
15062	Cafe Delhi Heights	2000	Continental,Italian,Seafood,North Indian,Cafe	Kurla	Casual Dining	11am to 12midnight	

1068 rows × 10 columns



In [85]:

```
seafood_dataset.sort_values(by="RATING",ascending=False).head(10)
```

Out[85]:

	NAME	PRICE	CUISINE_CATEGORY	REGION	CUISINE TYPE	
7104	Thangabali	1000	Seafood,South Indian,Mangalorean,Andhra,Kerala	Khar	Bar	1 4pr
76	Ceremonial Kitchen & Co	1000	Seafood,Maharashtrian,North Indian,Chinese	Thane	Casual Dining	11
13685	Maharashtra Lunch Home	600	Maharashtrian,Malwani,Konkan,Seafood	Kharghar	Casual Dining	345 to
12433	Quarter Canteen	1100	North Indian,Seafood,Chinese	Bandra	Casual Dining	1 330
902	The Harbour Bay - SeaFood Kitchen & Bar	2400	Seafood,Beverages	Bandra	Casual Dining	1
884	Rajmanya-Seafood family restaurant	800	Maharashtrian,Konkan,Seafood	Vashi	Casual Dining	
3380	Peco Peco	700	Chinese,Seafood,Asian	Powai	none	1 330 to
9954	Pi Bar and Kitchen	1600	Continental,European,Italian,Seafood,Pizza,Des...	Andheri	Bar	1 6pr 12
903	Ferry Wharf	1500	Seafood,Mangalorean	Bandra	Casual Dining	330 to
915	Monis Bar and Restaurant	1000	Indian,Chinese,Continental,Seafood,Bever...	Thane	Casual Dining	11 330 to

Q4) Which is the best Food Truck in Mumbai?

In [86]:

```
foodtruck_dataset=dataset[dataset["CUISINE TYPE"]=="Food Truck"]
```

In [87]:

foodtruck_dataset

Out[87]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIME
262	Dumpling Delights	200	Momos	Matunga	Food Truck	430p to 9pm
1017	Street Food Co.	250	Fast Food,Chinese	Virar	Food Truck	6pm to 11pm
1381	Veggies Treat	200	Italian,Mexican,North Indian	Kandivali	Food Truck	7pm to 11pm
1689	Punjab Da Chullah- Bar Bank	500	Fast Food,North Indian	Juhu	Food Truck	12noon to 11pm
2461	Bombay Food Truck	500	Fast Food	Bandra	Food Truck	1130pm to 7pm
2667	Pizza Al Passeggio- Pizza On The Go	200	Fast Food	Tardeo	Food Truck	12noon to 12midnight
3639	Sobo Belly	400	Mexican,Italian	Kandivali	Food Truck	5pm to 11pm
4386	Cheese On Fire	300	Fast Food,Italian	Ghatkopar	Food Truck	530pm to 11pm
5562	L' Dorado- Bar Bank	600	American,Mexican	Juhu	Food Truck	12noon to 11pm
5568	Phat Fork- Bar Bank	600	Chinese,Asian	Juhu	Food Truck	12noon to 11pm
5753	Jo Baka's Kitchen	300	Fast Food	Ghatkopar	Food Truck	7am to 11pm
6417	Stoner 9t9	200	Beverages	Chakala	Food Truck	5pm to 12pm
7922	Honeys Delights	100	Fast Food,Burger	Malad	Food Truck	Closed
8188	Indigo Burger Project- Bar Bank	500	Burger,Sandwich,Beverages	Juhu	Food Truck	12noon to 11pm
8935	YummyWheels	250	Fast Food,Italian,Mexican	Kandivali	Food Truck	Closed
9805	Little Hut	250	Fast Food,North Indian	Andheri	Food Truck	11am to 6pm, 4pm to 6pm
10398	The Pitch On Wheels	400	Fast Food,Pizza,Kebab	Vikhroli	Food Truck	11am to 11pm
10469	Rocksalt Food Truck	300	Italian,Fast Food	Kalyan	Food Truck	5pm to 11pm

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TII
10610	Eat & Run	200	Beverages,Fast Food	Mira Road	Food Truck	12nc
10643	Karma's Food Truck	200	Street Food	Thane	Food Truck	7 11:
10834	MFT The Food Truck	400	Desserts,Burger,Pizza,Lebanese,Fast Food	Bhayandar	Food Truck	430 12mic
11490	Mumma's Recipe	400	Fast Food	Santacruz	Food Truck	9am to
12046	Keste` Pizza Truck	400	Italian	Malad	Food Truck	C
12097	VFC	300	South Indian,Fast Food	Borivali	Food Truck	5
12124	Mumbai Rolling Kitchen	300	Fast Food,Rolls	Airoli	Food Truck	4
12349	Avenge Hungers	250	Italian,Fast Food	Kandivali	Food Truck	530 10:
12428	Thattukada	250	Kerala	Thane	Food Truck	6
12685	The BBQ Express	250	BBQ,Momos	Kurla	Food Truck	5
13931	Potoba Food Truck	150	Fast Food	Virar	Food Truck	6
14347	The Rolling Kitchen	300	Italian,South Indian	Mulund	Food Truck	C

In [88]:

```
foodtruck_dataset.sort_values(by="RATING",ascending=False).head(1)
```

Out[88]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE	RATING
262	Dumpling Delights	200	Momos	Matunga	Food Truck	430pm to 930pm	Very Good	4.3

Q5) Which places have the highest rated restaurant for each Cuisine Type in Mumbai?

In [89]:

```
highRR_dataset=Final_dataset[Final_dataset["RATING"]>=4.5]
```

In [90]:

```
highRR_dataset
```

Out[90]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	Bandra	Casual Dining	12noon to 130am
6	Persian Darbar	1300	Biryani,North Indian,Chinese,Mughlai	Marol	Casual Dining	10am to 3am
7	Tanatan	1500	Modern Indian	Juhu	Casual Dining	12noon to 130am
9	Plum by Bent Chair	1800	Asian	Lower Parel	Casual Dining	12noon to 1am
10	Angrezi Dhaba	1500	North Indian,Chinese,Thai,European	Dadar	Bar	12noon to 1am
...
14228	Zaika Crave - Club Aquaria	1300	North Indian,Continental,Chinese,Desserts	Borivali	Casual Dining	11am to 330pm,7pm to 1130pm
14234	Cone Culture	250	European	Kharghar	Casual Dining	Closed
15007	Dessertino	300	Desserts,Ice Cream	Kandivali	Dessert Parlor	11am to 12midnight
15051	Tick-eat	800	North Indian,Italian,Chinese,Mexican,Lebanese	Mulund	Casual Dining	1130am to 330pm,7pm to 1130pm
15056	Daftar Goregaon	750	Pizza,Chinese,North Indian,Beverages	Goregaon	Casual Dining	12noon to 1130pm

97 rows × 10 columns



In [91]:

```
highRR_dataset["REGION"].value_counts()
```

Out[91]:

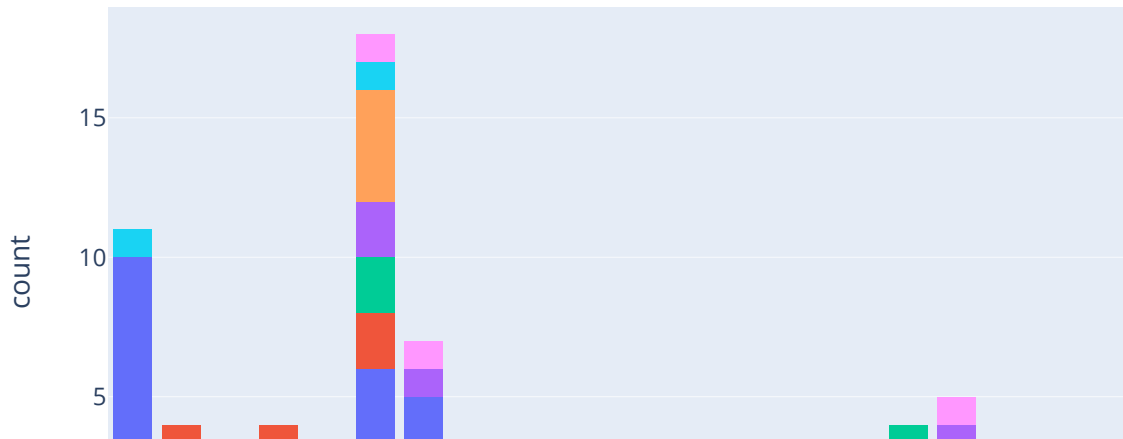
Andheri	18
Bandra	11
Powai	10
Thane	7
Borivali	5
Malad	4
Marol	4
Lower Parel	4
Chembur	3
Ghatkopar	3
Kharghar	3
Goregaon	3
Juhu	2
Vashi	2
CBD Belapur	2
Chakala	1
Mulund	1
Worli	1
Byculla	1
Fort	1
Kalbadevi	1
Bhayandar	1
Santacruz	1
Vile Parle	1
Dadar	1
Dahisar	1
Kandivali	1
Chandivali	1
Mohammad Ali Road	1
Khar	1
Navi Mumbai	1

Name: REGION, dtype: int64

In [92]:

```
fig=px.histogram(highRR_dataset,x="REGION",title="Places with Highest rated restaurant",col  
fig.show()
```

Places with Highest rated restaurant



Q6) What is the Avg Price Distribution of highest rated restaurant for each Cuisine Type in Mumbai?

In [93]:

```
MeanHighRR_dataset=highRR_dataset.groupby(by=["REGION","CUISINE TYPE"])["PRICE"].mean().reset_index()
```

In [94]:

MeanHighRR_dataset

Out[94]:

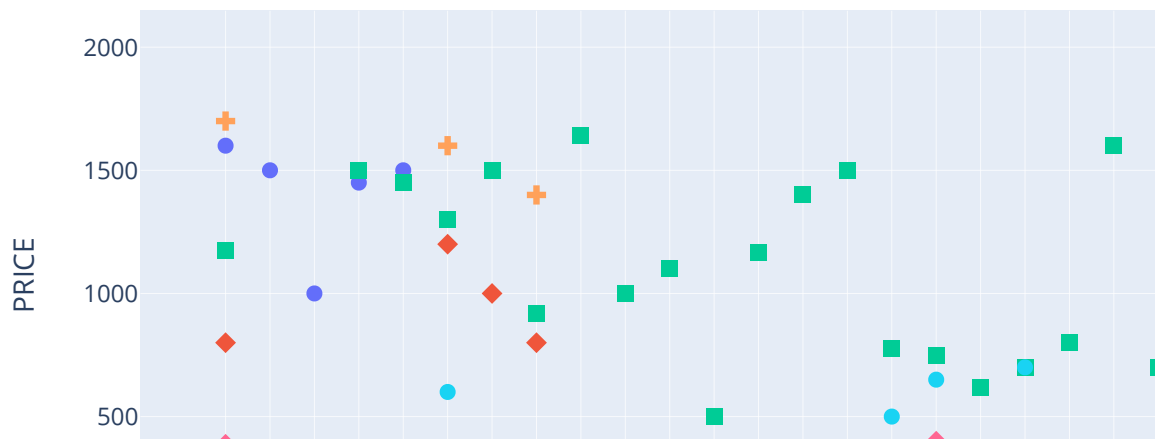
	REGION	CUSINE TYPE	PRICE
0	Andheri	Bar	1600.000000
1	Andheri	Café	800.000000
2	Andheri	Casual Dining	1175.000000
3	Andheri	Dessert Parlor	300.000000
4	Andheri	Lounge	1700.000000
5	Andheri	Quick Bites	350.000000
6	Andheri	none	387.500000
7	Bandra	Casual Dining	1640.000000
8	Bandra	Dessert Parlor	350.000000
9	Bhayandar	Casual Dining	1000.000000
10	Borivali	Café	1200.000000
11	Borivali	Casual Dining	1300.000000
12	Borivali	Lounge	1600.000000
13	Borivali	Quick Bites	600.000000
14	Byculla	Lounge	1400.000000
15	CBD Belapur	Casual Dining	1100.000000
16	Chakala	Casual Dining	500.000000
17	Chandivali	Quick Bites	600.000000
18	Chembur	Casual Dining	1166.666667
19	Dadar	Bar	1500.000000
20	Dahisar	Casual Dining	1400.000000
21	Fort	Casual Dining	1500.000000
22	Ghatkopar	Casual Dining	775.000000
23	Ghatkopar	Quick Bites	500.000000
24	Goregaon	Casual Dining	750.000000
25	Goregaon	Quick Bites	650.000000
26	Goregaon	none	400.000000
27	Juhu	Café	1000.000000
28	Juhu	Casual Dining	1500.000000
29	Kalbadevi	Dessert Parlor	700.000000
30	Kandivali	Dessert Parlor	300.000000
31	Khar	Bar	1000.000000
32	Kharghar	Casual Dining	616.666667
33	Lower Parel	Bar	1450.000000

	REGION	CUSINE TYPE	PRICE
34	Lower Parel	Casual Dining	1500.000000
35	Malad	Casual Dining	700.000000
36	Malad	Quick Bites	700.000000
37	Marol	Bar	1500.000000
38	Marol	Casual Dining	1450.000000
39	Mohammad Ali Road	Dessert Parlor	150.000000
40	Mulund	Casual Dining	800.000000
41	Navi Mumbai	Casual Dining	1600.000000
42	Powai	Lounge	1700.000000
43	Powai	Pub	1400.000000
44	Powai	Quick Bites	625.000000
45	Powai	none	687.500000
46	Santacruz	none	500.000000
47	Thane	Café	800.000000
48	Thane	Casual Dining	920.000000
49	Thane	Lounge	1400.000000
50	Vashi	Casual Dining	700.000000
51	Vile Parle	Casual Dining	1100.000000
52	Worli	Fine Dining	2000.000000

In [95]:

```
fig = px.scatter(MeanHighRR_dataset, x="REGION", y="PRICE", symbol="Cuisine Type", color="Cuisine Type")  
fig.show()
```

Avg Price Distribution of highest rated restaurant



Q7) Which areas have a large number of Chinese Restaurant Market?

In [96]:

```
chinese_dataset=Final_dataset[Final_dataset["Cuisine_Category"].str.contains("Chinese")]
```

In [97]:

```
chinese_dataset
```

Out[97]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATIN
0	Hitchki	1200	Modern Indian,North Indian,Chinese,Momos,Birya...	Bandra	Casual Dining	12noon to 130am	
2	Chin Chin Chu	1800	Asian,Chinese	Juhu	Casual Dining	12noon to 1am	V
4	BKC DIVE	1200	North Indian,Chinese,Continental	Bandra	Bar	1130am to 1am	V
5	Flea Bazaar Café	800	American,Asian,Street Food,North Indian,Luckno...	Lower Parel	Café	12noon to 1am	V
6	Persian Darbar	1300	Biryani,North Indian,Chinese,Mughlai	Marol	Casual Dining	10am to 3am	
...	
15071	Lucknow Zaika	500	North Indian,Chinese	Kurla	Quick Bites	12noon to 2am	
15072	Zuha's Kitchen	400	Chinese,North Indian,Mughlai	Mumbai Central	Quick Bites	12noon to 4pm,730pm to 430am	
15075	Tirupati Balaji	500	Chinese,Fast Food,North Indian	Andheri	Casual Dining	8am to 11pm,12midnight to 115am	
15076	Hari Om Snack Bar	350	Fast Food,South Indian,Chinese	Kandivali	Quick Bites	11am to 230am	
15079	Mandarin Panda	400	Desserts,Chinese,Thai	Malad	none	12noon to 330pm,7pm to 1am	

5119 rows × 10 columns



In [98]:

```
chinese_df=chinese_dataset["REGION"].value_counts().head(10).reset_index()
```


In [99]:

```
chinese_df
```

Out[99]:

	index	REGION
0	Andheri	389
1	Thane	371
2	Mira Road	224
3	Malad	186
4	Goregaon	163
5	Dombivali	159
6	Chembur	152
7	Kandivali	145
8	Kalyan	136
9	Borivali	131

In [100]:

```
chinese_df.rename(columns={"index":"REGION","REGION":"COUNT OF CHINESE RESTAURANTS"},inplace=True)
```

In [101]:

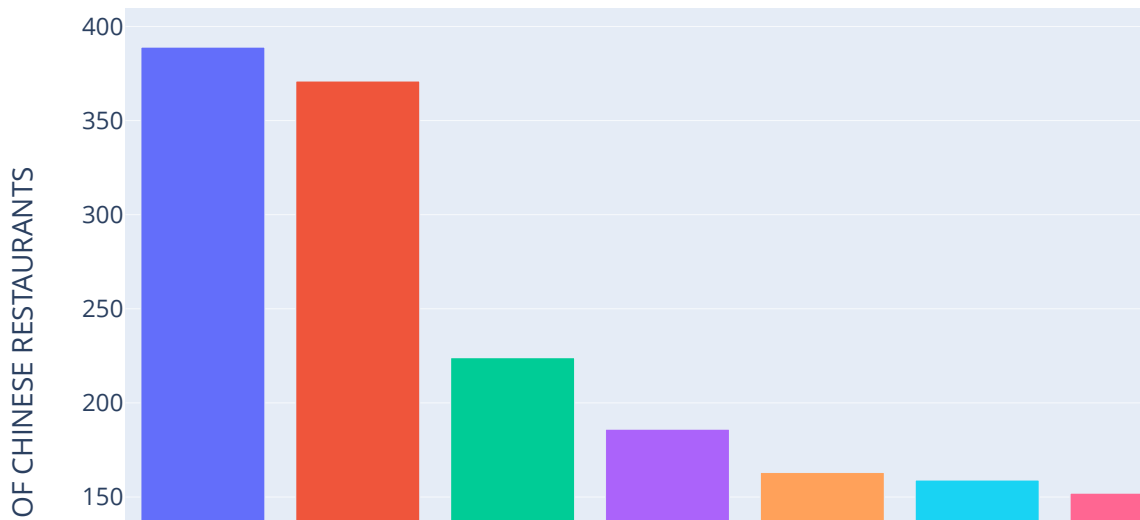
```
chinese_df
```

Out[101]:

	REGION	COUNT OF CHINESE RESTAURANTS
0	Andheri	389
1	Thane	371
2	Mira Road	224
3	Malad	186
4	Goregaon	163
5	Dombivali	159
6	Chembur	152
7	Kandivali	145
8	Kalyan	136
9	Borivali	131

In [102]:

```
fig=px.bar(chinese_df,x="REGION",y="COUNT OF CHINESE RESTAURANTS",color="REGION")  
fig.show()
```



Q8) Is there a relation between Price and Rating by each Cuisine Type?

In [103]:

```
price_rating_dataset=Final_dataset.groupby(["CUSINE TYPE","RATING"])["PRICE"].mean().reset_
price_rating_dataset
```

Out[103]:

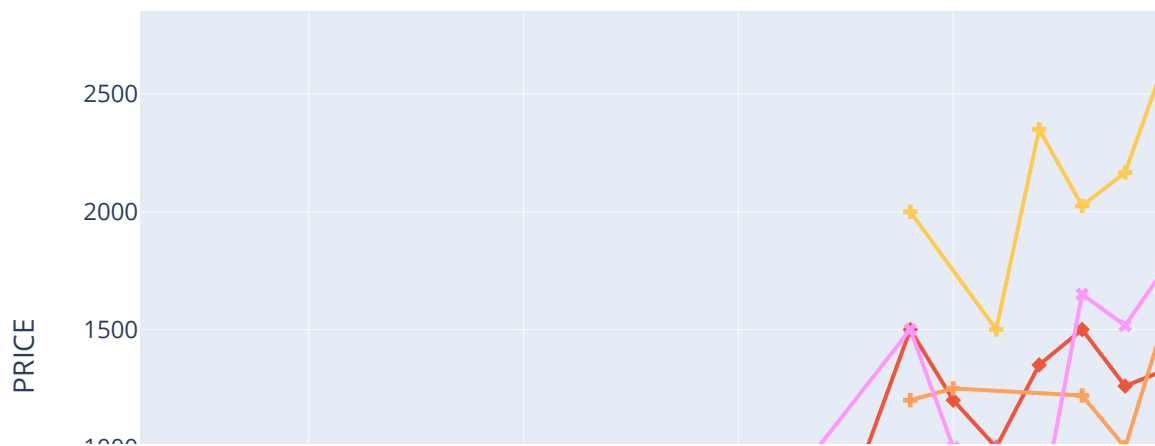
	CUSINE TYPE	RATING	PRICE
0	Bakery	2.7	400.000000
1	Bakery	2.8	285.714286
2	Bakery	2.9	328.571429
3	Bakery	3.0	300.000000
4	Bakery	3.1	369.117647
...
278	none	4.3	683.333333
279	none	4.4	555.000000
280	none	4.5	420.000000
281	none	4.6	687.500000
282	none	4.7	350.000000

283 rows × 3 columns

In [104]:

```
ing_dataset, y="PRICE", x="RATING",color='CUSINE TYPE',symbol="CUSINE TYPE",title="Price and
```

Price and Rating by each Cuisine Type



Q9) Is there a relation between Region and Price?

In [105]:

```
region_price_dataset=Final_dataset.groupby(["REGION"])[ "PRICE" ].mean().reset_index()  
region_price_dataset
```

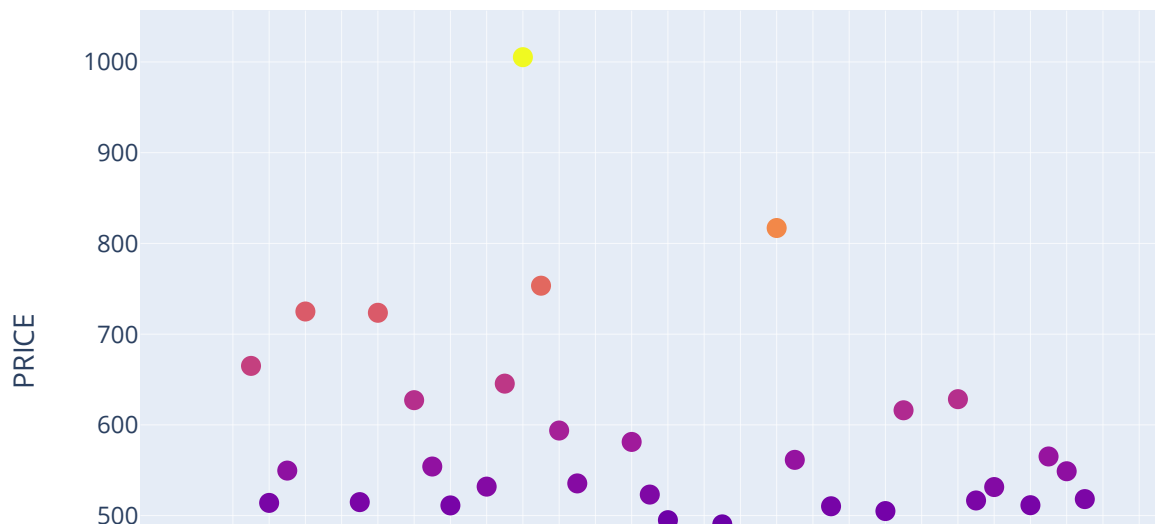
Out[105]:

	REGION	PRICE
0	Airoli	452.287582
1	Alibaug	665.000000
2	Ambernath	514.000000
3	Andheri	549.597765
4	Bandra	724.945946
...
74	Vikhroli	480.434783
75	Vile Parle	464.457831
76	Virar	452.027027
77	Wadala	427.500000
78	Worli	537.012987

79 rows × 2 columns

In [106]:

```
fig=px.scatter(region_price_dataset,x="REGION",y="PRICE",color="PRICE").update_traces(marke  
fig.show()
```



Q10) Find the list of Affordable Restaurants?

In [107]:

```
maxvalue=Final_dataset["PRICE"].max()  
maxvalue
```

Out[107]:

5000

In [108]:

```
affvalue=maxvalue/4  
affvalue
```

Out[108]:

1250.0

In [109]:

```
aff_dataset=Final_dataset[Final_dataset["PRICE"]<=1250]
aff_dataset.sort_values(by="PRICE",inplace=True)
aff_dataset
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

Out[109]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING_TYPE
6137	Sanjog Wine N Dine	5	North Indian,Chinese	Thane	Casual Dining	11am to 12midnight	Good
2925	Jab We Eat	50	South Indian,North Indian,Maharashtrian,Fast Food	Girgaum	none	5am to 10pm	Average
9598	Ho5 Store	50	Fast Food	Matunga	none	930am to 10pm	Average
9589	Golden Butterfly	100	Bakery,Desserts	Mira Road	Bakery	10am to 11pm	Average
5916	Madhuri Puranpoli	100	Maharashtrian	Vile Parle	none	10am to 10pm	Average
...
2740	Peninsula Next	1200	North Indian,Mughlai,Chinese	Sion	Casual Dining	11am to 3pm,6pm to 1130pm	Good
5528	The Thekka	1200	Finger Food,Continental,North Indian,Chinese	Vashi	Lounge	12noon to 1am	Very Good
964	Bijoli Grill	1250	Bengali	Powai	Casual Dining	1230pm to 11pm	Good
6045	Fabelle at The Chocolate Boutique - ITC Grand ...	1250	Desserts	Parel	Dessert Parlor	11am to 12midnight	Good
7301	SamBar Pub & Kitchen	1250	Finger Food,South Indian,North Indian	Khar	Pub	12midnight to 1am,630pm to 12midnight	Good

10190 rows × 10 columns

In [110]:

```

highrate_dataset=Final_dataset[Final_dataset["RATING"]>=4.5]
highrate_dataset.sort_values(by="PRICE",inplace=True)
highrate_dataset

```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: SettingWithCopyWarning:

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Out[110]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING
1502	Cake Centre-The Dessert Maker	150	Desserts	Mohammad Ali Road	Dessert Parlor	11am to 12midnight
763	Curry And Combos Twist	200	North Indian,Chinese	Andheri	Quick Bites	930am to 1130pm
807	Moussestruck	200	Desserts	Andheri	none	10am to 1145pm
14234	Cone Culture	250	European	Kharghar	Casual Dining	Close
725	Belo Pops	300	Ice Cream,Desserts,Beverages	Andheri	none	7pm to 3am
...
5335	Mia Cucina	2000	Italian	Bandra	Casual Dining	12noon to 1230AM
1786	Global Fusion	2000	Chinese,Japanese,Asian,North Indian	Worli	Fine Dining	12noon to 330pm,7pm to 1230AM
8887	Drifters Tap Station	2000	North Indian,Continental,European,American	Bandra	Casual Dining	12noon to 1am
12625	House of Mandarin	2100	Chinese,Sushi,Asian	Bandra	Casual Dining	12noon to 4pm,7pm to 12midnight
902	The Harbour Bay - SeaFood Kitchen & Bar	2400	Seafood,Beverages	Bandra	Casual Dining	12noon to 1am

97 rows × 10 columns

In [111]:

```
highrate_aff_dataset=pd.merge(highrate_dataset,aff_dataset)
highrate_aff_dataset
```

Out[111]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	
0	Cake Centre- The Dessert Maker	150	Desserts	Mohammad Ali Road	Dessert Parlor	12r
1	Curry And Combos Twist	200	North Indian,Chinese	Andheri	Quick Bites	9:
2	Moussestruck	200	Desserts	Andheri	none	
3	Cone Culture	250	European	Kharghar	Casual Dining	
4	Belo Pops	300	Ice Cream,Desserts,Beverages	Andheri	none	
...	
60	Angrezi Patiyalaa	1200	North Indian,Finger Food,American,Mexican,Chinese	Andheri	Casual Dining	12 1
61	Spice Republic	1200	Cafe,Continental,Mediterranean,Mexican,Italian...	Borivali	Café	11:
62	The Joker Bistro	1200	North Indian,Chinese,Continental	CBD Belapur	Casual Dining	12 12r
63	Invento	1200	Chinese,Fast Food,North Indian,Italian,Mexican	Lower Parel	Casual Dining	11: 4: 12r
64	Culinary Tales	1200	Chinese,European,Continental,Salad,Italian,Pizza	Andheri	Casual Dining	

65 rows × 10 columns



Q11) Find the list of most Reliable Restaurants?

In [112]:

```
meanvotes=Final_dataset["VOTES"].mean()
```

In [113]:

```
meanvotes
```

Out[113]:

```
177.2656679624538
```

In [114]:

```
maxvotes_dataset=Final_dataset[Final_dataset["VOTES"]>177]  
maxvotes_dataset.sort_values(by="VOTES",ascending=False,inplace=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: SettingWithCopyWarning:

A value is trying to be set on a copy of a slice from a DataFrame

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy (http://pandas.pydata.org/pandas-docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy)

In [115]:

```
maxvotes_dataset
```

Out[115]:

	NAME	PRICE	CUSINE_CATEGORY	REGION	CUSINE TYPE	TIMING	RATING
8897	Candies	700	Cafe,Italian,North Indian,Desserts	Bandra	Café	Closed	Very
3751	Prithvi Cafe	700	Cafe,Fast Food	Juhu	Café	1030am to 1030pm	Very
5337	Chili's American Grill & Bar	1400	American,Mexican,Burger,Tex-Mex	Powai	Casual Dining	12noon to 130am	Very
1251	Joey's Pizza	800	Pizza	Malad	Quick Bites	11am to 12midnight	Ex
8539	Leopold Cafe & Bar	1600	American,Chinese,Mughlai,Italian	Colaba	Casual Dining	730am to 12midnight	
...	
3828	Frozen Delight - The Dessert Cafe	250	Desserts,Ice Cream	Airoli	Dessert Parlor	Closed	
11211	Soul Curry	800	Chinese,North Indian,Malwani,Mughlai,Biryani	Bhandup	Casual Dining	11am to 1230AM	
2891	New Wanton Point	450	Chinese,North Indian,Seafood	Kandivali	Casual Dining	11am to 12midnight	
99	Appetite - Resto Bar	700	North Indian,Chinese	Powai	Casual Dining	12noon to 4pm,630pm to 130am	
12267	Buddha Bowl	1000	Asian,Healthy Food	Bandra	none	12noon to 330pm,7pm to 1130pm	Very

2345 rows × 10 columns



In [116]:

```
reliable_dataset=pd.merge(highrate_aff_dataset,maxvotes_dataset)
```

In [117]:

```
reliable_dataset.sort_index(by="VOTES",ascending=False,inplace=True)
```

C:\Users\athis\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: FutureWarning:

by argument to sort_index is deprecated, please use .sort_values(by=...)

In [118]:

```
reliable_dataset
```

Restaurant	VOTES	Menu	Location	Dining	Hours
Maharashtra Lunch Home	600	Maharashtrian,Malwani,Konkan,Seafood	Kharghar	Casual Dining	11am to 345pm,7pm to 1145pm
Invento	1200	Chinese,Fast Food,North Indian,Italian,Mexican	Lower Parel	Casual Dining	1130am to 4pm,7pm to 12midnight
Dessertino	300	Desserts,Ice Cream	Kandivali	Dessert Parlor	11am to 12midnight
Fresh Food Co.	500	Continental,Healthy Food,Salad,Beverages,Desse...	Santacruz	none	9am to 11pm
Rajmanya-Seafood family restaurant	800	Maharashtrian,Konkan,Seafood	Vashi	Casual Dining	11am to 11pm

