SANJIDA ESHA

Data analysis task:

Level1 :

- Task 1 :
    1. Top Cuisines Determine the top three most common cuisines in the dataset.
    2. Calculate the percentage of restaurants that serve each of the top cuisines.

K5 =SUM(G5,H5,I5,J5)

	A	B	C	D	E	F	G	H	I	J	K
1	unique	u1	u2	u3	u4		v1	v2	v3	v4	sum
2	French	French	Japanese	Desserts			14	0	0	0	14
3	Japanese	Japanese					72	0	0	0	72
4	Seafood	Seafood	Asian	Filipino	Indian		49	0	0	0	49
5	Chinese	Japanese	Sushi				855	0	0	0	855
6	Asian	Japanese	Korean				77	0	0	0	77
7	European	Chinese					62	0	0	0	62
8	Filipino	Asian	European				6	0	0	0	6
9	American	Seafood	Filipino	Asian	European		278	0	0	0	278
10	Korean	European	Asian	Indian			9	0	0	0	9
11	Cafe	Filipino					617	0	0	0	617
12	Italian	Filipino	Mexican				234	0	0	0	234
13	Fast Food	American	Ice Cream	Desserts			672	0	0	0	672
14	Bakery	Filipino	Mexican				621	0	0	0	621
15	Brazilian	Filipino					22	0	0	0	22
16	Pizza	Korean					232	0	0	0	232
17	Arabian	Cafe	American	Italian	Filipino		5	0	0	0	5
18	Bar Food	Italian	Pizza				9	0	0	0	9
19	Mexican	Filipino					62	0	0	0	62

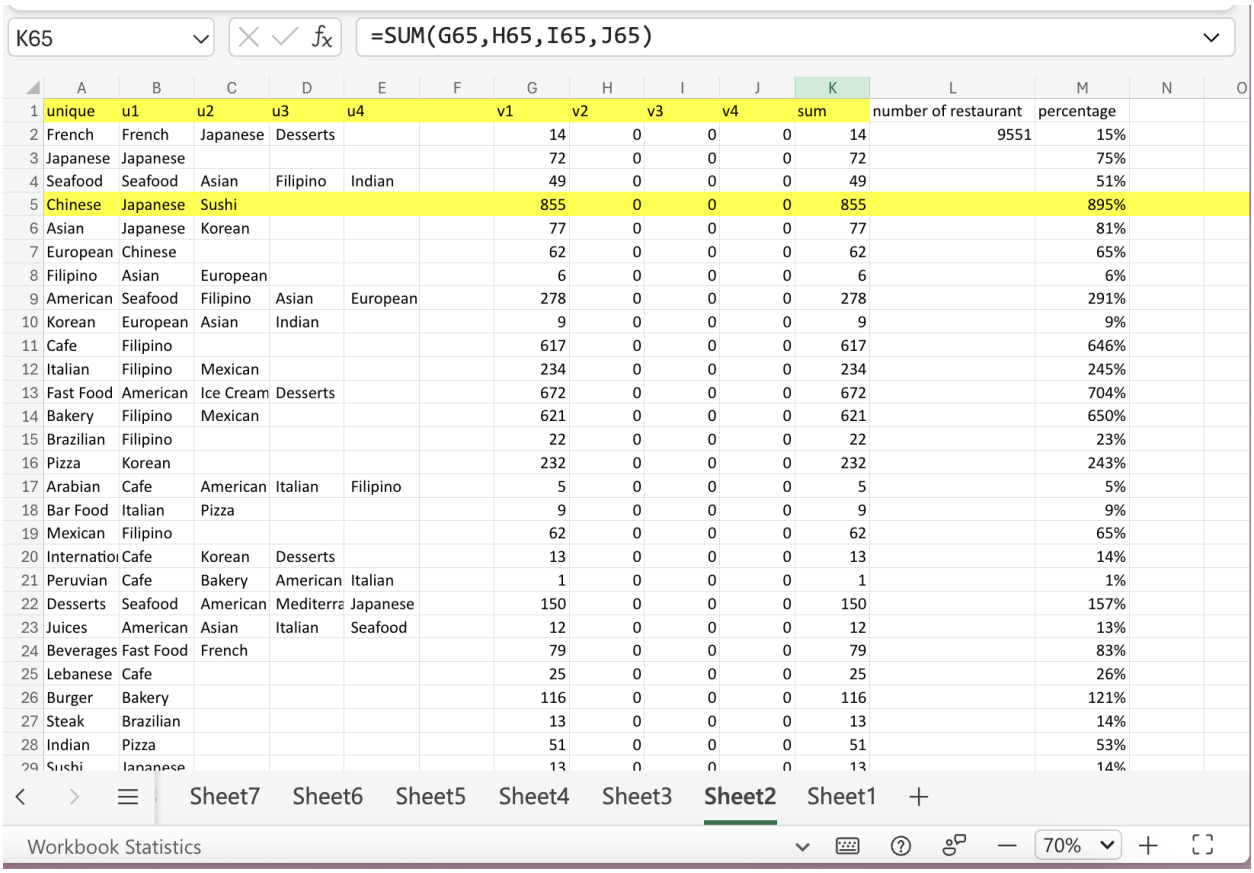
K65 =SUM(G65,H65,I65,J65)

	A	B	C	D	E	F	G	H	I	J	K
59	Turkish	Brazilian	Seafood				7	0	0	0	7
60	Pakistani	Bar Food	Brazilian				8	0	0	0	8
61	Continent	Brazilian					235	0	0	0	235
62	Goan	Brazilian	Bar Food				10	0	0	0	10
63	South Indi	Brazilian	Bar Food				262	0	0	0	262
64	African	Italian	Pizza				2	0	0	0	2
65	North Indi	Steak	BBQ				2992	0	0	0	2992
66	Rajasthani	Indian					6	0	0	0	6
67	Mughlai	Brazilian					215	0	0	0	215
68	Ice Cream	Beverages	International				178	0	0	0	178
69	Street Foo	French	Brazilian	Beverages			236	0	0	0	236
70	Mithai	Brazilian	Grill				246	0	0	0	246
71	Maharash	Brazilian					6	0	0	0	6
72	Modern In	French					14	0	0	0	14
73	Biryani	Sushi	Japanese				112	0	0	0	112
74	Parsi	BBQ	Grill	Brazilian			6	0	0	0	6
75	Raw Meat	Sushi					110	0	0	0	110
76	Kashmiri	Gourmet F	Burger				13	0	0	0	13
77	South Am	Brazilian	Italian				2	0	0	0	2

K65 =SUM(G65,H65,I65,J65)

	A	B	C	D	E	F	G	H	I	J	K
170	German	American	Breakfast	Burger			0	3	1	1	5
171	Fusion	American	BBQ	Burger			0	2	1	0	3
172	Cuban	Indian					0	1	0	0	1
173	Greek	Chinese	Sushi	Thai			0	5	1	2	8
174	Cajun	Chinese					0	2	6	0	8
175	Turkish	American	Italian	Pizza			0	5	3	0	8
176	Fast Food	Indian					0	820	385	77	1282
177	Persian	Burger					0	1	0	0	1
178	Hawaiian	American	Breakfast	Burger			0	1	2	0	3
179	Continent	Breakfast	Diner				0	245	193	50	488
180	Deli	American	Internatio	Sushi			0	1	0	1	2
181	Middle Ea	Pizza					0	6	10	1	17
182	North Ind	International					0	687	191	65	943
183	South Ind	American	Breakfast				0	219	123	25	367
184	Afghani	Mediterra	Tapas	Vegetarian			0	4	2	1	7
185	Rajasthan	BBQ					0	10	1	3	14
186	Indian	Pizza	Sandwich				0	9	4	4	17
187	Mughlai	Japanese	Sushi				0	635	124	16	775
188	Portugues	American	Breakfast	Desserts			0	1	1	0	2

heet11 Sheet10 Sheet9 Sheet8 Sheet7 Sheet6 Sheet5 Sheet4 Sheet3 **Sheet2** Sheet1 +



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	unique	u1	u2	u3	u4		v1	v2	v3	v4	sum	number of restaurant	percentage		
2	French	French	Japanese	Desserts			14	0	0	0	14	9551	15%		
3	Japanese	Japanese					72	0	0	0	72		75%		
4	Seafood	Seafood	Asian	Filipino	Indian		49	0	0	0	49		51%		
5	Chinese	Japanese	Sushi				855	0	0	0	855		895%		
6	Asian	Japanese	Korean				77	0	0	0	77		81%		
7	European	Chinese					62	0	0	0	62		65%		
8	Filipino	Asian	European				6	0	0	0	6		6%		
9	American	Seafood	Filipino	Asian	European		278	0	0	0	278		291%		
10	Korean	European	Asian	Indian			9	0	0	0	9		9%		
11	Cafe	Filipino					617	0	0	0	617		646%		
12	Italian	Filipino	Mexican				234	0	0	0	234		245%		
13	Fast Food	American	Ice Cream	Desserts			672	0	0	0	672		704%		
14	Bakery	Filipino	Mexican				621	0	0	0	621		650%		
15	Brazilian	Filipino					22	0	0	0	22		23%		
16	Pizza	Korean					232	0	0	0	232		243%		
17	Arabian	Cafe	American	Italian	Filipino		5	0	0	0	5		5%		
18	Bar Food	Italian	Pizza				9	0	0	0	9		9%		
19	Mexican	Filipino					62	0	0	0	62		65%		
20	Internatio	Cafe	Korean	Desserts			13	0	0	0	13		14%		
21	Peruvian	Cafe	Bakery	American	Italian		1	0	0	0	1		1%		
22	Desserts	Seafood	American	Mediterra	Japanese		150	0	0	0	150		157%		
23	Juices	American	Asian	Italian	Seafood		12	0	0	0	12		13%		
24	Beverages	Fast Food	French				79	0	0	0	79		83%		
25	Lebanese	Cafe					25	0	0	0	25		26%		
26	Burger	Bakery					116	0	0	0	116		121%		
27	Steak	Brazilian					13	0	0	0	13		14%		
28	Indian	Pizza					51	0	0	0	51		53%		
29	Sushi	Japanese					13	0	0	0	13		14%		

- Task 2:
    1. Identify the city with the highest number of restaurants in the dataset.
    2. Calculate the average rating for restaurants in each city.
    3. Determine the city with the highest average rating.

A4 | Seafood

unique	sum
French	14
Japanese	72
Seafood	49
Chinese	855
Asian	77
European	62
Filipino	6
American	278
Korean	9
Cafe	617

sum	(All)

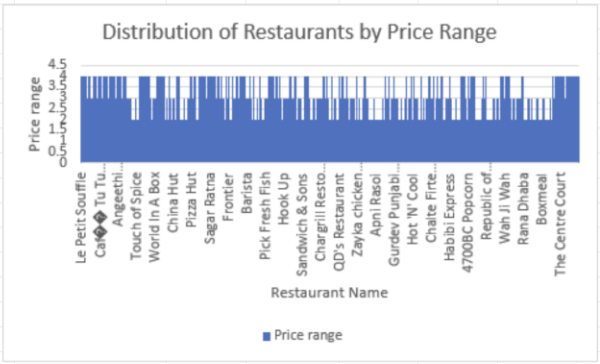
unique	Sum of sum
North Indian	2992
Chinese	1831
Fast Food	1282
North Indian	943
Chinese	855
Mughlai	775
Fast Food	672
Bakery	621

City	Count of Restaurant Name	Average of Aggregate rating
Inner City	2	4.9
Quezon City	1	4.8
Makati City	2	4.65
Pasig City	3	4.633333333
Mandaluyong City	4	4.625
Beechworth	1	4.6
London	20	4.535
Taguig City	4	4.525
Secunderabad	2	4.5
Tagaytay City	1	4.5
Lincoln	1	4.5
Orlando	20	4.475
Tampa Bay	20	4.41

- Task 3:
    1. Create a histogram or bar chart to visualize the distribution of price ranges among the restaurants.
    2. Calculate the percentage of restaurants in each price range category.

H4

	A	B	C	D	E	F
1	Restaurant Name	Price range	unique	restaurant number	count	percentage
2	Le Petit Souffle	3	3	9551	1408	15%
3	Izakaya Kikufuji	3	4		586	6%
4	Heat - Edsa Shangri-La	4	2		3113	33%
5	Ooma	4	1		4444	47%
6	Sambo Kojin	4		SUM OF COUNT	9551	
7	Din Tai Fung	3				
8	Buffet 101	4				
9	Vikings	4				
10	Spiral - Sofitel Philippine Plaza Manila	4				
11	Locavore	3				
12	Silantro Fil-Mex	3				
13	Mad Mark's Creamery & Good Eats	3				
14	Silantro Fil-Mex	3				
15	Guevarra's	3				
16	Sodam Korean Restaurant	3				
17	Cafe Arabelle	3				
18	Nonna's Pasta & Pizzeria	3				
19	Balay Dako	3				
20	Hobing Korean Dessert Cafe	2				
21	Wildflour Cafe + Bakery	4				
22	NIU by Vikings	4				
23	The Food Hall by Todd English	4				
24	Chez Michou	2				



in Sheet13 Sheet12 Sheet11 Sheet10 Sheet9 Sheet8 Sheet7 Sheet6 **Sheet5** Sheet4 Sheet3 Sheet2 Sheet1

Workbook Statistics

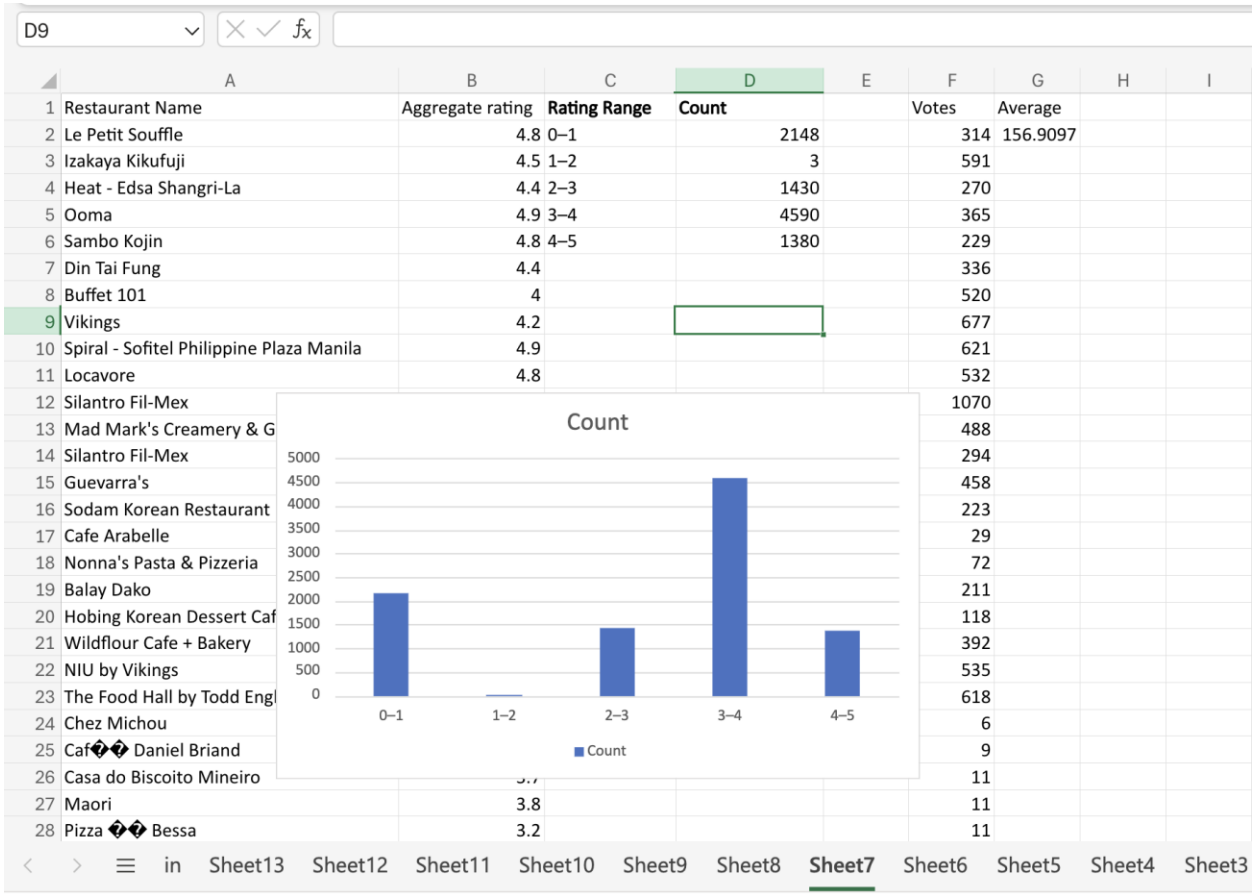
- Task 4:
  1. Determine the percentage of restaurants that offer online delivery.
  2. Compare the average ratings of restaurants with and without online delivery.

G1 average

	A	B	C	D	E	F	G	H
1	Restaurant Name	Has Online delivery	UNIQUE	Count	percentage	Aggregate rating	average	
2	Le Petit Souffle	No	Yes	2451	26%	4.8	3.248837209	
3	Izakaya Kikufuji	No	No	7100	74%	4.5	2.465295775	
4	Heat - Edsa Shangri-La	No	SUM OF COUNT	9551		4.4		
5	Ooma	No				4.9		
6	Sambo Kojin	No				4.8		
7	Din Tai Fung	No				4.4		
8	Buffet 101	No				4		
9	Vikings	No				4.2		
10	Spiral - Sofitel Philippine Plaza Manila	No				4.9		
11	Locavore	No				4.8		
12	Silantro Fil-Mex	No				4.9		
13	Mad Mark's Creamery & Good Eats	No				4.2		
14	Silantro Fil-Mex	No				4.8		
15	Guevarra's	No				4.2		
16	Sodam Korean Restaurant	No				4.3		
17	Cafe Arabelle	No				3.6		
18	Nonna's Pasta & Pizzeria	No				4		
19	Balay Dako	No				4.5		
20	Hobing Korean Dessert Cafe	No				4.5		

Level 2 :

- Task 1:
  1. Analyze the distribution of aggregate ratings and determine the most common rating range.
  2. Calculate the average number of votes received by restaurants.

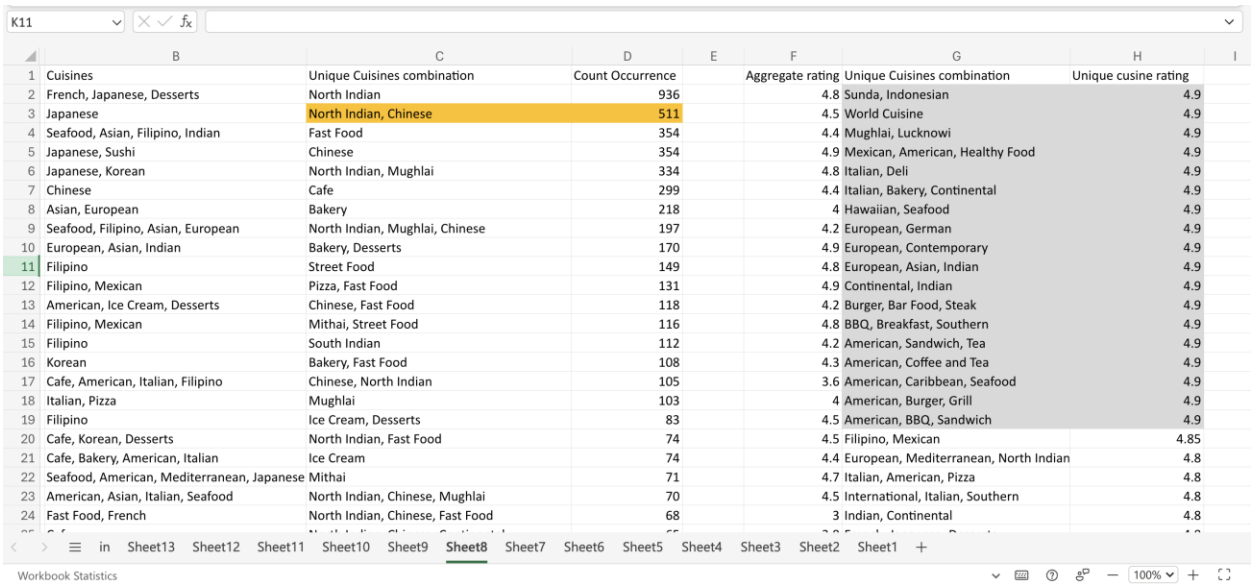


D9

	A	B	C	D	E	F	G	H	I
1	Restaurant Name	Aggregate rating	Rating Range	Count		Votes	Average		
2	Le Petit Souffle	4.8	0–1	2148		314	156.9097		
3	Izakaya Kikufuji	4.5	1–2	3		591			
4	Heat - Edsa Shangri-La	4.4	2–3	1430		270			
5	Ooma	4.9	3–4	4590		365			
6	Sambo Kojin	4.8	4–5	1380		229			
7	Din Tai Fung	4.4				336			
8	Buffet 101	4				520			
9	Vikings	4.2				677			
10	Spiral - Sofitel Philippine Plaza Manila	4.9				621			
11	Locavore	4.8				532			
12	Silantro Fil-Mex					1070			
13	Mad Mark's Creamery & G					488			
14	Silantro Fil-Mex					294			
15	Guevarra's					458			
16	Sodam Korean Restaurant					223			
17	Cafe Arabelle					29			
18	Nonna's Pasta & Pizzeria					72			
19	Balay Dako					211			
20	Hobing Korean Dessert Caf					118			
21	Wildflour Cafe + Bakery					392			
22	NIU by Vikings					535			
23	The Food Hall by Todd Engl					618			
24	Chez Michou					6			
25	Caf�? Daniel Briand					9			
26	Casa do Biscoito Mineiro					11			
27	Maori	3.8				11			
28	Pizza ?? Bessa	3.2				11			

in Sheet13 Sheet12 Sheet11 Sheet10 Sheet9 Sheet8 **Sheet7** Sheet6 Sheet5 Sheet4 Sheet3

- Task 2:
  1. Identify the most common combinations of cuisines in the dataset.
  2. Determine if certain cuisine combinations tend to have higher ratings.



	B	C	D	F	G	H
1	Cuisines	Unique Cuisines combination	Count Occurrence	Aggregate rating	Unique Cuisines combination	Unique cusine rating
2	French, Japanese, Desserts	North Indian	936	4.8	Sunda, Indonesian	4.9
3	Japanese	North Indian, Chinese	511	4.5	World Cuisine	4.9
4	Seafood, Asian, Filipino, Indian	Fast Food	354	4.4	Mughlai, Lucknowi	4.9
5	Japanese, Sushi	Chinese	354	4.9	Mexican, American, Healthy Food	4.9
6	Japanese, Korean	North Indian, Mughlai	334	4.8	Italian, Deli	4.9
7	Chinese	Cafe	299	4.4	Italian, Bakery, Continental	4.9
8	Asian, European	Bakery	218	4	Hawaiian, Seafood	4.9
9	Seafood, Filipino, Asian, European	North Indian, Mughlai, Chinese	197	4.2	European, German	4.9
10	European, Asian, Indian	Bakery, Desserts	170	4.9	European, Contemporary	4.9
11	Filipino	Street Food	149	4.8	European, Asian, Indian	4.9
12	Filipino, Mexican	Pizza, Fast Food	131	4.9	Continental, Indian	4.9
13	American, Ice Cream, Desserts	Chinese, Fast Food	118	4.2	Burger, Bar Food, Steak	4.9
14	Filipino, Mexican	Mithai, Street Food	116	4.8	BBQ, Breakfast, Southern	4.9
15	Filipino	South Indian	112	4.2	American, Sandwich, Tea	4.9
16	Korean	Bakery, Fast Food	108	4.3	American, Coffee and Tea	4.9
17	Cafe, American, Italian, Filipino	Chinese, North Indian	105	3.6	American, Caribbean, Seafood	4.9
18	Italian, Pizza	Mughlai	103	4	American, Burger, Grill	4.9
19	Filipino	Ice Cream, Desserts	83	4.5	American, BBQ, Sandwich	4.9
20	Cafe, Korean, Desserts	North Indian, Fast Food	74	4.5	Filipino, Mexican	4.85
21	Cafe, Bakery, American, Italian	Ice Cream	74	4.4	European, Mediterranean, North Indian	4.8
22	Seafood, American, Mediterranean, Japanese	Mithai	71	4.7	Italian, American, Pizza	4.8
23	American, Asian, Italian, Seafood	North Indian, Chinese, Mughlai	70	4.5	International, Italian, Southern	4.8
24	Fast Food, French	North Indian, Chinese, Fast Food	68	3	Indian, Continental	4.8

- Task 3:
  1. Plot the locations of restaurants on a map using longitude and latitude coordinates.
  2. Identify any patterns or clusters of restaurants in specific areas.

- Task 4:
  1. Identify if there are any restaurant chains present in the dataset.
  2. Analyze the ratings and popularity of different restaurant chains.

F5

	A	B	C	D	E
1	Restaurant Name	is chain	Aggregate rating	Votes	
2	Le Petit Souffle	No	4.8	314	
3	Izakaya Kikufuji	No	4.5	591	
4	Heat - Edsa Shangri-La	No	4.4	270	
5	Ooma	No	4.9	365	
6	Sambo Kojin	No	4.8	229	
7	Din Tai Fung	Yes	4.4	336	
8	Buffet 101	No	4	520	
9	Vikings	No	4.2	677	
10	Spiral - Sofitel Philippine Plaza Manila	No	4.9	621	
11	Locavore	No	4.8	532	
12	Silantro Fil-Mex	Yes	4.9	1070	
13	Mad Mark's Creamery & Good Eats	No	4.2	488	
14	Silantro Fil-Mex	Yes	4.8	294	
15	Guevarra's	No	4.2	458	
16	Sodam Korean Restaurant	No	4.3	223	
17	Cafe Arabelle	No	3.6	29	
18	Nonna's Pasta & Pizzeria	No	4	72	
19	Balay Dako	No	4.5	211	
20	Hobing Korean Dessert Cafe	No	4.5	118	
21	Wildflour Cafe + Bakery	No	4.4	392	
22	NIU by Vikings	No	4.7	535	
23	The Food Hall by Todd English	No	4.5	618	
24	Chez Michou	No	3	6	

C4 4841

	A	B	C
1	is chain	Yes	
2			
3	Restaurant Name	Average of Aggregate rating	Average of Votes
4	Truffles	3.95	4841
5	Joey's Pizza	4.25	3903.5
6	AB's - Absolute Barbecues	4.825	3350
7	Big Chill	4.475	2713.25
8	Big Yellow Door	4.266666667	2503.666667
9	Out Of The Box	3.85	2450
10	Saravana Bhavan	4.133333333	2412.666667
11	Olive Bistro	4.15	1854
12	Talaga Sampireun	4.9	1838
13	SpiceKlub	4.3	1825.5
14	SodaBottleOpenerWala	4.066666667	1791.333333
15	Wood Box Cafe	3.95	1724.5
16	Farzi Cafe	4.366666667	1683
17	Chili's	4.58	1631.2
18	AB's Absolute Barbecues	4.85	1575.5
19	The Flying Saucer Cafe	4.1	1572.5
20	Naturals Ice Cream	4.8	1547
21	The Cheesecake Factory	4.65	1505
22	Raasta	3.85	1471.5
23	Pirates of Grill	4	1426.4
24	Tea Villa Cafe	3.925	1291.75
25	Imperfecto	3.55	1273
26	QD's Restaurant	4.033333333	1178.666667
27	Hard Rock Cafe	4.2	1163.666667

PivotTable Fields

Choose fields to add to the report and drag them between the areas below:

Search

Restaurant Name
is chain
Aggregate rating
Votes

Filters: is chain

Rows: Restaurant Name

Columns: Values

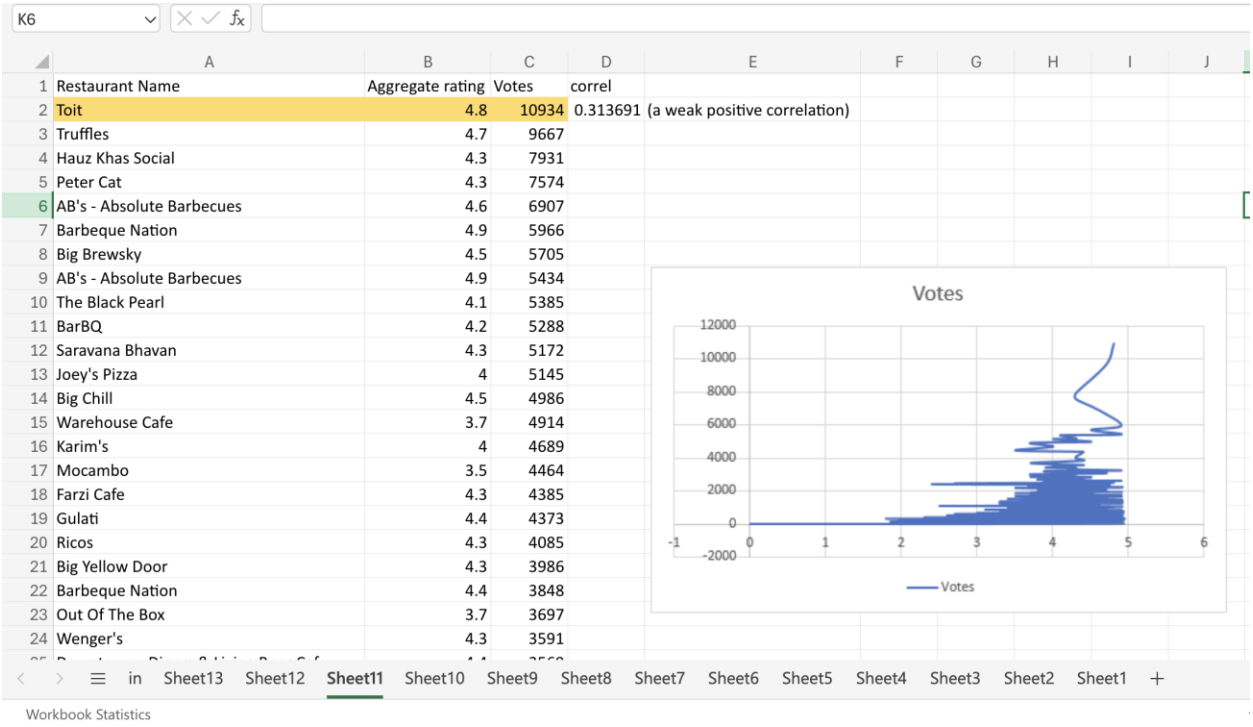
Values: Average of Aggregate rating, Average of Votes

in Sheet13 Sheet12 Sheet11 Sheet10 Sheet9 Sheet8 Sheet7 Sheet6

Workbook Statistics Average: 2422.475 Count: 3 Sum: 4844.95 90%

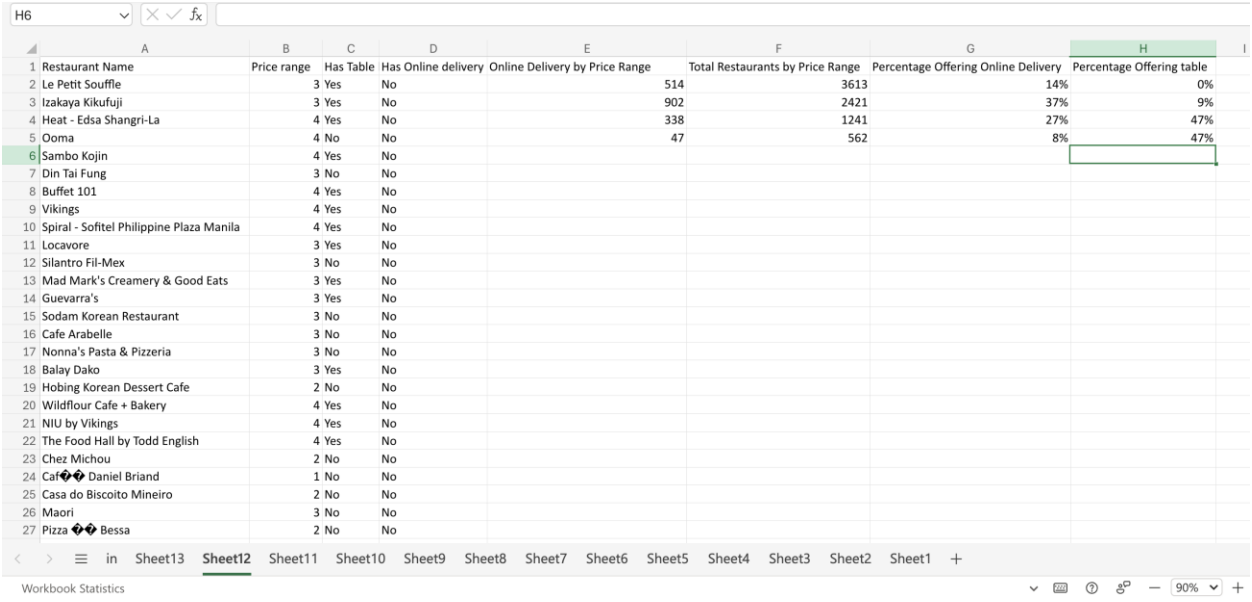
Level 3 :

- Task 2:
  1. Identify the restaurants with the highest and lowest number of votes.
  2. Analyze if there is a correlation between the number of votes and the rating of a restaurant.



	Restaurant Name	Aggregate rating	Votes	correl	
2	Toit	4.8	10934	0.313691	(a weak positive correlation)
3	Truffles	4.7	9667		
4	Hauz Khas Social	4.3	7931		
5	Peter Cat	4.3	7574		
6	AB's - Absolute Barbecues	4.6	6907		
7	Barbeque Nation	4.9	5966		
8	Big Brewsky	4.5	5705		
9	AB's - Absolute Barbecues	4.9	5434		
10	The Black Pearl	4.1	5385		
11	BarBQ	4.2	5288		
12	Saravana Bhavan	4.3	5172		
13	Joey's Pizza	4	5145		
14	Big Chill	4.5	4986		
15	Warehouse Cafe	3.7	4914		
16	Karim's	4	4689		
17	Mocambo	3.5	4464		
18	Farzi Cafe	4.3	4385		
19	Gulati	4.4	4373		
20	Ricos	4.3	4085		
21	Big Yellow Door	4.3	3986		
22	Barbeque Nation	4.4	3848		
23	Out Of The Box	3.7	3697		
24	Wenger's	4.3	3591		

- Task 3:
  1. Analyze if there is a relationship between the price range and the availability of online delivery and table booking.
  2. Determine if higher-priced restaurants are more likely to offer these services.



	Restaurant Name	Price range	Has Table	Has Online delivery	Online Delivery by Price Range	Total Restaurants by Price Range	Percentage Offering Online Delivery	Percentage Offering table
2	Le Petit Souffle	3	Yes	No	514	3613	14%	0%
3	Izakaya Kikufuji	3	Yes	No	902	2421	37%	9%
4	Heat - Edsa Shangri-La	4	Yes	No	338	1241	27%	47%
5	Ooma	4	No	No	47	562	8%	47%
6	Sambo Kojin	4	Yes	No				
7	Din Tai Fung	3	No	No				
8	Buffet 101	4	Yes	No				
9	Vikings	4	Yes	No				
10	Spiral - Sofitel Philippine Plaza Manila	4	Yes	No				
11	Locavore	3	Yes	No				
12	Silantro Fil-Mex	3	No	No				
13	Mad Mark's Creamery & Good Eats	3	Yes	No				
14	Guevarra's	3	Yes	No				
15	Sodam Korean Restaurant	3	No	No				
16	Cafe Arabelle	3	No	No				
17	Nonna's Pasta & Pizzeria	3	No	No				
18	Balay Dako	3	Yes	No				
19	Hobing Korean Dessert Cafe	2	No	No				
20	Wildflour Cafe + Bakery	4	Yes	No				
21	NIU by Vikings	4	Yes	No				
22	The Food Hall by Todd English	4	Yes	No				
23	Chez Michou	2	No	No				
24	Caf?? Daniel Briand	1	No	No				
25	Casa do Biscoito Mineiro	2	No	No				
26	Maori	3	No	No				
27	Pizza ?? Bessa	2	No	No				