

IDENTIFYING THE BEST LOCATION FOR YOGEN FRÜZ FRANCHISE

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IBM Data Science Capstone Project

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1. Introduction

1.1. Background

In 1986, two young brothers opened a revolutionary frozen yogurt retail concept in Toronto, Canada. It was a modest effort: a small store with an extraordinary product and a great design. A concept was developed that provided consumers a health experience unlike any they had tasted before. They immediately fell in love, and a strong following pursued.



Today, Yogen Früz has grown to be a world leader in the frozen yogurt category, with over 1400 locations operating in 47 countries around the world. Yogen Früz was recognized by Entrepreneur Magazine for its accomplishments and rated the number one Franchise in the World in 1999 among the Franchise 500.

Yogen Früz has five franchises/outlets in Pakistan, in three major cities (Islamabad, Lahore & Karachi). Lahore has two franchises. Flagship outlet in DHA and Johar Town, Lahore.

Yogen Früz provides delicious and nutritious frozen desserts, just what you need to live a healthy and active lifestyle.

In the last 12 months or so, frozen yoghurt has become wildly popular in Pakistan. While ice-cream is still the most popular frozen dessert in the country, frozen yoghurt or 'froyo', as it's commonly referred to, has been able to carve out a niche market for itself. Therefore, it is advantageous for Yogen Früz to accurately identify areas/towns/UC where the growing demand is and where the new franchise can be opened.

1.2. Business Problem

The objective of this capstone project is to analyze and select the best locations in the city of Lahore, Pakistan to open a Yogen Früz - Frozen Yogurt point. Using data science methodology and machine learning techniques like clustering, this project aims to provide solutions to answer the business question: In the city of Lahore, Pakistan, if an investor is looking to open a Frozen Yogurt point, where would you recommend that they open it?

1.3. Target Audience of this project

This project is particularly useful to investors looking to open or invest in new Frozen Yogurt joint in the Metropolitan city of Pakistan i.e. Lahore. This project is timely as the demand of frozen yogurt items is on rise and there are limited places for a big city like Lahore.

1.4. Data

To help YUGEN FRUZ in their search, we will need to access the following data:

- The Neighborhoods / Towns of Lahore, Pakistan from Wikipedia: https://en.wikipedia.org/wiki/List_of_towns_in_Lahore
- The coordinates (latitude, longitude) to these Towns/UC of Lahore from Open Street Map APIs / Postal Codes

From Foursquare we will need following venues data:

- o the Frozen Yogurt/Yogurt venues of all Towns/UC
- o the office's venues of all Towns/UC
- o the high school's venues of all Towns/UC
- o the universities venues of all Towns/UC

We will then leverage the data in order to determine which locality is the most appropriate in order to locate the Frozen Yogurt Franchise / Joint venue.

1.5. Methodology

- For each locality, all office, school, university and venues data have been collected from Foursquare.
- Then for each locality, the sums of the office, school, university and venues were computed.
- For each of this 4 categories, a weight (or penalty) has been defined according to what Yogen Früz considers the most important.
- Frozen Yogurt venues have been weighted with -1, to avoid concurrence.
- Schools have been weighted with 1, since student are good customers.
- Universities have been weighted with 1.5, since students are good customers.
- Offices have been weighted with 2, since employees are even better customers.

Note that the weights can be modified according to the importance of each category. Lastly, a score was computed for each locality as the weighted sum of the number of venues in each of the 4 categories (school, university, office, venues).

2. Data

2.1. Top 5 Cities of Pakistan with Total Population

	Province	Capital	City	Country	Code	Latitude	Longitude	Population	Total Population
0	Sindh	admin	Karachi	Pakistan	PK	24.905600	67.082200	12130000	11624219
1	Punjab	admin	Lahore	Pakistan	PK	31.549722	74.343611	6577000	6310888
2	Punjab	minor	Faisalābād	Pakistan	PK	31.416667	73.083333	2617000	2506595
3	Khyber Pakhtunkhwa		Serai	Pakistan	PK	34.739330	72.335655	1860310	1860310
4	Punjab	minor	Rāwalpindi	Pakistan	PK	33.597331	73.047904	1858000	1743101

2.2. The geographical coordinates of Lahore

```
address = 'Lahore, Pakistan'
```

```
geolocator = Nominatim(user_agent="lahore_explorer")
location = geolocator.geocode(address, timeout=10000)
latitude = location.latitude
longitude = location.longitude
print('The geograpical coordinate of Lahore are {}, {}'.format(latitude, longitude))
```

The geograpical coordinate of Lahore are 31.5656079, 74.3141775.

2.3. The Map of Lahore, Pakistan

```
map_lahore = folium.Map(location=[latitude, longitude], zoom_start=11)

# add markers to map
for lat, lng, label in zip(df_data_1['Latitude'], df_data_1['Longitude'], df_data_1['City']):
    label = folium.Popup(label, parse_html=True)
    folium.CircleMarker(
        [lat, lng],
        radius=5,
        popup=label,
        color='blue',
        fill=True,
        fill_color='#3186cc',
        fill_opacity=2,
        parse_html=False).add_to(map_lahore)

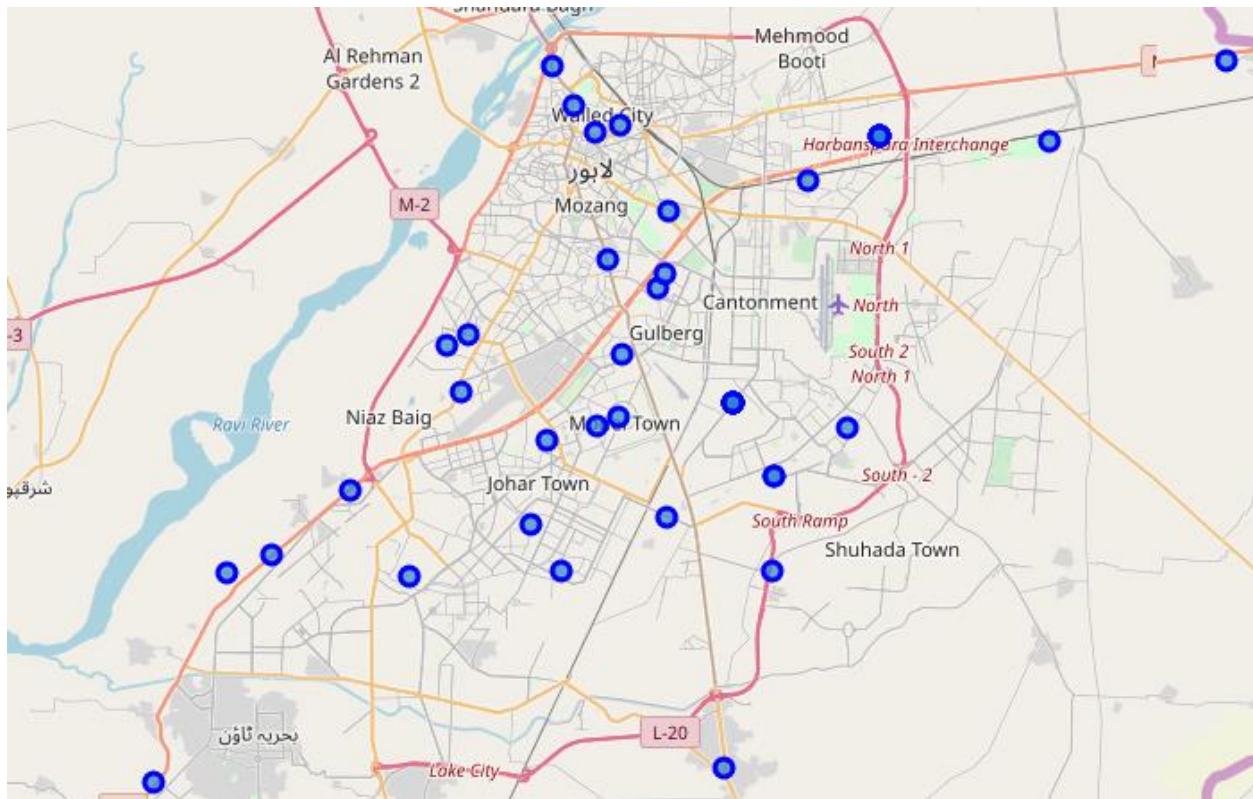
map_lahore
```



2.4. The Neighborhood/Towns/UC's of Lahore, Pakistan

	Neighborhood	Postal Code	Latitude	Longitude
0	BATA PUR	53400	33.238200	72.834700
1	C.M.A. CANTT. LAHORE	54800	31.576100	74.424700
2	FEROZEPUR ROAD LAHORE	54600	31.488800	74.368600
3	GULBERG COLONY	54660	31.488800	74.368600
4	HARBANS PURA	54850	31.576100	74.424700
5	KAHNA NAU	53100	31.369200	74.365300
6	LAHORE CANTT. G.P.O.	54810	31.576100	74.424700
7	LAHORE DEFENCE HOUSING SOICETY	54792	31.481100	74.316400
8	LAHORE ISMAIL NAGAR	54760	31.451749	74.343023
9	MODEL TOWN LAHORE	54700	31.484400	74.324400
10	TAJ PURA	54870	31.561545	74.397274
11	TOWNSHIP SECTOR A-1 LAHORE	54770	31.481100	74.316400
12	WAGHA	53600	31.600830	74.558052
13	AITCHESON COLLEGE	54030	31.551728	74.344053
14	ALFLAH	54020	31.480809	74.412262
15	AWAN COLONEY	54780	31.507932	74.258842
16	BAGHBANPURA	54920	31.224200	74.099700
17	BAHRIA TOWN	53720	31.365070	74.145976
18	BALLOKI	55210	31.188976	73.874344
19	BARKI	53200	31.047800	74.085000
20	CHAH MIRAN	54900	31.464900	74.384600
21	CHUHANG	53800	31.433100	74.174200
22	JALLO	53500	31.574575	74.490081
23	KOHINOOR ENERGY	55160	31.263199	74.185293
24	LAHORE ALLAMA IQBAL TOWN	54570	31.511292	74.266660
25	LAHORE E.M.E Society P.O	53710	31.438946	74.191477
26	LAHORE ENGINEERING UNIVERSITY	54890	31.576100	74.424700
27	LAHORE G.P.O	54000	31.488800	74.368600
28	LAHORE MULTAN ROAD	54500	31.488800	74.368600
29	LAHORE NEW UNIVERSITY CAMPUS	54590	31.488800	74.368600
30	LAHORE PMG PUNJAB POST OFFICE	54560	31.488800	74.368600
31	LAHORE PT & T AUDIT	54550	31.488800	74.368600
32	LAHORE PUNJAB GOVERNOR HOUSE	54880	31.576100	74.424700
33	LAHORE SECONDARY BOARD	54650	31.488800	74.368600
34	LAHORE SHADMAN WOMEN MODEL P.O	54610	31.535632	74.320718
35	MANGA MANDI	55270	31.304400	74.063600
36	MANSOORA	54790	31.492752	74.264180
37	MOGHALPURA	54840	31.576100	74.424700
38	NAULAKHA	54010	31.579618	74.325044
39	NIAZ BEG THOKAR	53700	31.442500	73.883000
40	RAIWIND	55150	31.254400	74.217800
41	SHAH ALAM MARKET	54100	31.577423	74.315594
42	SHAHDARA BAGH	54950	31.464900	74.384600
43	SHAHI MOHALLAH	54110	31.586012	74.307484
44	TIMBER MARKET	54120	31.599041	74.299059

2.5. The Map of Neighborhood/Towns/UC's Lahore, Pakistan



3. Analysis of each Neighborhood in Lahore

Foursquare API to explore the Neighborhood Clusters

3.1. Venues in Neighborhood/Towns/UC's Lahore, Pakistan

```
lahore_venues = getNearbyVenues(names=df_data_0['Neighborhood'],  
                                latitudes=df_data_0['Latitude'],  
                                longitudes=df_data_0['Longitude']  
                                )
```

```
print(lahore_venues.shape)  
lahore_venues.head(127)
```

```
(4353, 7)
```

Neighborhood	Latitude	Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
AITCHESON COLLEGE	93	93	93	93	93	93
ALFLAH	95	95	95	95	95	95
AWAN COLONEY	85	85	85	85	85	85
BAGHBANPURA	58	58	58	58	58	58
BAHRIA TOWN	96	96	96	96	96	96
BALLOKI	17	17	17	17	17	17
BARKI	3	3	3	3	3	3
BATA PUR	9	9	9	9	9	9
C.M.A. CANTT. LAHORE	92	92	92	92	92	92
CHAH MIRAN	93	93	93	93	93	93
CHUHANG	94	94	94	94	94	94
FAISAL TOWN	97	97	97	97	97	97
FEROZEPUR ROAD LAHORE	97	97	97	97	97	97
GREEN TOWN	95	95	95	95	95	95
GULBERG I	92	92	92	92	92	92
GULBERG II	92	92	92	92	92	92
GULBERG III	94	94	94	94	94	94
HARBANS PURA	92	92	92	92	92	92
JALLO	92	92	92	92	92	92
JOHAR TOWN	97	97	97	97	97	97
KAHNA NAU	95	95	95	95	95	95
KAMAHAN	96	96	96	96	96	96
KOHINOOR ENERGY	89	89	89	89	89	89
LAHORE ALLAMA IQBAL TOWN	88	88	88	88	88	88
LAHORE CANTT. G.P.O.	92	92	92	92	92	92
LAHORE DEFENCE HOUSING SOICETY	91	91	91	91	91	91
LAHORE E.M.E Society P.O	95	95	95	95	95	95
LAHORE ENGINEERING UNIVERSITY	92	92	92	92	92	92
LAHORE G.P.O	97	97	97	97	97	97
LAHORE ISMAIL NAGAR	93	93	93	93	93	93
LAHORE MULTAN ROAD	97	97	97	97	97	97
LAHORE NEW UNIVERSITY CAMPUS	97	97	97	97	97	97
LAHORE PMG PUNJAB POST OFFICE	97	97	97	97	97	97
LAHORE PT & T AUDIT	97	97	97	97	97	97
LAHORE PUNJAB GOVERNOR HOUSE	92	92	92	92	92	92

LAHORE SECONDARY BOARD	97	97	97	97	97	97
LAHORE SHADMAN WOMEN MODEL P.O	96	96	96	96	96	96
MANGA MANDI	47	47	47	47	47	47
MANSOORA	83	83	83	83	83	83
MODEL TOWN LAHORE	91	91	91	91	91	91
MOGHALPURA	92	92	92	92	92	92
NAULAKHA	99	99	99	99	99	99
NIAZ BEG THOKAR	2	2	2	2	2	2
RAIWIND	69	69	69	69	69	69
SHAH ALAM MARKET	100	100	100	100	100	100
SHAHDARA BAGH	93	93	93	93	93	93
SHAHI MOHALLAH	86	86	86	86	86	86
TAJPURA	92	92	92	92	92	92
TIMBER MARKET	96	96	96	96	96	96
TOWNSHIP	93	93	93	93	93	93
WAGHA	30	30	30	30	30	30
WAPDA TOWN	96	96	96	96	96	96

3.2. Analysis of each Neighborhood in Lahore

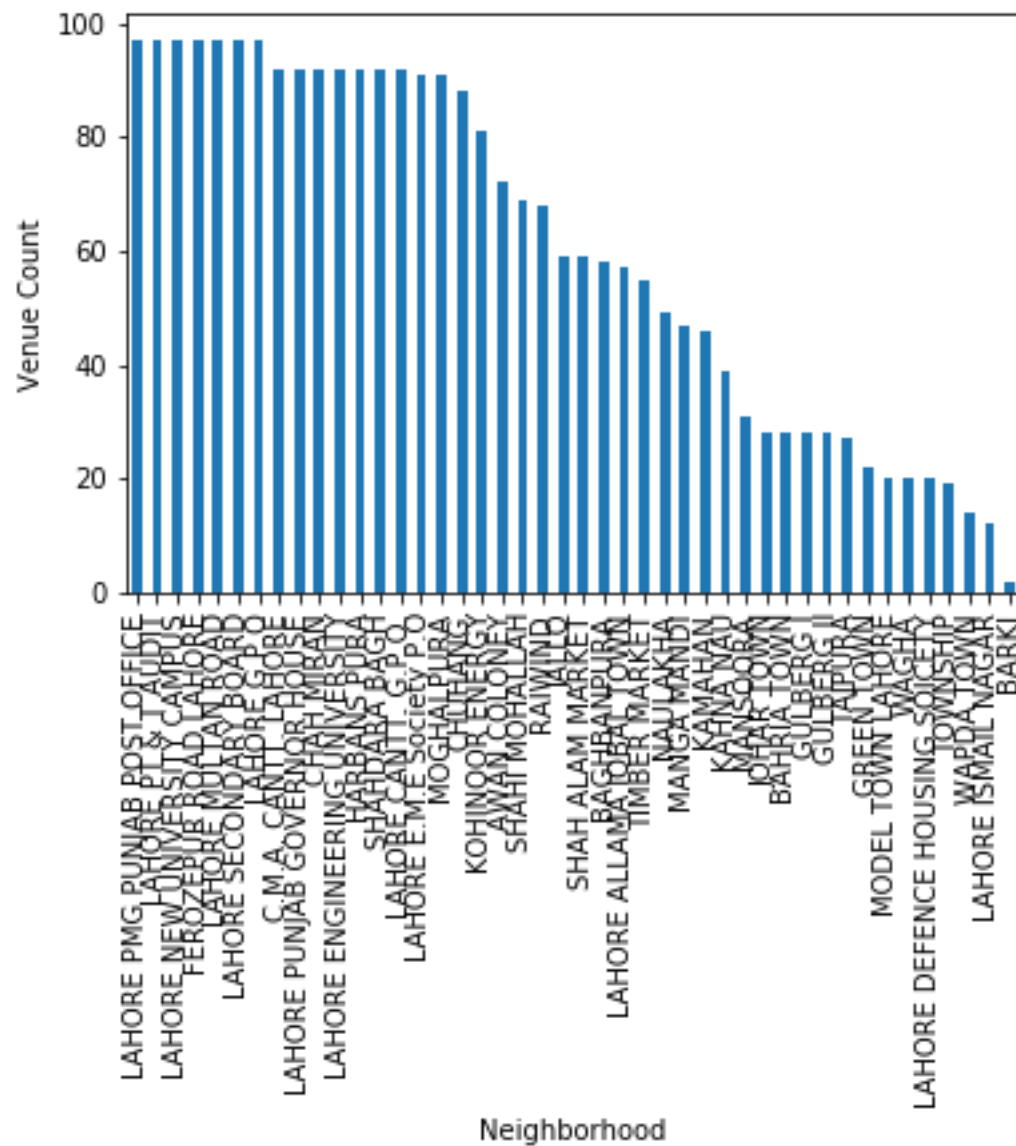
	Neighborhood	Accessories Store	Adult Education Center	Afghan Restaurant	Airport Gate	Alternative Healer	American Restaurant	Aquarium	Arts & Crafts Store	Asian Restaurant	Travel & Transport	Travel Agency	Turkish Restaurant	University	Video Store	Warehouse	Watch Shop	Water Park	Wedding Hall	Yoga Studio
0	AWAN COLONEY	0.000000	0.013889	0.013889	0.000000	0.000000	0.027778	0.000000	0.000000	0.000000	...	0.013889	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	BAGHBANPURA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.034483	0.000000	0.000000	0.000000	0.000000
2	BAHRIA TOWN	0.000000	0.000000	0.033333	0.000000	0.000000	0.000000	0.000000	0.000000	0.033333	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.033333
3	BARKI	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4	C.M.A. CANTT, LAHORE	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000
5	CHAH MIRAN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010753	0.000000	...	0.000000	0.010753	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6	CHUHANG	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.022472	...	0.000000	0.000000	0.000000	0.011238	0.000000	0.000000	0.000000	0.000000	0.000000	0.011238
7	FEROZEPUR ROAD, LAHORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010309	0.000000	0.010309	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
8	GREEN TOWN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
9	GULBERG I	0.000000	0.000000	0.034483	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.034483	0.000000	0.000000	0.000000	0.000000	0.000000
10	GULBERG II	0.000000	0.000000	0.034483	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.034483	0.000000	0.000000	0.000000	0.000000	0.000000
11	HARBANS PURA	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000
12	JALLO	0.000000	0.000000	0.000000	0.017241	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.017241	0.000000	0.000000	0.034483	0.000000	0.000000
13	JOHAR TOWN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.035714	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14	KAHNA NAU	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.057143	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.028571	0.000000
15	KAMAHAN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.048780	...	0.000000	0.024390	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16	KOHINOOR ENERGY	0.000000	0.000000	0.024098	0.000000	0.000000	0.000000	0.000000	0.038148	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.024098	0.000000	0.000000	0.000000	0.000000
17	LAHORE ALLAMA IQBAL TOWN	0.000000	0.016987	0.016987	0.000000	0.000000	0.016987	0.000000	0.000000	...	0.016987	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18	LAHORE CANTT, G.P.O.	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
19	LAHORE DEFENCE HOUSING SOCIETY	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
20	LAHORE E.M.E Society P.O	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.021508	...	0.000000	0.000000	0.010753	0.000000	0.000000	0.000000	0.000000	0.010753	0.000000
21	LAHORE ENGINEERING UNIVERSITY	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22	LAHORE G.P.O	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010417	0.000000	0.010417	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
23	LAHORE ISMAIL NAGAR	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.090909	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.090909	0.000000
24	LAHORE MULTAN ROAD	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010417	0.000000	0.020833	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
25	LAHORE NEW UNIVERSITY CAMPUS	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010309	0.000000	0.020919	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26	LAHORE PMG PUNJAB POST OFFICE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010417	0.000000	0.010417	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27	LAHORE PT & T AUDIT	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010309	0.000000	0.010309	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
28	LAHORE PUNJAB GOVERNOR HOUSE	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
29	LAHORE SECONDARY BOARD	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010417	0.000000	0.010417	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
30	MANGA MANDI	0.000000	0.000000	0.042553	0.000000	0.000000	0.000000	0.000000	0.000000	0.021277	...	0.000000	0.000000	0.000000	0.000000	0.042553	0.000000	0.000000	0.000000	0.000000
31	MANSOORA	0.000000	0.031250	0.000000	0.000000	0.000000	0.062500	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32	MODEL TOWN LAHORE	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33	MOGHALPURA	0.000000	0.000000	0.000000	0.010870	0.000000	0.010870	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.043478	0.000000	0.000000	0.000000	0.000000	0.000000
34	NAULAKHA	0.019231	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.019231	0.000000	0.019231	0.000000	0.000000	0.019231	0.000000	0.000000
35	RAIWIND	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.029412	...	0.000000	0.000000	0.000000	0.000000	0.014706	0.000000	0.000000	0.000000	0.000000
36	SHAH ALAM MARKET	0.016129	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.016129	...	0.000000	0.016129	0.000000	0.000000	0.000000	0.000000	0.016129	0.000000	0.000000
37	SHAHDARA BAGH	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.010753	0.000000	...	0.000000	0.010753	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38	SHAHI MOHALLAH	0.000000	0.000000	0.000000	0.000000	0.014706	0.000000	0.000000	0.014706	0.029412	...	0.000000	0.000000	0.000000	0.014706	0.014706	0.000000	0.000000	0.000000	0.000000
39	TAJIPURA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.074074	0.000000	0.000000	0.000000	0.000000	0.000000
40	TIMBER MARKET	0.000000	0.000000	0.000000	0.000000	0.018182	0.000000	0.000000	0.018182	0.018182	...	0.000000	0.000000	0.000000	0.018182	0.000000	0.000000	0.000000	0.000000	0.000000
41	TOWNSHIP	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42	WAGHA	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.111111	0.000000	0.000000
43	WAPDA TOWN	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.071429	0.000000

44 rows × 206 columns

3.3. Top Ten Venues of Lahore

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	AWAN COLONEY	Housing Development	BBQ Joint	Bakery	Gym	Fast Food Restaurant	Clothing Store	Hospital	Food Truck	Gas Station	Bank
1	BAGHBANPURA	Factory	Farm	Office	Industrial Estate	Gas Station	Warehouse	Hospital	Fast Food Restaurant	Housing Development	Restaurant
2	BAHRIA TOWN	Restaurant	Bakery	BBQ Joint	Housing Development	Factory	Yoga Studio	Music Store	Recording Studio	Pizza Place	Coffee Shop
3	BARKI	Gas Station	Train Station	Yoga Studio	Dentist's Office	Event Service	Electronics Store	Donut Shop	Dog Run	Doctor's Office	Distribution Center
4	C.M.A. CANTT, LAHORE	Housing Development	Event Space	Mosque	Building	Hospital	University	Factory	Café	Hookah Bar	Office

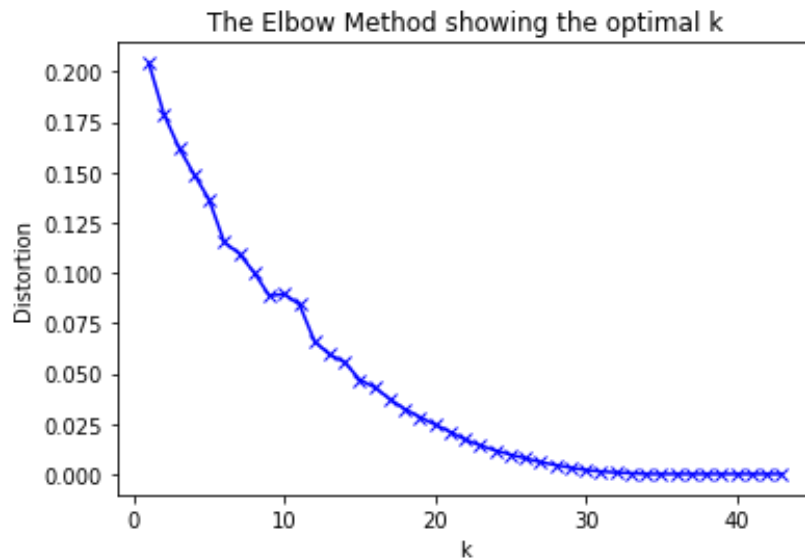
	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	AWAN COLONEY	Housing Development	BBQ Joint	Bakery	Clothing Store	Fast Food Restaurant	Gym	Food Truck	Dentist's Office	Hospital	Mosque
1	BAGHBANPURA	Factory	Farm	Office	Industrial Estate	Gas Station	Warehouse	Hospital	Fast Food Restaurant	Housing Development	Restaurant
2	BAHRIA TOWN	Bakery	BBQ Joint	Housing Development	Factory	Restaurant	Yoga Studio	Office	Recording Studio	Pizza Place	Coffee Shop
3	BARKI	Gas Station	Train Station	Yoga Studio	Dentist's Office	Event Service	Electronics Store	Donut Shop	Dog Run	Doctor's Office	Distribution Center
4	C.M.A. CANTT. LAHORE	Housing Development	Mosque	Event Space	Hospital	Factory	University	Building	Café	Office	Bakery



4. Clustering Neighborhoods/Towns/UC's

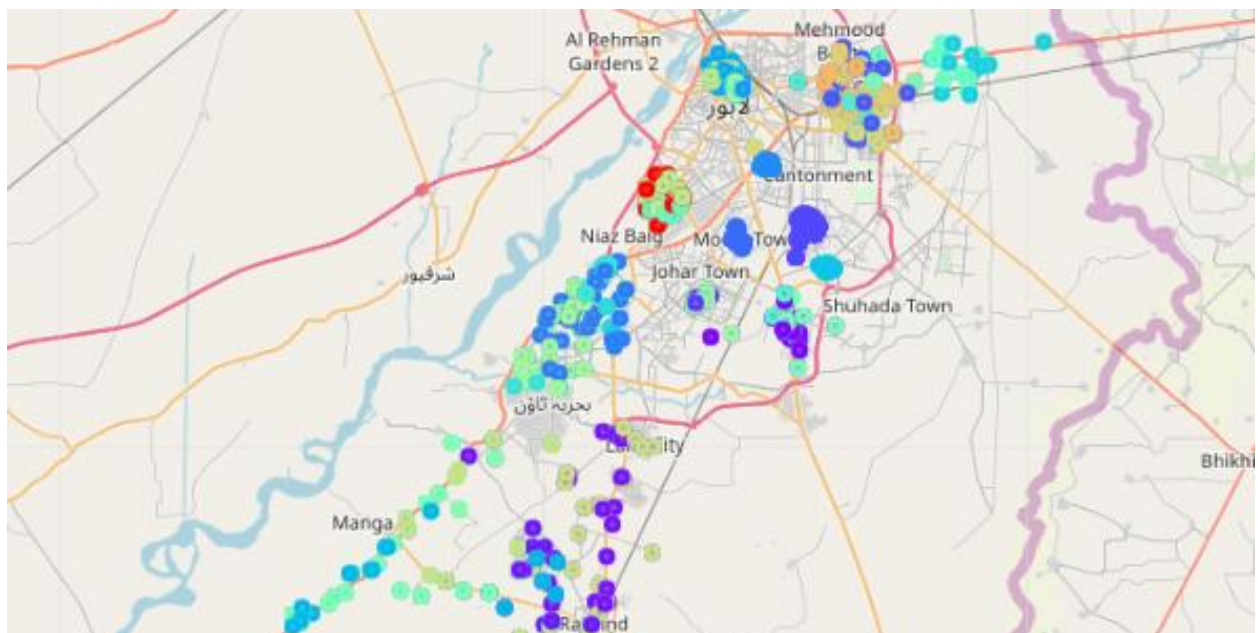
Running K-means clustering for 44 clusters

The Elbow method showing the optimal K.



To determine the optimal number of clusters, we have to select the value of k at the “elbow” ie the point after which the distortion/inertia start decreasing in a linear fashion. Thus for the given data, we conclude that the optimal number of clusters for the data is **10**.

4.1. The Map of Clusters



4.2. Top 5 Venues in all Neighborhoods/Towns/UC's

Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
AWAN COLONEY	Clothing Store	BBQ Joint	Gym	Housing Development	Fast Food Restaurant
BAGHBANPURA	Factory	Office	Farm	Gas Station	Warehouse
BAHRIA TOWN	Bakery	Housing Development	Factory	BBQ Joint	Restaurant
BARKI	Gas Station	Train Station	Yoga Studio	Dentist's Office	Event Service
C.M.A. CANTT. LAHORE	Housing Development	Mosque	Event Space	University	Factory
CHAH MIRAN	Café	Salon / Barbershop	Bakery	Housing Development	Office
CHUHANG	Housing Development	Factory	Office	Boutique	Hospital
FEROZEPUR ROAD LAHORE	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
GREEN TOWN	Housing Development	Park	Bakery	BBQ Joint	Pakistani Restaurant
GULBERG I	Office	Doctor's Office	Hotel	Spa	Housing Development
GULBERG II	Office	Doctor's Office	Hotel	Spa	Housing Development
HARBANS PURA	Housing Development	Mosque	University	Factory	Hospital
JALLO	Housing Development	Factory	Hospital	Pakistani Restaurant	Café
JOHAR TOWN	Office	Boutique	Building	Bus Station	Clothing Store
KAHNA NAU	Office	Housing Development	Bus Station	Burger Joint	Café
KAMAHAN	Office	Housing Development	Market	Bus Station	Factory
KOHINOOR ENERGY	Factory	Farm	Housing Development	Mosque	Hospital
LAHORE ALLAMA IQBAL TOWN	Gym	BBQ Joint	Clothing Store	Bakery	Fast Food Restaurant
LAHORE CANTT. G.P.O.	Housing Development	Mosque	University	Factory	Hospital
LAHORE DEFENCE HOUSING SOCIETY	BBQ Joint	Office	General Entertainment	Tech Startup	Photography Studio
LAHORE E.M.E Society P.O	Housing Development	Factory	Office	Boutique	Clothing Store
LAHORE ENGINEERING UNIVERSITY	Housing Development	Mosque	Hospital	University	Factory
LAHORE G.P.O	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
LAHORE ISMAIL NAGAR	Office	Housing Development	Wedding Hall	Bus Station	Gas Station

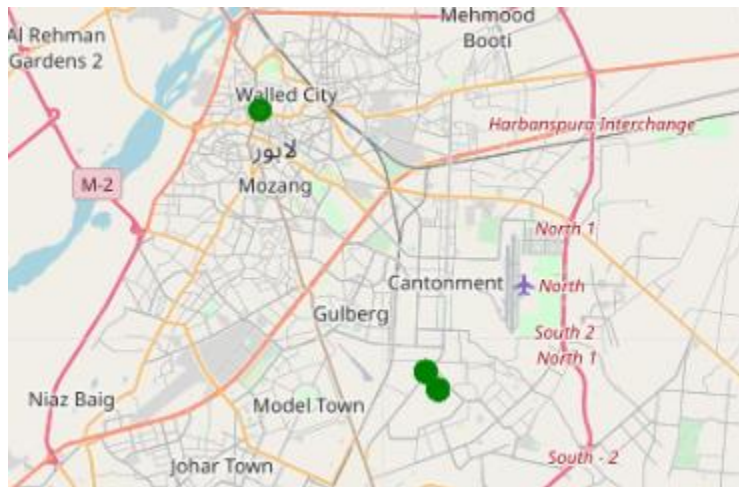
LAHORE MULTAN ROAD	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
LAHORE NEW UNIVERSITY CAMPUS	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
LAHORE PMG PUNJAB POST OFFICE	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
LAHORE PT & T AUDIT	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
LAHORE PUNJAB GOVERNOR HOUSE	Housing Development	Mosque	University	Factory	Hospital
LAHORE SECONDARY BOARD	Automotive Shop	Bakery	Auto Dealership	Housing Development	Salon / Barbershop
MANGA MANDI	Factory	Farm	Office	BBQ Joint	Afghan Restaurant
MANSOORA	Housing Development	Clothing Store	Pharmacy	Bank	Gas Station
MODEL TOWN LAHORE	BBQ Joint	Office	General Entertainment	Tech Startup	Photography Studio
MOGHALPURA	Housing Development	Mosque	University	Hospital	Factory
NAULAKHA	Bank	Pakistani Restaurant	Market	Office	Historic Site
RAIWIND	Factory	Farm	Mosque	Housing Development	Hospital
SHAH ALAM MARKET	Bank	Office	Pakistani Restaurant	Bookstore	Market
SHAHDARA BAGH	Café	Salon / Barbershop	Bakery	Housing Development	Office
SHAHI MOHALLAH	Historic Site	Bookstore	Mosque	Pakistani Restaurant	Shrine
TAJPURA	Hookah Bar	Juice Bar	Cemetery	Housing Development	Hospital
TIMBER MARKET	Pakistani Restaurant	Historic Site	Mosque	Garden	Breakfast Spot
TOWNSHIP	Housing Development	Park	Bakery	High School	Residential Building (Apartment / Condo)
WAGHA	Hospital	Housing Development	Factory	Water Park	Pakistani Restaurant
WAPDA TOWN	Housing Development	School	Event Space	Clothing Store	Factory

4.3. Examining each Cluster

4.3.1. Frozen Yogurt Venues in Lahore

Neighborhood	Venue	Venue Latitude	Venue Longitude	Venue Category
FEROZEPUR ROAD LAHORE	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
FEROZEPUR ROAD LAHORE	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE G.P.O	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE G.P.O	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE MULTAN ROAD	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE MULTAN ROAD	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE NEW UNIVERSITY CAMPUS	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE NEW UNIVERSITY CAMPUS	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE PMG PUNJAB POST OFFICE	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE PMG PUNJAB POST OFFICE	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE PT & T AUDIT	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE PT & T AUDIT	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
LAHORE SECONDARY BOARD	Yogurberry	31.48709779	74.37614389	Frozen Yogurt Shop
LAHORE SECONDARY BOARD	Al noor milk shop	31.49286385	74.37153934	Frozen Yogurt Shop
SHAH ALAM MARKET	Allah Waris Milk Shop	31.57772678	74.30786528	Frozen Yogurt Shop
SHAHI MOHALLAH	Allah Waris Milk Shop	31.57772678	74.30786528	Frozen Yogurt Shop

4.3.2. Map of Frozen Yogurt Venues in Lahore

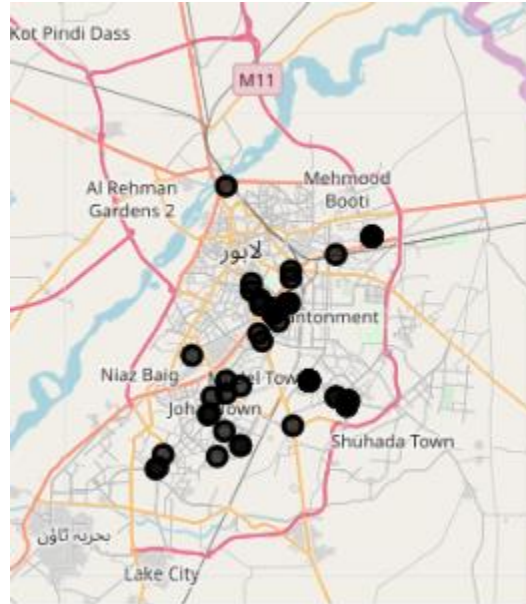


4.3.3. Schools & High Schools Venues in Lahore

Neighborhood	Venue	Venue Latitude	Venue Longitude	Venue Category
C.M.A. CANTT. LAHORE	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
FEROZEPUR ROAD LAHORE	Beaconhouse School System	31.48027167	74.3644079	Middle School
HARBANS PURA	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
LAHORE CANTT. G.P.O.	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
LAHORE DEFENCE HOUSING SOICETY	First Step Islamic School	31.4763813	74.31325531	School
LAHORE ISMAIL NAGAR	sunrise english high school	31.45088833	74.35285074	Middle School
TAJPURA	Society Public School	31.56205368	74.38549805	High School
TOWNSHIP	Mus'ab School System	31.45870223	74.28985765	High School
TOWNSHIP	The Punjab School	31.44709713	74.30066931	High School
TOWNSHIP	LGS JT Girls	31.4579724	74.28854553	High School
AITCHESON COLLEGE	Aitchison College	31.55215457	74.35073147	High School
AITCHESON COLLEGE	Aitchison College	31.54661258	74.35143471	Middle School
CHAH MIRAN	Defence Public Library Complex	31.47015062	74.38528173	Library
CHAH MIRAN	LGS Phase V	31.46589562	74.39348388	School
CHAH MIRAN	TNS Beaconhouse	31.464063	74.393865	School
CHAH MIRAN	Roots Ivy Campus	31.467007	74.395006	High School
LAHORE ENGINEERING UNIVERSITY	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
LAHORE G.P.O	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE MULTAN ROAD	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE NEW UNIVERSITY CAMPUS	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE PMG PUNJAB POST OFFICE	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE PT & T AUDIT	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE PUNJAB GOVERNOR HOUSE	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
LAHORE SECONDARY BOARD	Beaconhouse School System	31.48027167	74.3644079	Middle School
LAHORE SHADMAN WOMEN MODEL P.O	The Rahber School	31.532738	74.32846	School
LAHORE SHADMAN WOMEN MODEL P.O	Allied School	31.53904623	74.32154026	High School
LAHORE SHADMAN WOMEN MODEL P.O	Yousaf School	31.529179	74.327773	Nursery School

LAHORE SHADMAN WOMEN MODEL P.O	Crescent Model School	31.54361251	74.32163764	High School
MANSOORA	Dar E Arqam	31.496763	74.275257	Private School
MOGHALPURA	Lahore Grammar School (Paragon Campus)	31.5735965	74.4130021	High School
SHAHDARA BAGH	Defence Public Library Complex	31.47015062	74.38528173	Library
SHAHDARA BAGH	LGS Phase V	31.46589562	74.39348388	School
SHAHDARA BAGH	Roots Ivy Campus	31.467007	74.395006	High School
SHAHDARA BAGH	TNS Beaconhouse	31.464063	74.393865	School
TIMBER MARKET	Suffah Trust	31.60688088	74.30234542	School
WAPDA TOWN	The Trust School	31.432587	74.254395	School
WAPDA TOWN	Punjab School khayaban-e- jinnah	31.423225	74.248155	School
WAPDA TOWN	The Punjab School	31.424011	74.249305	Middle School
GREEN TOWN	The Trust School Green Town	31.431257	74.29565	School
GREEN TOWN	Town Public High School	31.43784494	74.3123281	High School
GREEN TOWN	Govt. Girls High School	31.4380136	74.3122691	High School
FAISAL TOWN	American Lycetuff JT Kids Campus	31.47253	74.301716	Private School
FAISAL TOWN	LGS JT Pre-School	31.47002888	74.29104369	Preschool
FAISAL TOWN	Aal-e-Imran School System	31.480717	74.3017	School
GULBERG III	Beaconhouse School (BGTL)	31.505846	74.32942	School
GULBERG III	Saeed Akhtar Studio	31.51018096	74.32642311	School
GULBERG II	Lahore Grammar School	31.52670701	74.33769453	High School
GULBERG II	Learning Alliance - Lahore Preschool	31.51861234	74.34191045	Nursery School
GULBERG II	BCCG Beaconhouse College Campus Gulberg	31.530228	74.34801	High School
GULBERG II	Les Anges Montessori Academy	31.52353978	74.33783201	Nursery School
GULBERG II	LGS 55 Main	31.53019376	74.3494198	High School
GULBERG II	Esen Foundation	31.52478934	74.33818143	High School
GULBERG I	BCCG Beaconhouse College Campus Gulberg	31.530228	74.34801	High School
GULBERG I	Esen Foundation	31.52478934	74.33818143	High School
GULBERG I	Lahore Grammar School	31.52670701	74.33769453	High School
GULBERG I	LGS 55 Main	31.53019376	74.3494198	High School
GULBERG I	Les Anges Montessori Academy	31.52353978	74.33783201	Nursery School

4.3.4. Map of Schools & High Schools Venues in Lahore



4.3.5. Colleges & Universities Venues in Lahore

Neighborhood	Venue	Venue Latitude	Venue Longitude	Venue Category
FEROZEPUR ROAD LAHORE	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
FEROZEPUR ROAD LAHORE	janjua ceter	31.49087924	74.37069745	Fraternity House
FEROZEPUR ROAD LAHORE	Lahore Grammar School	31.49549511	74.37442006	Student Center
FEROZEPUR ROAD LAHORE	lgs ajr	31.4873	74.3579	Student Center
FEROZEPUR ROAD LAHORE	Lauriston Academia	31.48191842	74.36482702	Student Center
FEROZEPUR ROAD LAHORE	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
FEROZEPUR ROAD LAHORE	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE DEFENCE HOUSING SOICETY	Model Scholqrs	31.480297	74.316572	College Academic Building
LAHORE DEFENCE HOUSING SOICETY	Electrical Engineering Department, FAST-NU	31.48041012	74.30311203	College Engineering Building

LAHORE DEFENCE HOUSING SOICETY	Fast School of Management , FAST-NUCES	31.48124267	74.30344217	College Science Building
LAHORE DEFENCE HOUSING SOICETY	FAST-NUCES	31.48126914	74.30335575	University
LAHORE DEFENCE HOUSING SOICETY	Youth Club Lahore	31.47538732	74.31494638	Community College
LAHORE DEFENCE HOUSING SOICETY	Sports Ground, FAST-NU	31.48026372	74.30313349	College Soccer Field
LAHORE DEFENCE HOUSING SOICETY	Fast Music Society	31.48126104	74.30311203	College Rec Center
LAHORE DEFENCE HOUSING SOICETY	executive room FAST-NU	31.48102379	74.30380249	Student Center
LAHORE DEFENCE HOUSING SOICETY	Amsterdam, FAST-NU	31.48140347	74.30358555	Student Center
LAHORE DEFENCE HOUSING SOICETY	ICT Trainings	31.47526103	74.31063244	College Technology Building
LAHORE DEFENCE HOUSING SOICETY	Quaid-e-Azam Law College	31.47686956	74.32234228	Law School
LAHORE DEFENCE HOUSING SOICETY	Seminar hall (FAST-NU)	31.48179739	74.3046913	College Auditorium
LAHORE DEFENCE HOUSING SOICETY	old auditorium FAST-NU	31.48102528	74.30395222	College Auditorium
LAHORE DEFENCE HOUSING SOICETY	Beacon house School	31.47431907	74.32062366	General College & University
LAHORE DEFENCE HOUSING SOICETY	Bloomfield Hall E Block Model Town	31.48223663	74.31921438	General College & University
LAHORE DEFENCE HOUSING SOICETY	new 12	31.48124317	74.3034194	College Classroom
LAHORE DEFENCE HOUSING SOICETY	Shah seats, finance class	31.48248538	74.30597465	College Classroom
LAHORE DEFENCE HOUSING SOICETY	hangout area	31.48112117	74.30380326	College Quad
LAHORE DEFENCE HOUSING SOICETY	Nuces lab	31.480831	74.30315495	College Lab
LAHORE DEFENCE HOUSING SOICETY	E&M XVI	31.48196637	74.30688559	College Classroom
LAHORE DEFENCE HOUSING SOICETY	E&M 13	31.48194036	74.30431317	College Classroom
LAHORE DEFENCE HOUSING SOICETY	New Block, FAST-NU	31.4813908	74.30344116	College Technology Building

LAHORE DEFENCE HOUSING SOICETY	E&M XVII	31.48194036	74.30431317	College Classroom
LAHORE DEFENCE HOUSING SOICETY	Student Snack Bar, Punjab University	31.49190205	74.31479742	College Cafeteria
LAHORE DEFENCE HOUSING SOICETY	admission office FAST-NU	31.48115756	74.30370586	College Administrative Building
LAHORE DEFENCE HOUSING SOICETY	Highway, FAST-NU	31.48130915	74.30363786	College Quad
LAHORE DEFENCE HOUSING SOICETY	DPS, Model Town Lahore	31.48016908	74.32523524	College Science Building
LAHORE DEFENCE HOUSING SOICETY	Tennis Court, FAST-NU	31.4803977	74.30353398	College Tennis Court
LAHORE DEFENCE HOUSING SOICETY	Justice Gul Muhammad Library, FAST-NU	31.48139235	74.30352205	College Library
LAHORE DEFENCE HOUSING SOICETY	Conceptz	31.47592163	74.30886841	College Academic Building
LAHORE DEFENCE HOUSING SOICETY	Cafeteria, FAST-NU	31.4811569	74.30376315	College Cafeteria
LAHORE ISMAIL NAGAR	Lahore	31.44889849	74.35399628	General College & University
MODEL TOWN LAHORE	DPS, Model Town Lahore	31.48016908	74.32523524	College Science Building
MODEL TOWN LAHORE	Model Scholqrs	31.480297	74.316572	College Academic Building
MODEL TOWN LAHORE	Divisional Public School	31.4847893	74.33116425	College Technology Building
MODEL TOWN LAHORE	Bloomfield Hall E Block Model Town	31.48223663	74.31921438	General College & University
MODEL TOWN LAHORE	Quaid-e-Azam Law College	31.47686956	74.32234228	Law School
MODEL TOWN LAHORE	Beacon house School	31.47431907	74.32062366	General College & University
MODEL TOWN LAHORE	B Block Masjid	31.48871256	74.33233858	College Academic Building
TAJPURA	Punjab college, Shalamar campus	31.56694066	74.39596961	College Academic Building
TOWNSHIP	University Of Management & Technolgy (UMT)	31.4516217	74.29302043	University
TOWNSHIP	Scope	31.4462	74.2836	Student Center
TOWNSHIP	UMT Library	31.451959	74.293327	College Library

TOWNSHIP	national university of computer and emerging sciences	31.45936381	74.29655557	University
TOWNSHIP	UMT Football Club	31.45181735	74.29165363	College Football Field
TOWNSHIP	UMT Cafeteria	31.45177313	74.29426805	College Cafeteria
TOWNSHIP	UMT South Block	31.45108972	74.29416418	Student Center
TOWNSHIP	UMT Ground	31.45125446	74.29294109	College Stadium
TOWNSHIP	Student Teacher Centre	31.45365044	74.28091332	Student Center
TOWNSHIP	University of Education	31.45420238	74.29795138	University
TOWNSHIP	School of Engineering	31.452855	74.292204	College Engineering Building
TOWNSHIP	UMT Science Lab	31.45129794	74.29401666	College Lab
TOWNSHIP	2N-04	31.45146942	74.29362488	University
TOWNSHIP	UMT SST Department	31.45116294	74.29414809	College Engineering Building
TOWNSHIP	Pakistan Public School	31.44960733	74.29852651	College Science Building
TOWNSHIP	Drawing hall	31.451391	74.293052	College Classroom
TOWNSHIP	Bahira University	31.45866776	74.28858185	College Academic Building
TOWNSHIP	UMT Girls Common Room	31.45146955	74.29406494	Student Center
TOWNSHIP	UMT Central Block	31.45149018	74.29432105	Student Center
TOWNSHIP	A-1 Tution Centre	31.44233713	74.29010402	Student Center
TOWNSHIP	UMT North Block	31.45176208	74.29376528	Student Center
TOWNSHIP	UMT Millat Photocopy Shop	31.45156108	74.29448605	College Bookstore
TOWNSHIP	UMT Jhanda Chowk	31.45236236	74.29307772	University
TOWNSHIP	kips college	31.45924878	74.29639514	College Academic Building
TOWNSHIP	UMT IPC Lab	31.45197294	74.29407299	College Lab
TOWNSHIP	UMT SBE Department	31.45168006	74.29408908	College Academic Building
TOWNSHIP	UMT Rector Office	31.45140548	74.29403007	College Administrative Building
TOWNSHIP	4L- 05	31.45282901	74.29302616	College Classroom
TOWNSHIP	UMT Simulation Lab	31.45097128	74.29095775	College Lab

TOWNSHIP	the educator tahir campus	31.43908	74.285447	College Academic Building
TOWNSHIP	Bloomfield Hall	31.45543645	74.28417367	College Academic Building
AITCHESON COLLEGE	National Management College	31.55485094	74.33914949	College Residence Hall
AITCHESON COLLEGE	Old Tree Ground	31.548969	74.350006	College Rec Center
AITCHESON COLLEGE	AEO Pakistan (Pearson Vue)	31.55002616	74.35350943	Student Center
AITCHESON COLLEGE	La Salle School System	31.544571	74.350473	General College & University
AITCHESON COLLEGE	Bnu	31.54176913	74.34797065	College & University
AITCHESON COLLEGE	Pakistan School of Fashion Design	31.552644	74.354975	University
AITCHESON COLLEGE	Tennis court	31.547688	74.349104	College Tennis Court
AITCHESON COLLEGE	Convent Of Jesus And Mary	31.561937	74.339817	College & University
AITCHESON COLLEGE	Bus STOP	31.54954181	74.35578331	University
ALFLAH	LUMS square	31.471728	74.41002	College Rec Center
ALFLAH	Smart Lab	31.4722344	74.41082314	College Auditorium
ALFLAH	LUMS SSE	31.47185746	74.41089758	College Academic Building
ALFLAH	LUMS Mosque	31.47156576	74.40916263	College Administrative Building
ALFLAH	LUMS PsiFi	31.4717409	74.41171065	General College & University
ALFLAH	LUMS IST Labs	31.4721118	74.40856141	College Lab
ALFLAH	KADE Lab	31.47201027	74.41111922	College Lab
ALFLAH	Cs Drpartment	31.4717797	74.4102307	College Academic Building
CHAH MIRAN	Defence College For Boys	31.46603806	74.38972778	General College & University
CHAH MIRAN	LUMS School of Science and Engineering	31.47191101	74.38963043	College Engineering Building

CHAH MIRAN	Defence Degree College For Women	31.45840577	74.38551299	College Academic Building
CHAH MIRAN	Crown academy	31.4712441	74.39078719	General College & University
CHAH MIRAN	Smart Prep	31.46367584	74.38569052	Student Center
CHAH MIRAN	Kindergarten Dha	31.46810974	74.39667395	Student Center
CHAH MIRAN	Ise city campus	31.46938158	74.37756418	Student Center
CHAH MIRAN	Center For Islamic Knowledge	31.47417106	74.37962014	Student Center
CHAH MIRAN	CRC - A & O Level Tuition	31.47186818	74.37804524	Student Center
CHAH MIRAN	AlWabil Center For Islamic Knowledge	31.47444271	74.37953424	General College & University
CHUHANG	Qarshi university	31.42260071	74.17719949	General College & University
LAHORE ALLAMA IQBAL TOWN	Tech building	31.505225	74.27478	College Technology Building
LAHORE ALLAMA IQBAL TOWN	Beacon House School Library	31.51244706	74.27783489	College Library
LAHORE ALLAMA IQBAL TOWN	Beacon House School	31.51237389	74.27787781	General College & University
LAHORE G.P.O	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE G.P.O	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE G.P.O	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE G.P.O	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE G.P.O	lgs ajr	31.4873	74.3579	Student Center
LAHORE G.P.O	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE G.P.O	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE MULTAN ROAD	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE MULTAN ROAD	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE MULTAN ROAD	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE MULTAN ROAD	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE MULTAN ROAD	lgs ajr	31.4873	74.3579	Student Center

LAHORE MULTAN ROAD	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE MULTAN ROAD	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE NEW UNIVERSITY CAMPUS	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE NEW UNIVERSITY CAMPUS	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE NEW UNIVERSITY CAMPUS	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE NEW UNIVERSITY CAMPUS	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE NEW UNIVERSITY CAMPUS	lgs ajr	31.4873	74.3579	Student Center
LAHORE NEW UNIVERSITY CAMPUS	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE NEW UNIVERSITY CAMPUS	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE PMG PUNJAB POST OFFICE	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE PMG PUNJAB POST OFFICE	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE PMG PUNJAB POST OFFICE	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE PMG PUNJAB POST OFFICE	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE PMG PUNJAB POST OFFICE	lgs ajr	31.4873	74.3579	Student Center

LAHORE PMG PUNJAB POST OFFICE	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE PMG PUNJAB POST OFFICE	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE PT & T AUDIT	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE PT & T AUDIT	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE PT & T AUDIT	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE PT & T AUDIT	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE PT & T AUDIT	lgs ajr	31.4873	74.3579	Student Center
LAHORE PT & T AUDIT	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE PT & T AUDIT	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE SECONDARY BOARD	PLHR59 - Institute of Emerging Sciences	31.48930219	74.37097235	College Academic Building
LAHORE SECONDARY BOARD	janjua ceter	31.49087924	74.37069745	Fraternity House
LAHORE SECONDARY BOARD	Lahore Grammar School	31.49549511	74.37442006	Student Center
LAHORE SECONDARY BOARD	Lauriston Academia	31.48191842	74.36482702	Student Center
LAHORE SECONDARY BOARD	lgs ajr	31.4873	74.3579	Student Center
LAHORE SECONDARY BOARD	SCORE (Special Children Organization for Rehabilitation and Education)	31.483319	74.364375	General College & University
LAHORE SECONDARY BOARD	Walton railway training academy	31.48729772	74.35790252	College Engineering Building
LAHORE SHADMAN WOMEN MODEL P.O	Virtual University of Pakistan	31.53359985	74.32054138	University

LAHORE SHADMAN WOMEN MODEL P.O	Headquarter Islami Jamiat -e- Talaba Pakistan	31.532982	74.32207	Student Center
LAHORE SHADMAN WOMEN MODEL P.O	Noble group of colleges	31.54161497	74.32886714	College Academic Building
LAHORE SHADMAN WOMEN MODEL P.O	Apa Nisar Fatima High School	31.52715396	74.32340208	Community College
LAHORE SHADMAN WOMEN MODEL P.O	Peak Solutions College	31.54263517	74.31885123	College Academic Building
LAHORE SHADMAN WOMEN MODEL P.O	American Lycetuff Shah Jamal 1	31.5312017	74.3276928	College Academic Building
LAHORE SHADMAN WOMEN MODEL P.O	FMH College of Medicine and Dentistry	31.53571833	74.32830575	Medical School
LAHORE SHADMAN WOMEN MODEL P.O	Lahore College For Women University	31.54351618	74.32736627	College & University
MANSOORA	Nimra Masjid	31.496459	74.275418	General College & University
NAULAKHA	Govt. Fatima Jinnah College For Women	31.58624707	74.31802851	University
SHAH ALAM MARKET	King Edward Medical University	31.56960436	74.31731814	Medical School
SHAH ALAM MARKET	Government College University (GCU)	31.57480438	74.30738294	University
SHAH ALAM MARKET	GCU Bangladesh Department	31.5714	74.306	University
SHAH ALAM MARKET	punjab university college of information technology	31.57229909	74.31020276	University
SHAH ALAM MARKET	dar ul Uloom Hozb ul Ahnaf	31.57736	74.306164	Student Center
SHAH ALAM MARKET	K.E Reading Room	31.5680946	74.31549062	College Library
SHAH ALAM MARKET	Bukhari Auditorium, GC University Lahore	31.57099482	74.30894236	College Auditorium
SHAH ALAM MARKET	King Edward Girls Hostel	31.56952477	74.31814575	College Residence Hall

SHAH ALAM MARKET	Govt. College University	31.57161331	74.30851746	General College & University
SHAH ALAM MARKET	MLab GCU Lahore	31.57490002	74.30720069	College Lab
SHAH ALAM MARKET	Inter Cafe GC University	31.57259993	74.3077908	College Cafeteria
SHAH ALAM MARKET	GLab GCU Lahore	31.57476165	74.30722361	College Lab
SHAH ALAM MARKET	Govt. Fatima Jinnah College For Women	31.58624707	74.31802851	University
SHAH ALAM MARKET	PG Cafe	31.57477847	74.30720642	College Cafeteria
SHAH ALAM MARKET	Oriental College, Punjab University	31.570812	74.30963	University
SHAH ALAM MARKET	Punjab University (College of Art & Design)	31.56906513	74.30913142	University
SHAH ALAM MARKET	dcs gcu	31.57480923	74.30742986	College Technology Building
SHAH ALAM MARKET	GCU New Block	31.57125273	74.3089309	College Academic Building
SHAH ALAM MARKET	Postgraduate cafe, GC University Lahore	31.57380191	74.30619808	College Cafeteria
SHAH ALAM MARKET	PUCIT	31.57039417	74.3096986	University
SHAHDARA BAGH	Defence College For Boys	31.46603806	74.38972778	General College & University
SHAHDARA BAGH	LUMS School of Science and Engineering	31.47191101	74.38963043	College Engineering Building
SHAHDARA BAGH	Defence Degree College For Women	31.45840577	74.38551299	College Academic Building
SHAHDARA BAGH	Crown academy	31.4712441	74.39078719	General College & University
SHAHDARA BAGH	Smart Prep	31.46367584	74.38569052	Student Center
SHAHDARA BAGH	Kindergarten Dha	31.46810974	74.39667395	Student Center
SHAHDARA BAGH	CRC - A & O Level Tuition	31.47186818	74.37804524	Student Center
SHAHDARA BAGH	Center For Islamic Knowledge	31.47417106	74.37962014	Student Center
SHAHDARA BAGH	Ise city campus	31.46938158	74.37756418	Student Center
SHAHDARA BAGH	AlWabil Center For Islamic Knowledge	31.47444271	74.37953424	General College & University

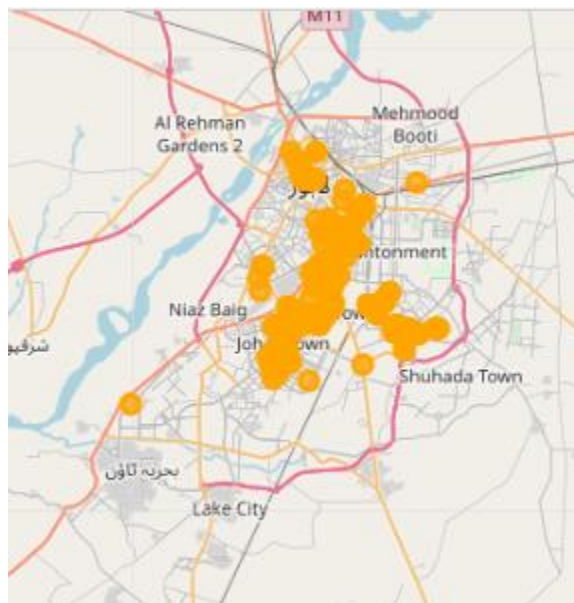
SHAHI MOHALLAH	Iqra Group Of Academies	31.58259751	74.30199853	College Academic Building
SHAHI MOHALLAH	dar ul Uloom Hozb ul Ahnaf	31.57736	74.306164	Student Center
SHAHI MOHALLAH	Jamia Madnia	31.5869	74.2995	General College & University
SHAHI MOHALLAH	Govt. Fatima Jinnah College For Women	31.58624707	74.31802851	University
GREEN TOWN	Govt. MC Boys High School	31.4380136	74.3122691	General College & University
FAISAL TOWN	FAST-NUCES	31.48126914	74.30335575	University
FAISAL TOWN	Fast School of Management , FAST-NUCES	31.48124267	74.30344217	College Science Building
FAISAL TOWN	floor 1 new block fast nukes	31.4829	74.30390066	University
FAISAL TOWN	Student zone	31.47115943	74.30154018	Student Center
FAISAL TOWN	Sports Ground, FAST-NU	31.48026372	74.30313349	College Soccer Field
FAISAL TOWN	JT Auditorium	31.46698092	74.29439553	Auditorium
FAISAL TOWN	Fast Music Society	31.48126104	74.30311203	College Rec Center
FAISAL TOWN	Lahore Granmar School Johar Town	31.47344809	74.28581814	College Academic Building
FAISAL TOWN	Pak Poly Technic College	31.47303206	74.29968959	College Engineering Building
FAISAL TOWN	JT Multimedia Room O Levels	31.46977997	74.29019165	College Classroom
FAISAL TOWN	kips Css Campus	31.48139323	74.2982916	College Administrative Building
FAISAL TOWN	Amsterdam, FAST-NU	31.48140347	74.30358555	Student Center
FAISAL TOWN	executive room FAST-NU	31.48102379	74.30380249	Student Center
FAISAL TOWN	ASK TECH	31.478438	74.303869	Student Center
FAISAL TOWN	Justice Gul Muhammad Library, FAST-NU	31.48139235	74.30352205	College Library
FAISAL TOWN	AIMC Boys Dorms	31.48582718	74.29709987	College Residence Hall
FAISAL TOWN	North Pole International (Pvt.) Ltd	31.482712	74.29796	General College & University
FAISAL TOWN	AIMC Shopping Mall	31.4858193	74.29786189	College Cafeteria
FAISAL TOWN	New Block, FAST-NU	31.4813908	74.30344116	College Technology Building

FAISAL TOWN	Nuces lab	31.480831	74.30315495	College Lab
FAISAL TOWN	Cafeteria, FAST-NU	31.4811569	74.30376315	College Cafeteria
FAISAL TOWN	LDA Girls high school	31.47377079	74.28652864	College Administrative Building
FAISAL TOWN	old auditorium FAST-NU	31.48102528	74.30395222	College Auditorium
FAISAL TOWN	Auditorium, FAST-NU	31.4808676	74.30270433	College Auditorium
FAISAL TOWN	AIMC Stadium	31.48580072	74.29781033	College Cricket Pitch
FAISAL TOWN	E&M 13	31.48194036	74.30431317	College Classroom
FAISAL TOWN	AIMC Inter-dorms Lawn	31.4858043	74.29713425	College Quad
FAISAL TOWN	E&M XVII	31.48194036	74.30431317	College Classroom
FAISAL TOWN	hangout area	31.48112117	74.30380326	College Quad
FAISAL TOWN	Lab 6 FAST-NU	31.479722	74.303089	College Lab
FAISAL TOWN	E&M XV	31.48211957	74.30276626	College Classroom
FAISAL TOWN	Civil department FAST NU	31.48303795	74.30394745	College Engineering Building
FAISAL TOWN	AIMC Library	31.48571044	74.29712279	College Library
FAISAL TOWN	JT Step Threater O Levels	31.46977997	74.29019165	College Rec Center
FAISAL TOWN	AIMC Auditorium	31.482203	74.29944	College Auditorium
GULBERG III	Chef Institute.	31.51014925	74.32635232	General College & University
GULBERG III	Bahauddin Zakariya University Lahore Campus	31.51015831	74.31793685	College Academic Building
GULBERG III	Comsat	31.51439285	74.32089233	University
GULBERG III	Govt. gulberg college for boys	31.5087858	74.33213235	College Administrative Building
GULBERG III	Preston University	31.5076776	74.3184209	University
GULBERG III	Grace College	31.50437546	74.32118225	College Auditorium
GULBERG III	Iqra Trust School	31.49510164	74.3244447	Student Center
GULBERG III	American Language center	31.49923405	74.3217413	Student Center

GULBERG III	Superior College	31.50149792	74.33230519	College Classroom
GULBERG III	Ali Auditorium	31.51630573	74.32728035	College Auditorium
GULBERG III	Punjab University Library	31.49920845	74.31813163	College Library
GULBERG III	Hamdard Public School	31.49768554	74.33120549	General College & University
GULBERG III	Skans School of Accountancy (C.A Campus)	31.51233673	74.32337189	General College & University
GULBERG III	BZU lahore campus	31.51009364	74.31906543	General College & University
GULBERG III	Grace College	31.51025488	74.31857848	College Academic Building
GULBERG III	IMS - The Institute of Management Sciences	31.50619971	74.33674693	University
GULBERG III	CFE (ACCA CAMPUS)	31.49927861	74.31819969	College Classroom
GULBERG III	Acute Business College	31.498986	74.316857	College Academic Building
GULBERG III	British Education And Training System	31.50794045	74.31490054	College Communications Building
GULBERG III	The Bridges School	31.51306927	74.3211106	College & University
GULBERG II	Wise College	31.5307197	74.33819861	College & University
GULBERG II	FC College University	31.52338154	74.33465855	Community College
GULBERG II	Forman Christian College	31.52549803	74.33318065	University
GULBERG II	Services Institute Of Medical Sciences	31.52557107	74.34156676	Medical School
GULBERG II	Lahore Preschool	31.51878399	74.34172142	Student Center
GULBERG II	Forman Christian College	31.52247425	74.33312336	University
GULBERG II	College of Home Economics	31.52660728	74.35110377	College Academic Building
GULBERG II	COTHM	31.533694	74.345362	College Academic Building
GULBERG II	Lahore Grammer School 39 B Main Gulberg Lahore	31.53231454	74.34298732	College Administrative Building
GULBERG II	Arena GullbergIII kalma Chowk	31.52543647	74.34168132	University

GULBERG II	Rosan's Islamic School	31.528841	74.340823	Student Center
GULBERG II	Prometric Testing Center - USEFP	31.51806549	74.3365718	Student Center
GULBERG II	PCBA	31.52950182	74.34688235	College & University
GULBERG I	Wise College	31.5307197	74.33819861	College & University
GULBERG I	Lahore Grammer School 39 B Main Gulberg Lahore	31.53231454	74.34298732	College Administrative Building
GULBERG I	Services Institute Of Medical Sciences	31.52557107	74.34156676	Medical School
GULBERG I	Kinnaird College	31.53790778	74.33924675	College Academic Building
GULBERG I	College of Home Economics	31.52660728	74.35110377	College Academic Building
GULBERG I	COTHM	31.533694	74.345362	College Academic Building
GULBERG I	Rosan's Islamic School	31.528841	74.340823	Student Center
GULBERG I	PCBA	31.52950182	74.34688235	College & University
GULBERG I	Shibli Foundation University Hostel Jail Hostel	31.53846602	74.33684675	College Residence Hall
GULBERG I	Arena GullbergIII kalma Chowk	31.52543647	74.34168132	University

4.3.6. Map of Colleges & Universities Venues in Lahore



4.3.7. Office Venues in Lahore

Neighborhood	Venue	Venue Latitude	Venue Longitude	Venue Category
FEROZEPUR ROAD LAHORE	Faysalbank	31.49319172	74.37273058	Office
FEROZEPUR ROAD LAHORE	Platalytics	31.47852516	74.37329102	Office
FEROZEPUR ROAD LAHORE	Fatima Fertilizer Company	31.49512821	74.37514167	Office
FEROZEPUR ROAD LAHORE	Bramerz	31.49819453	74.37157943	Advertising Agency
FEROZEPUR ROAD LAHORE	Innovation	31.49339424	74.37675668	Coworking Space
FEROZEPUR ROAD LAHORE	DreamsVue	31.49605488	74.36493158	Tech Startup
FEROZEPUR ROAD LAHORE	Delphi Global	31.4944502	74.375619	Office
FEROZEPUR ROAD LAHORE	Telenor Franchise	31.49497241	74.37397335	Office
FEROZEPUR ROAD LAHORE	Marksman	31.498106	74.374193	Campaign Office
FEROZEPUR ROAD LAHORE	Smonte	31.49949455	74.37259197	Tech Startup
FEROZEPUR ROAD LAHORE	Fatima Group Head Office	31.49411737	74.37574691	Office
FEROZEPUR ROAD LAHORE	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
FEROZEPUR ROAD LAHORE	SMC Group	31.49393173	74.37592054	Office
FEROZEPUR ROAD LAHORE	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
KAHNA NAU	Punjab Developers Office	31.378172	74.364236	Real Estate Office
LAHORE DEFENCE HOUSING SOICETY	ZTE Lahore Office	31.48011475	74.31457972	Corporate Amenity
LAHORE DEFENCE HOUSING SOICETY	SigmaTec Solutions	31.48004723	74.31446075	Coworking Space
LAHORE DEFENCE HOUSING SOICETY	TechVezoto	31.48049961	74.3177879	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Pakistan Academy of Family Physicians	31.48630208	74.31110222	Campaign Office
LAHORE DEFENCE HOUSING SOICETY	Brandaive	31.47685835	74.30675955	Advertising Agency
LAHORE DEFENCE HOUSING SOICETY	Skooter Technologies	31.48346608	74.30737138	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Nestle Zonal Office	31.48035552	74.31406375	Coworking Space
LAHORE DEFENCE HOUSING SOICETY	Wedding Studio By CMS	31.477159	74.323818	Photography Studio
LAHORE DEFENCE HOUSING SOICETY	Expertflow	31.485951	74.309119	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Leo Communications Pvt. Ltd	31.47653717	74.30875329	Office
LAHORE DEFENCE HOUSING SOICETY	Hot chocolate point	31.488212	74.324764	Corporate Coffee Shop
LAHORE DEFENCE HOUSING SOICETY	OneByte HQ	31.478036	74.327116	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Indus Motor Company (Lahore Office)	31.47170258	74.32013702	Office

LAHORE DEFENCE HOUSING SOICETY	Alpolink	31.47497953	74.31156054	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Nespak Limited	31.47358962	74.31040328	Office
LAHORE DEFENCE HOUSING SOICETY	Youth Studio	31.47725452	74.32620338	Office
LAHORE DEFENCE HOUSING SOICETY	CTO 24/7 (Pvt) Ltd	31.472044	74.31922011	Office
LAHORE DEFENCE HOUSING SOICETY	JB Productions	31.48395348	74.31923676	Office
LAHORE DEFENCE HOUSING SOICETY	aj multimedia studio	31.4762979	74.30679965	Office
LAHORE DEFENCE HOUSING SOICETY	Dragonfly	31.48116371	74.30371159	Office
LAHORE DEFENCE HOUSING SOICETY	PITB Development Center	31.48343086	74.31877899	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Mindblaze Technologies	31.472369	74.314448	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Reckitt Benckiser Regional Office	31.48073184	74.30455958	Office
LAHORE DEFENCE HOUSING SOICETY	Tab's Group International; Faisal Town, Lahore	31.48173429	74.30366576	Tech Startup
LAHORE DEFENCE HOUSING SOICETY	Synergy	31.475368	74.306096	Office
LAHORE DEFENCE HOUSING SOICETY	Executive Centre	31.48124281	74.30364857	Conference Room
LAHORE DEFENCE HOUSING SOICETY	Medcon International	31.47550392	74.30628204	Office
LAHORE DEFENCE HOUSING SOICETY	NewsONE Lahore	31.47740797	74.32301826	Office
LAHORE DEFENCE HOUSING SOICETY	Ovex Technologies Pakistan (Pvt) Ltd	31.48093193	74.31040328	Office
LAHORE DEFENCE HOUSING SOICETY	Technosoft	31.48125922	74.31081577	Office
LAHORE DEFENCE HOUSING SOICETY	Associated consulting engineers	31.48800131	74.31030015	Coworking Space
LAHORE ISMAIL NAGAR	NLC Site Office Fly Over Kacha Jail Road	31.455051	74.33584	Office
MODEL TOWN LAHORE	Hot chocolate point	31.488212	74.324764	Corporate Coffee Shop
MODEL TOWN LAHORE	Systems limited	31.48960068	74.32987536	Office
MODEL TOWN LAHORE	TechVezoto	31.48049961	74.3177879	Tech Startup
MODEL TOWN LAHORE	Total Parco Pakistan Limited Head Office	31.48728781	74.32824847	Office
MODEL TOWN LAHORE	Mezino HQ	31.4930853	74.32681804	Tech Startup
MODEL TOWN LAHORE	Wedding Studio By CMS	31.477159	74.323818	Photography Studio
MODEL TOWN LAHORE	Youth Studio	31.47725452	74.32620338	Office
MODEL TOWN LAHORE	Mezino HQ	31.493135	74.326819	Tech Startup

MODEL TOWN LAHORE	SigmaTec Solutions	31.48004723	74.31446075	Coworking Space
MODEL TOWN LAHORE	Nestle Zonal Office	31.48035552	74.31406375	Coworking Space
MODEL TOWN LAHORE	HBS Technologies	31.4900618	74.32953738	Office
MODEL TOWN LAHORE	OneByte HQ	31.478036	74.327116	Tech Startup
MODEL TOWN LAHORE	ZTE Lahore Office	31.48011475	74.31457972	Corporate Amenity
MODEL TOWN LAHORE	BijleeDot PK	31.4908494	74.32873785	Office
MODEL TOWN LAHORE	JB Productions	31.48395348	74.31923676	Office
MODEL TOWN LAHORE	NewsONE Lahore	31.47740797	74.32301826	Office
MODEL TOWN LAHORE	PITB Development Center	31.48343086	74.31877899	Tech Startup
TOWNSHIP	LX REDLiTEZoNE	31.45376822	74.28096489	Tech Startup
TOWNSHIP	Palmist Moazzam	31.43980789	74.2880249	Office
TOWNSHIP	Sources International	31.4522567	74.2810965	Office
TOWNSHIP	Continental Biscuits Limited Regional Office	31.45418564	74.28455184	Office
AITCHESON COLLEGE	HBL Corporate Center	31.54917266	74.34255123	Office
AITCHESON COLLEGE	Fauji Foods Ltd	31.54904205	74.34308834	Office
AITCHESON COLLEGE	Ufone Davis Road	31.56029262	74.33775754	Coworking Space
AITCHESON COLLEGE	ATS Synthetic Ltd	31.56182098	74.33750153	Office
AITCHESON COLLEGE	Pc Crew Lounge	31.552298	74.33794	Corporate Coffee Shop
AITCHESON COLLEGE	ksb pumps company limited	31.55903832	74.3384793	Coworking Space
AITCHESON COLLEGE	Jang	31.55923777	74.33869124	Office
AITCHESON COLLEGE	Targetedmedia	31.5624622	74.33961347	Office
AITCHESON COLLEGE	Dunya TV	31.56152373	74.33713889	Office
AITCHESON COLLEGE	Rocxial HQ	31.54505	74.340683	Tech Startup
AITCHESON COLLEGE	HFS branch	31.5614	74.3384	Office
AITCHESON COLLEGE	punjab bait ul maal	31.56123161	74.33705807	Office
AITCHESON COLLEGE	UDL Distribution Lahore East	31.55982775	74.3373222	Office
AITCHESON COLLEGE	Jang Group Of Companies	31.55927969	74.33841056	Office
AITCHESON COLLEGE	Suzuki Regional Office	31.54179775	74.34819976	Conference Room
AITCHESON COLLEGE	Wateen	31.56045532	74.3377533	Tech Startup
AITCHESON COLLEGE	Crescent Bahuman Ltd.	31.54244169	74.34882983	Office
ALFLAH	Intagleo Systems	31.48777124	74.40941457	Tech Startup
ALFLAH	Webols Pakistan	31.48387167	74.40809188	Office
ALFLAH	Qarshi Lahore Office	31.48187599	74.40206807	Office
ALFLAH	Ebryx SMC Private Limited	31.484747	74.4091773	Tech Startup
ALFLAH	Systems Ltd	31.486509	74.422241	Office
ALFLAH	Venture Republic: Digital Agency	31.48107805	74.4026649	Office
ALFLAH	AutoSoft Dynamics (PVT.) LTD	31.48117869	74.41185951	Tech Startup
ALFLAH	Nishat Chunian	31.4819126	74.40143247	Office
ALFLAH	millat estate	31.47435922	74.40360267	Office
ALFLAH	Adservice	31.48339883	74.41965221	Office

ALFLAH	SCB, Phase-II, DHA	31.47442673	74.41395516	Office
CHAH MIRAN	Nadra Executice Registration Center DHA2	31.46192169	74.38497469	Office
CHAH MIRAN	Kansai Paint	31.46326802	74.38333111	Office
CHAH MIRAN	Driving Licensing Facilitation Centre	31.47147731	74.38911504	Office
CHAH MIRAN	DPL Cafe	31.46977331	74.38569699	CafÃ©
CHAH MIRAN	OPPO head office	31.464508	74.38774	Office
CHAH MIRAN	7vals	31.46277879	74.38516939	Tech Startup
CHAH MIRAN	Metikulous	31.470673	74.389026	Tech Startup
CHAH MIRAN	QBXNet	31.46406506	74.38969342	Tech Startup
CHAH MIRAN	HBL Bank	31.4748764	74.38208008	Office
CHAH MIRAN	Kickstart	31.474408	74.379501	Coworking Space
CHAH MIRAN	Synnapps Limited	31.46410689	74.38958462	Tech Startup
CHAH MIRAN	Meinhardt Pakistan Pvt Ltd	31.47313022	74.37932234	Office
CHAH MIRAN	Careem Office	31.464442	74.389558	Office
CHAH MIRAN	DVM Pharma	31.46149	74.378355	Office
CHAH MIRAN	Olaround HQ	31.46373088	74.3856695	Tech Startup
CHAH MIRAN	Venture Dive	31.46669155	74.38959035	Tech Startup
CHAH MIRAN	Zealcon Engineering (Pvt) Ltd.	31.462849	74.384796	Office
CHAH MIRAN	Redbull Office	31.46376363	74.38938419	Office
CHAH MIRAN	Heliumm	31.47002501	74.39029471	Office
CHAH MIRAN	KK Power International Pvt Ltd	31.463582	74.388568	Office
CHAH MIRAN	Maxxsol	31.4712226	74.3895159	Tech Startup
CHAH MIRAN	Obscure Interactive	31.47200716	74.39166907	Tech Startup
CHAH MIRAN	B Solutions	31.47079998	74.38950445	Tech Startup
CHAH MIRAN	iris communications	31.47204204	74.37678532	Office
CHAH MIRAN	Business Development Floor, INFOGISTIC Pvt. Ltd.	31.4638659	74.38829899	Office
CHAH MIRAN	Design & Development Floor, INFOGISTIC Pvt. Ltd.	31.4638476	74.38827753	Office
CHAH MIRAN	DHA Main Office	31.47099592	74.38970488	Office
CHAH MIRAN	IT Bees (Pvt) Limited	31.47135953	74.38903487	Tech Startup
CHUHANG	SGS Pakistan	31.43294334	74.18107605	Office
CHUHANG	A.N. Engineering Industries	31.43522	74.18242	Office
KOHINOOR ENERGY	Zenith factory	31.25607315	74.18543224	Factory
LAHORE ALLAMA IQBAL TOWN	Firmsol Online, Pvt, Ltd.	31.51285748	74.27656993	Tech Startup
LAHORE E.M.E Society P.O	SGS International	31.435362	74.186116	Office
LAHORE E.M.E Society P.O	Friulsider Centre	31.44089552	74.20083614	Office
LAHORE E.M.E Society P.O	Asian Consultants	31.434544	74.19772	Office
LAHORE E.M.E Society P.O	A.N. Engineering Industries	31.43522	74.18242	Office
LAHORE G.P.O	Faysalbank	31.49319172	74.37273058	Office
LAHORE G.P.O	Platalytics	31.47852516	74.37329102	Office
LAHORE G.P.O	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE G.P.O	Marksman	31.498106	74.374193	Campaign Office
LAHORE G.P.O	Fatima Fertilizer Company	31.49512821	74.37514167	Office

LAHORE G.P.O	Delphi Global	31.4944502	74.375619	Office
LAHORE G.P.O	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE G.P.O	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE G.P.O	SMC Group	31.49393173	74.37592054	Office
LAHORE G.P.O	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE G.P.O	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE G.P.O	Innovation	31.49339424	74.37675668	Coworking Space
LAHORE G.P.O	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE G.P.O	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE MULTAN ROAD	Faysalbank	31.49319172	74.37273058	Office
LAHORE MULTAN ROAD	Platalytics	31.47852516	74.37329102	Office
LAHORE MULTAN ROAD	Marksman	31.498106	74.374193	Campaign Office
LAHORE MULTAN ROAD	SMC Group	31.49393173	74.37592054	Office
LAHORE MULTAN ROAD	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE MULTAN ROAD	Delphi Global	31.4944502	74.375619	Office
LAHORE MULTAN ROAD	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE MULTAN ROAD	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE MULTAN ROAD	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE MULTAN ROAD	Fatima Fertilizer Company	31.49512821	74.37514167	Office
LAHORE MULTAN ROAD	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE MULTAN ROAD	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE MULTAN ROAD	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE MULTAN ROAD	Innovation	31.49339424	74.37675668	Coworking Space
LAHORE NEW UNIVERSITY CAMPUS	Faysalbank	31.49319172	74.37273058	Office
LAHORE NEW UNIVERSITY CAMPUS	Platalytics	31.47852516	74.37329102	Office
LAHORE NEW UNIVERSITY CAMPUS	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE NEW UNIVERSITY CAMPUS	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE NEW UNIVERSITY CAMPUS	Marksman	31.498106	74.374193	Campaign Office
LAHORE NEW UNIVERSITY CAMPUS	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE NEW UNIVERSITY CAMPUS	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE NEW UNIVERSITY CAMPUS	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE NEW UNIVERSITY CAMPUS	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE NEW UNIVERSITY CAMPUS	Innovation	31.49339424	74.37675668	Coworking Space

LAHORE NEW UNIVERSITY CAMPUS	Fatima Fertilizer Company	31.49512821	74.37514167	Office
LAHORE NEW UNIVERSITY CAMPUS	SMC Group	31.49393173	74.37592054	Office
LAHORE NEW UNIVERSITY CAMPUS	Delphi Global	31.4944502	74.375619	Office
LAHORE NEW UNIVERSITY CAMPUS	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE PMG PUNJAB POST OFFICE	Faysalbank	31.49319172	74.37273058	Office
LAHORE PMG PUNJAB POST OFFICE	Platalytics	31.47852516	74.37329102	Office
LAHORE PMG PUNJAB POST OFFICE	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE PMG PUNJAB POST OFFICE	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE PMG PUNJAB POST OFFICE	Delphi Global	31.4944502	74.375619	Office
LAHORE PMG PUNJAB POST OFFICE	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE PMG PUNJAB POST OFFICE	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE PMG PUNJAB POST OFFICE	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE PMG PUNJAB POST OFFICE	Fatima Fertilizer Company	31.49512821	74.37514167	Office
LAHORE PMG PUNJAB POST OFFICE	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE PMG PUNJAB POST OFFICE	Innovation	31.49339424	74.37675668	Coworking Space
LAHORE PMG PUNJAB POST OFFICE	SMC Group	31.49393173	74.37592054	Office
LAHORE PMG PUNJAB POST OFFICE	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE PMG PUNJAB POST OFFICE	Marksman	31.498106	74.374193	Campaign Office
LAHORE PT & T AUDIT	Faysalbank	31.49319172	74.37273058	Office
LAHORE PT & T AUDIT	Platalytics	31.47852516	74.37329102	Office
LAHORE PT & T AUDIT	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE PT & T AUDIT	SMC Group	31.49393173	74.37592054	Office
LAHORE PT & T AUDIT	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE PT & T AUDIT	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE PT & T AUDIT	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE PT & T AUDIT	Marksman	31.498106	74.374193	Campaign Office
LAHORE PT & T AUDIT	Innovation	31.49339424	74.37675668	Coworking Space
LAHORE PT & T AUDIT	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE PT & T AUDIT	Delphi Global	31.4944502	74.375619	Office

LAHORE PT & T AUDIT	Fatima Fertilizer Company	31.49512821	74.37514167	Office
LAHORE PT & T AUDIT	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE PT & T AUDIT	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE SECONDARY BOARD	Faysalbank	31.49319172	74.37273058	Office
LAHORE SECONDARY BOARD	Plataalytics	31.47852516	74.37329102	Office
LAHORE SECONDARY BOARD	Ali Xeeshan Theater Studio	31.49880791	74.37259674	Office
LAHORE SECONDARY BOARD	Telenor Franchise	31.49497241	74.37397335	Office
LAHORE SECONDARY BOARD	Bramerz	31.49819453	74.37157943	Advertising Agency
LAHORE SECONDARY BOARD	Marksman	31.498106	74.374193	Campaign Office
LAHORE SECONDARY BOARD	DreamsVue	31.49605488	74.36493158	Tech Startup
LAHORE SECONDARY BOARD	Fatima Fertilizer Company	31.49512821	74.37514167	Office
LAHORE SECONDARY BOARD	Delphi Global	31.4944502	74.375619	Office
LAHORE SECONDARY BOARD	Smonte	31.49949455	74.37259197	Tech Startup
LAHORE SECONDARY BOARD	SMC Group	31.49393173	74.37592054	Office
LAHORE SECONDARY BOARD	Innovation	31.49339424	74.37675668	Coworking Space
LAHORE SECONDARY BOARD	Telenor Office And Call Center	31.48029899	74.36437456	Tech Startup
LAHORE SECONDARY BOARD	Fatima Group Head Office	31.49411737	74.37574691	Office
LAHORE SHADMAN WOMEN MODEL P.O	HexaSol Technologies	31.5336	74.3171	Office
LAHORE SHADMAN WOMEN MODEL P.O	Vety Care (pvt) Ltd	31.539555	74.331235	Office
LAHORE SHADMAN WOMEN MODEL P.O	e-Business Pring	31.54410889	74.32295524	Office
LAHORE SHADMAN WOMEN MODEL P.O	The Connection -Head Office	31.538946	74.328107	Office
LAHORE SHADMAN WOMEN MODEL P.O	Regional Passport Office Shadman	31.543804	74.32874	Office
LAHORE SHADMAN WOMEN MODEL P.O	Jazz Experience Center	31.545691	74.318737	Corporate Amenity
LAHORE SHADMAN WOMEN MODEL P.O	it-geist	31.53011024	74.32239956	Tech Startup
LAHORE SHADMAN WOMEN MODEL P.O	Grant Thornton	31.54366751	74.32143939	Office
LAHORE SHADMAN WOMEN MODEL P.O	Klass Security Services	31.5307401	74.32224274	Office

LAHORE SHADMAN WOMEN MODEL P.O	EQUIPSIS (Pvt) Ltd	31.54381032	74.32267282	Office
LAHORE SHADMAN WOMEN MODEL P.O	MOBILINK (Outbond Operations)	31.54492866	74.32086427	Office
LAHORE SHADMAN WOMEN MODEL P.O	Mobilink	31.54365493	74.32188971	Office
LAHORE SHADMAN WOMEN MODEL P.O	Care foundation	31.53457544	74.33115853	Office
LAHORE SHADMAN WOMEN MODEL P.O	Palmchip	31.54041862	74.32900238	Office
LAHORE SHADMAN WOMEN MODEL P.O	Blendsoft FZC	31.53111083	74.32991545	Tech Startup
LAHORE SHADMAN WOMEN MODEL P.O	Print View Technologies	31.52277743	74.32343645	Tech Startup
LAHORE SHADMAN WOMEN MODEL P.O	Institute Of Democracy And Development	31.53631032	74.33116998	Office
LAHORE SHADMAN WOMEN MODEL P.O	Sunlight Pakistan	31.53837967	74.31916046	Office
LAHORE SHADMAN WOMEN MODEL P.O	Farz Foundation	31.54361725	74.32145691	Office
LAHORE SHADMAN WOMEN MODEL P.O	Telenor Customer Service Center	31.539051	74.330835	Office
LAHORE SHADMAN WOMEN MODEL P.O	Z.K.B Site Office	31.54328213	74.31695722	Office
LAHORE SHADMAN WOMEN MODEL P.O	Vety Care/Leads Pharma	31.53861873	74.33097522	Office
LAHORE SHADMAN WOMEN MODEL P.O	Tintash	31.533989	74.328183	Tech Startup
LAHORE SHADMAN WOMEN MODEL P.O	Open-Silicon Pakistan	31.53959943	74.32934403	Office
LAHORE SHADMAN WOMEN MODEL P.O	Panasian Group	31.54438159	74.32122231	Office
LAHORE SHADMAN WOMEN MODEL P.O	Zong Franchise	31.54439762	74.31791394	Office
LAHORE SHADMAN WOMEN MODEL P.O	OCS	31.54308321	74.3177247	Office
LAHORE SHADMAN WOMEN MODEL P.O	Matco Rice (Regional office)	31.539692	74.329673	Campaign Office
LAHORE SHADMAN WOMEN MODEL P.O	Equinox Office	31.54374717	74.32248549	Coworking Space
LAHORE SHADMAN WOMEN MODEL P.O	Manhattan Communication Pvt Ltd	31.54364586	74.32144928	Office
LAHORE SHADMAN WOMEN MODEL P.O	Meicon Ltd.	31.53827122	74.33211517	Office
LAHORE SHADMAN WOMEN MODEL P.O	Soliton Technologies	31.53996658	74.32454681	Office
MANSOORA	Silver Sand paints	31.48819548	74.26196321	Office
MANSOORA	YoursDomain.com	31.4988359	74.27036762	Office

MANSOORA	Halls Int.	31.49060631	74.26190186	Coworking Space
NAULAKHA	Latif sons Pakistan.	31.57543418	74.32850625	Office
NAULAKHA	Nishtar road	31.57547696	74.32833439	Office
NAULAKHA	BAS Group - M.H Shah & Co.	31.57562882	74.32817459	Office
NAULAKHA	BAS Group - B.A Syed & Co.	31.57537917	74.32840886	Office
NAULAKHA	Riaz and Sons Plastic House	31.57584819	74.31989193	Office
NAULAKHA	3B Traders	31.57524035	74.32360411	Office
NAULAKHA	Shoaib Material Store	31.57859268	74.31924302	Office
NAULAKHA	Mitsubishi Compressor Stockist	31.57537842	74.32836151	Office
NAULAKHA	Libra trading corporation (pvt)	31.57010397	74.32942281	Office
NAULAKHA	ayan sikander & co	31.57537651	74.33037567	Office
NAULAKHA	Crescent Corporation	31.575296	74.332352	Office
NAULAKHA	Salman Papers	31.575991	74.312196	Office
NAULAKHA	Tahir amin traders	31.57631302	74.32473755	Coworking Space
NAULAKHA	Samia Paper mart	31.57592	74.31262	Office
SHAH ALAM MARKET	Samia Paper mart	31.57592	74.31262	Office
SHAH ALAM MARKET	Riaz and Sons Plastic House	31.57584819	74.31989193	Office
SHAH ALAM MARKET	Shoaib Material Store	31.57859268	74.31924302	Office
SHAH ALAM MARKET	Bank Square Nila Gumbad	31.56774626	74.31302144	Office
SHAH ALAM MARKET	3B Traders	31.57524035	74.32360411	Office
SHAH ALAM MARKET	Shirkat Printing Press	31.57097109	74.3186415	Office
SHAH ALAM MARKET	Ufone Franchise Data Darbar	31.57742946	74.30761814	Office
SHAH ALAM MARKET	Salman Papers	31.575991	74.312196	Office
SHAH ALAM MARKET	Tahir amin traders	31.57631302	74.32473755	Coworking Space
SHAHDARA BAGH	Nadra Executice Registration Center DHA2	31.46192169	74.38497469	Office
SHAHDARA BAGH	Kansai Paint	31.46326802	74.38333111	Office
SHAHDARA BAGH	Driving Licensing Facilitation Centre	31.47147731	74.38911504	Office
SHAHDARA BAGH	DPL Cafe	31.46977331	74.38569699	Café
SHAHDARA BAGH	OPPO head office	31.464508	74.38774	Office
SHAHDARA BAGH	7vals	31.46277879	74.38516939	Tech Startup
SHAHDARA BAGH	QBXNet	31.46406506	74.38969342	Tech Startup
SHAHDARA BAGH	Metikulous	31.470673	74.389026	Tech Startup
SHAHDARA BAGH	Careem Office	31.464442	74.389558	Office
SHAHDARA BAGH	Kickstart	31.474408	74.379501	Coworking Space
SHAHDARA BAGH	Synnapps Limited	31.46410689	74.38958462	Tech Startup
SHAHDARA BAGH	Meinhardt Pakistan Pvt Ltd	31.47313022	74.37932234	Office
SHAHDARA BAGH	HLB Bank	31.4748764	74.38208008	Office
SHAHDARA BAGH	DVM Pharma	31.46149	74.378355	Office
SHAHDARA BAGH	Olaround HQ	31.46373088	74.3856695	Tech Startup
SHAHDARA BAGH	Venture Dive	31.46669155	74.38959035	Tech Startup
SHAHDARA BAGH	Zealcon Engineering (Pvt) Ltd.	31.462849	74.384796	Office
SHAHDARA BAGH	IT Bees (Pvt) Limited	31.47135953	74.38903487	Tech Startup
SHAHDARA BAGH	DHA Main Office	31.47099592	74.38970488	Office

SHAHDARA BAGH	Business Development Floor, INFOGISTIC Pvt. Ltd.	31.4638659	74.38829899	Office
SHAHDARA BAGH	Obscure Interactive	31.47200716	74.39166907	Tech Startup
SHAHDARA BAGH	Maxxsol	31.4712226	74.3895159	Tech Startup
SHAHDARA BAGH	Design & Development Floor, INFOGISTIC Pvt. Ltd.	31.4638476	74.38827753	Office
SHAHDARA BAGH	KK Power International Pvt Ltd	31.463582	74.388568	Office
SHAHDARA BAGH	Redbull Office	31.46376363	74.38938419	Office
SHAHDARA BAGH	iris communications	31.47204204	74.37678532	Office
SHAHDARA BAGH	B Solutions	31.47079998	74.38950445	Tech Startup
SHAHDARA BAGH	Heliumm	31.47002501	74.39029471	Office
SHAHI MOHALLAH	Mobilink	31.58510025	74.30060056	Office
SHAHI MOHALLAH	Ufone Franchise Data Darbar	31.57742946	74.30761814	Office
SHAHI MOHALLAH	Salman Papers	31.575991	74.312196	Office
SHAHI MOHALLAH	Samia Paper mart	31.57592	74.31262	Office
JOHAR TOWN	Irinattech	31.464623	74.223394	Tech Startup
JOHAR TOWN	PRD, Mohafiz Town	31.45534353	74.21719027	Office
JOHAR TOWN	Orchard Farms	31.46193504	74.21839905	Office
JOHAR TOWN	Unilever Pakistan Lahore Office	31.46388555	74.22723819	Office
JOHAR TOWN	PLRA	31.455673	74.214261	Corporate Amenity
GREEN TOWN	HSY Manufacturing Factory	31.43803693	74.31220793	Office
GREEN TOWN	IOM	31.43892139	74.29214379	Conference Room
GREEN TOWN	Skinup	31.44019462	74.30999078	Office
FAISAL TOWN	Red Signal	31.4773388	74.30090995	Coworking Space
FAISAL TOWN	Strong Force Office	31.477234	74.29643	Office
FAISAL TOWN	RED SIGNAL&,ç	31.47729429	74.30085838	Tech Startup
FAISAL TOWN	Skills International (Pvt) Ltd.	31.48152638	74.30002213	Office
FAISAL TOWN	aj multimedia studio	31.4762979	74.30679965	Office
FAISAL TOWN	Phaedra HQ	31.47817993	74.29769897	Tech Startup
FAISAL TOWN	anxsolutions	31.47725956	74.29866975	Tech Startup
FAISAL TOWN	Medcon International	31.47550392	74.30628204	Office
FAISAL TOWN	Satistrum	31.46748977	74.29414272	Tech Startup
FAISAL TOWN	Inno8.net	31.47918474	74.30019377	Office
FAISAL TOWN	Jamiat Ulema Pakistan (Noorani)	31.47616453	74.30563331	Campaign Office
FAISAL TOWN	Mobilezapp Lahore, Inc	31.47159914	74.29458461	Office
FAISAL TOWN	PTCL Complex	31.47758345	74.28876326	Office
FAISAL TOWN	TrangoLabs	31.48311645	74.28852261	Tech Startup
FAISAL TOWN	Tabs Group International; Faisal Town, Lahore	31.48173429	74.30366576	Tech Startup
FAISAL TOWN	Inno8 Tech	31.47813101	74.30103599	Tech Startup
FAISAL TOWN	Anwar Ali Associates	31.48328521	74.30263448	Office
FAISAL TOWN	Reckitt Benckiser Regional Office	31.48073184	74.30455958	Office
FAISAL TOWN	connectel	31.48172951	74.29760742	Tech Startup
FAISAL TOWN	Dragonfly	31.48116371	74.30371159	Office

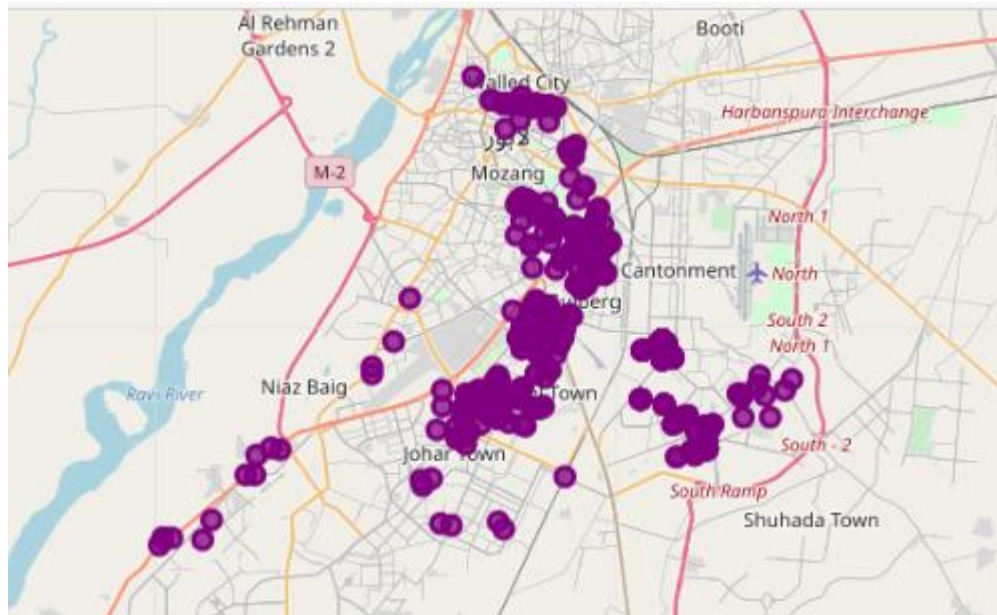
FAISAL TOWN	925 - Reinventing Recruitment	31.47192305	74.30294959	Office
FAISAL TOWN	Synergy	31.475368	74.306096	Office
FAISAL TOWN	TechEsthete	31.4654808	74.29792786	Tech Startup
FAISAL TOWN	Executive Centre	31.48124281	74.30364857	Conference Room
FAISAL TOWN	Pentaloop	31.468107	74.296991	Tech Startup
FAISAL TOWN	Leo Communications Pvt. Ltd	31.47653717	74.30875329	Office
FAISAL TOWN	ZCom Systems Group Inc.	31.47038184	74.28677503	Office
FAISAL TOWN	Page1 Office	31.46768	74.29433	Office
FAISAL TOWN	FINCA Microfinance Bank Head Office	31.469863	74.299235	Office
FAISAL TOWN	AAA Consultants	31.48338821	74.30258865	Office
FAISAL TOWN	Brandaive	31.47685835	74.30675955	Advertising Agency
FAISAL TOWN	VIVA INTERNATIONAL (PVT) LTD	31.48054884	74.29974115	Campaign Office
FAISAL TOWN	National Bank Of Pakistan	31.47434311	74.29635504	Office
GULBERG III	Pak Qatar Family Takaful	31.50169182	74.32384491	Office
GULBERG III	Dynamic Markeeting Concept	31.501556	74.326635	Office
GULBERG III	Innovation District 92	31.50014	74.335106	Tech Startup
GULBERG III	Sport.cc	31.49671962	74.31923729	Office
GULBERG III	GE	31.51063721	74.32963476	Office
GULBERG III	Adcom Pvt. Ltd Lahore Office	31.50233571	74.3268106	Office
GULBERG III	Brandact Communication	31.50240235	74.32659865	Office
GULBERG III	MRB Research	31.49942803	74.32024556	Office
GULBERG III	Business Research and support Channel	31.5019529	74.3304837	Office
GULBERG III	CCJK Technologies.	31.496613	74.31917	Tech Startup
GULBERG III	Nishat Head Office	31.4950275	74.32518369	Office
GULBERG III	DLI Office	31.500984	74.3221	Office
GULBERG III	Lumensoft Technologies (Pvt) Ltd	31.510688	74.323389	Office
GULBERG III	muSharp	31.49815895	74.32960153	Tech Startup
GULBERG III	MSC Head Office New Garden Town, Lahore	31.50278211	74.32711422	Conference Room
GULBERG III	Confiz Limited	31.50776686	74.33747219	Tech Startup
GULBERG III	Geniteam	31.49787309	74.33324939	Tech Startup
GULBERG III	Spider Net Cafe	31.50076279	74.32174649	Tech Startup
GULBERG III	pikessoft	31.500189	74.317543	Tech Startup
GULBERG III	FourSpan Technologies	31.50220229	74.32628632	Office
GULBERG III	Creative Consultants	31.50372993	74.31878686	Office
GULBERG III	Planet.pk	31.50582504	74.32131958	Office
GULBERG III	Mobilink BCD Office	31.49939904	74.32483997	Office
GULBERG III	Devbox	31.49938924	74.31817746	Tech Startup
GULBERG III	Apricot Studio	31.502277	74.326603	Tech Startup
GULBERG III	CambridgeDocs	31.51217266	74.32474136	Tech Startup
GULBERG III	Oyster Industries	31.50284152	74.33557508	Office
GULBERG III	Pyrochem	31.49512445	74.33200633	Office
GULBERG III	Wasif Ali Associates Archietechs	31.50696239	74.33811842	Office

GULBERG III	LINKdotNET	31.49938924	74.31817746	Tech Startup
GULBERG III	Sufi Group (Head Office)	31.5091318	74.3296793	Office
GULBERG III	Aeris Logistics	31.50580406	74.32817841	Coworking Space
GULBERG III	Express Tv	31.509414	74.328934	Office
GULBERG III	MANADUS HQ	31.50002246	74.32265162	Office
GULBERG III	Inbox Business Technologies	31.50916072	74.31533594	Office
GULBERG III	Zerosch	31.49993365	74.31744576	Tech Startup
GULBERG III	Quality Management standards.9000	31.50795589	74.33693268	Office
GULBERG III	Kashf Foundation	31.49932671	74.31816864	Office
GULBERG III	Express News	31.507158	74.331978	Office
GULBERG III	Nazeer & Co.	31.51143695	74.32555605	Office
GULBERG III	Leonx Lhr Base	31.50087725	74.32179232	Office
GULBERG III	Opus	31.50845905	74.32245612	Advertising Agency
GULBERG II	Srdw	31.527678	74.33876	Office
GULBERG II	Mobilink House	31.52261496	74.34965371	Office
GULBERG II	Daftarkhwan	31.520466	74.343962	Coworking Space
GULBERG II	Vision Plus	31.526336	74.347195	Office
GULBERG II	Amadeus.	31.51709978	74.34346275	Tech Startup
GULBERG II	Bank Al Habib Main Market Gulberg	31.524791	74.344594	Office
GULBERG II	Careaxiom	31.521935	74.34934	Office
GULBERG II	IGI Insurance	31.5283432	74.33836365	Office
GULBERG II	Pakistan Post	31.52832603	74.34720612	Post Office
GULBERG II	Group M	31.52271515	74.34863508	Campaign Office
GULBERG II	Ufone Head Office	31.52894829	74.34986084	Office
GULBERG II	Vowel	31.532348	74.344285	Advertising Agency
GULBERG II	WemoTech	31.53352332	74.34020347	Tech Startup
GULBERG II	Coca Cola Beverages Pakistan Ltd.	31.52112009	74.35136725	Office
GULBERG II	HimaVerte	31.520602	74.348731	Office
GULBERG II	New ERA Furnishers	31.522776	74.34586	Office
GULBERG II	Avais Chambers	31.532527	74.340118	Office
GULBERG II	Wateen Telecom	31.52542844	74.34771862	Office
GULBERG II	Dawn News	31.52045543	74.35073354	Office
GULBERG II	Vehicle Tracking Pvt. Ltd.	31.53511238	74.34482574	Office
GULBERG II	Starcom Pakistan	31.535524	74.34278	Advertising Agency
GULBERG II	WPP Pakistan	31.52322197	74.34749603	Advertising Agency
GULBERG II	Designers East	31.517954	74.34052	Office
GULBERG II	The Citizens Foundation - Regional Office	31.526596	74.34445	Office
GULBERG II	Warid Telecom HQ	31.53412301	74.34567841	Office

GULBERG II	Appify	31.5229579	74.34896157	Tech Startup
GULBERG II	TÃ¼V - Austria	31.53073854	74.34442505	Conference Room
GULBERG II	Systems Limited	31.53332604	74.33985978	Office
GULBERG II	Brightex Pvt Ltd	31.524453	74.346683	Office
GULBERG II	Technopsis - A Shapes Group Company	31.51772342	74.33936716	Tech Startup
GULBERG II	Nuqta Designs	31.53512573	74.346138	Office
GULBERG II	Lotus PR HQ	31.52505795	74.34738067	Office
GULBERG II	Startex Marketing Services	31.51860175	74.3443005	Coworking Space
GULBERG II	ActiveKey Solutions	31.523293	74.348192	Tech Startup
GULBERG II	Contour Software Pvt Ltd	31.52155488	74.34710001	Office
GULBERG II	Ovex Technologies	31.52291021	74.34892416	Office
GULBERG II	Architectural Innovations 3 C Gulberg III	31.52264519	74.34082247	Office
GULBERG II	KM Communications	31.52443096	74.34660741	Campaign Office
GULBERG II	Aptma Ave	31.53467249	74.34080492	Office
GULBERG II	M&P Office	31.515707	74.341665	Office
GULBERG II	Wemo	31.53371042	74.34036959	Office
GULBERG II	Road Prince Head Office	31.5255146	74.33421326	Office
GULBERG II	Naseeb Networks-STC	31.53052619	74.35216914	Office
GULBERG II	AHLN CA's	31.532543	74.340131	Coworking Space
GULBERG II	Hira Textile Head Office	31.52262115	74.33234406	Conference Room
GULBERG II	City 42	31.53649478	74.33926978	Building
GULBERG II	Naseeb Networks	31.52965726	74.34592789	Office
GULBERG I	Vowel	31.532348	74.344285	Advertising Agency
GULBERG I	Mobilink House	31.52261496	74.34965371	Office
GULBERG I	RED Communications Arts (Pvt) Ltd.	31.53889461	74.34755801	Advertising Agency
GULBERG I	TÃ¼V - Austria	31.53073854	74.34442505	Conference Room
GULBERG I	WPP Pakistan	31.52322197	74.34749603	Advertising Agency
GULBERG I	Vision Plus	31.526336	74.347195	Office
GULBERG I	Bank Al Habib Main Market Gulberg	31.524791	74.344594	Office
GULBERG I	Pakistan Post	31.52832603	74.34720612	Post Office
GULBERG I	BinaryTech	31.53160214	74.35213477	Office
GULBERG I	KM Communications	31.52443096	74.34660741	Campaign Office
GULBERG I	ActiveKey Solutions	31.523293	74.348192	Tech Startup
GULBERG I	Ovex Technologies	31.52291021	74.34892416	Office
GULBERG I	Dreamzsol Technologies	31.53489931	74.3471539	Office
GULBERG I	Mwm Tech Office	31.53114431	74.35287341	Tech Startup

GULBERG I	Brightex Pvt Ltd	31.524453	74.346683	Office
GULBERG I	Road Prince Head Office	31.5255146	74.33421326	Office
GULBERG I	Bumpin	31.53172684	74.35263062	Tech Startup
GULBERG I	Wemo	31.53371042	74.34036959	Office
GULBERG I	UrFilez	31.53091385	74.35267432	Coworking Space
GULBERG I	MetaApp (Pvt) Ltd	31.53313427	74.34774209	Office
GULBERG I	Aptma Ave	31.53467249	74.34080492	Office
GULBERG I	Nuqta Designs	31.53512573	74.346138	Office
GULBERG I	AHLN CA's	31.532543	74.340131	Coworking Space
GULBERG I	Lotus PR HQ	31.52505795	74.34738067	Office
GULBERG I	Naseeb Networks-STC	31.53052619	74.35216914	Office
GULBERG I	Group M	31.52271515	74.34863508	Campaign Office
GULBERG I	IGI Insurance	31.5283432	74.33836365	Office
GULBERG I	Ufone Head Office	31.52894829	74.34986084	Office
GULBERG I	Avais Chambers	31.532527	74.340118	Office
GULBERG I	Srdw	31.527678	74.33876	Office
GULBERG I	City 42	31.53649478	74.33926978	Building
GULBERG I	PTI Secretariat Lahore Region	31.53473276	74.34714583	Campaign Office
GULBERG I	Wateen Telecom	31.52542844	74.34771862	Office
GULBERG I	DWP Group	31.53670446	74.34971764	Tech Startup
GULBERG I	New ERA Furnishers	31.522776	74.34586	Office
GULBERG I	Vehicle Tracking Pvt. Ltd.	31.53511238	74.34482574	Office
GULBERG I	A.F Ferguson & Co	31.53892088	74.34750096	Office
GULBERG I	Creative Chaos (Pvt.) Limited Lahore Office	31.53119118	74.35257581	Office
GULBERG I	MCB House	31.53263917	74.35017463	Bank
GULBERG I	Naseeb Networks	31.52965726	74.34592789	Office
GULBERG I	Siddiq Trade Centre	31.531454	74.35211103	Office
GULBERG I	Starcom Pakistan	31.535524	74.34278	Advertising Agency
GULBERG I	Systems Limited	31.53332604	74.33985978	Office
GULBERG I	Warid Telecom HQ	31.53412301	74.34567841	Office
GULBERG I	Appify	31.5229579	74.34896157	Tech Startup
GULBERG I	The Citizens Foundation - Regional Office	31.526596	74.34445	Office

4.3.8. Map of office Venues in Lahore



5. Results

5.1. Neighborhood / Towns / UC's Data

Neighborhood	Postal Code	Latitude	Longitude	Frozen Yogurt Shop	Schools	Colleges & Universities	Offices
BATA PUR	53400	33.2382	72.8347	0	0	0	0
C.M.A. CANTT. LAHORE	54800	31.5761	74.4247	0	1	0	0
FEROZPUR ROAD LAHORE	54600	31.4888	74.3686	2	1	7	14
HARBANS PURA	54850	31.5761	74.4247	0	1	0	0
KAHNA NAU	53100	31.3692	74.3653	0	0	0	1
LAHORE CANTT. G.P.O.	54810	31.5761	74.4247	0	1	0	0
LAHORE DEFENCE HOUSING SOICETY	54792	31.4811	74.3164	0	1	31	31
LAHORE ISMAIL NAGAR	54760	31.4517486	74.3430233	0	1	1	1
MODEL TOWN LAHORE	54700	31.4844	74.3244	0	0	7	17
TAJPURA	54870	31.5615446	74.3972739	0	1	1	0
TOWNSHIP	54770	31.4493794	74.2907083	0	3	31	4
WAGHA	53600	31.60083	74.5580521	0	0	0	0
AITCHESON COLLEGE	54030	31.5517281	74.3440528	0	2	9	17
ALFLAH	54020	31.4808093	74.4122625	0	0	8	11
AWAN COLONEY	54780	31.5079323	74.2588417	0	0	0	0
BAGHBANPURA	54920	31.2242	74.0997	0	0	0	0
BAHRIA TOWN	53720	31.3650703	74.1459763	0	0	0	0
BALLOKI	55210	31.1889764	73.874344	0	0	0	0
BARKI	53200	31.0478	74.085	0	0	0	0
CHAH MIRAN	54900	31.4649	74.3846	0	4	10	28
CHUHANG	53800	31.4331	74.1742	0	0	1	2
JALLO	53500	31.5745747	74.4900809	0	0	0	0
KOHINOOR ENERGY	55160	31.2631995	74.1852931	0	0	0	1
LAHORE ALLAMA IQBAL TOWN	54570	31.5112923	74.26666	0	0	3	1
LAHORE E.M.E Society P.O	53710	31.4389455	74.191477	0	0	0	4
LAHORE ENGINEERING UNIVERSITY	54890	31.5761	74.4247	0	1	0	0
LAHORE G.P.O	54000	31.4888	74.3686	2	1	7	14
LAHORE MULTAN ROAD	54500	31.4888	74.3686	2	1	7	14
LAHORE NEW UNIVERSITY CAMPUS	54590	31.4888	74.3686	2	1	7	14
LAHORE PMG PUNJAB POST OFFICE	54560	31.4888	74.3686	2	1	7	14
LAHORE PT & T AUDIT	54550	31.4888	74.3686	2	1	7	14

LAHORE PUNJAB GOVERNOR HOUSE	54880	31.5761	74.4247	0	1	0	0
LAHORE SECONDARY BOARD	54650	31.4888	74.3686	2	1	7	14
LAHORE SHADMAN WOMEN MODEL P.O	54610	31.535632	74.3207177	0	4	8	32
MANGA MANDI	55270	31.3044	74.0636	0	0	0	0
MANSOORA	54790	31.4927516	74.2641798	0	1	1	3
MOGHALPURA	54840	31.5761	74.4247	0	1	0	0
NAULAKHA	54010	31.5796179	74.3250442	0	0	1	14
IAZ BEG THOKAR	53700	31.4425	73.883	0	0	0	0
RAIWIND	55150	31.2544	74.2178	0	0	0	0
SHAH ALAM MARKET	54100	31.5774233	74.3155941	1	0	20	9
SHAHDARA BAGH	54950	31.4649	74.3846	0	4	10	28
SHAHI MOHALLAH	54110	31.5860117	74.307484	1	0	4	4
TIMBER MARKET	54120	31.5990413	74.2990593	0	1	0	0
JOHAR TOWN	54782	31.4605666	74.2213174	0	0	0	5
WAPDA TOWN	54770	31.431934	74.2442385	0	3	0	0
GREEN TOWN	53101	31.4339849	74.3024844	0	3	1	3
FAISAL TOWN	54770	31.4764071	74.2968725	0	3	35	33
KAMAHAN	53101	31.4340819	74.3832937	0	0	0	0
GULBERG III	54660	31.5049516	74.3257485	0	2	20	42
GULBERG II	54660	31.5264042	74.3397981	0	6	13	47
GULBERG I	54660	31.5309687	74.3421832	0	5	10	46

5.2. Weighted Score of Neighborhood / Towns / UC's Data

Neighborhood	Score
FAISAL TOWN	121.5
GULBERG II	119.5
GULBERG III	116
GULBERG I	112
LAHORE DEFENCE HOUSING SOCIETY	109.5
LAHORE SHADMAN WOMEN MODEL P.O	80
SHAHDARA BAGH	75
CHAH MIRAN	75
TOWNSHIP	57.5
AITCHESON COLLEGE	49.5
SHAH ALAM MARKET	47
MODEL TOWN LAHORE	44.5
LAHORE SECONDARY BOARD	37.5
LAHORE PT & T AUDIT	37.5
LAHORE PMG PUNJAB POST OFFICE	37.5

LAHORE NEW UNIVERSITY CAMPUS	37.5
LAHORE MULTAN ROAD	37.5
LAHORE G.P.O	37.5
FEROZEPUR ROAD LAHORE	37.5
ALFLAH	34
NAULAKHA	29.5
SHAHI MOHALLAH	13
GREEN TOWN	10.5
JOHAR TOWN	10
MANSOORA	8.5
LAHORE E.M.E Society P.O	8
LAHORE ALLAMA IQBAL TOWN	6.5
CHUHANG	5.5
LAHORE ISMAIL NAGAR	4.5
WAPDA TOWN	3
TAJPURA	2.5
KOHINOOR ENERGY	2
KAHNA NAU	2
LAHORE CANTT. G.P.O.	1
LAHORE PUNJAB GOVERNOR HOUSE	1
HARBANS PURA	1
C.M.A. CANTT. LAHORE	1
MOGHALPURA	1
LAHORE ENGINEERING UNIVERSITY	1
TIMBER MARKET	1
KAMAHAN	0
BARKI	0
RAIWIND	0
NIAZ BEG THOKAR	0
BALLOKI	0
MANGA MANDI	0
WAGHA	0
AWAN COLONEY	0
BAGHBANPURA	0
BAHRIA TOWN	0
JALLO	0
BATA PUR	0

- The 5 localities with the best score are “Faisal Town”, “Gulberg II”, “Gulberg III”, “Gulberg I”, and “Lahore Defense Housing Authority”.

These options maximizes the number of potential customers from offices, schools, and universities and at the same time have not too large competence.

5.3. Map of Faisal Town Lahore



6. Recommendations

This analysis can be improved with following extensions:

- Consider more venue categories. For example like “Restaurants” which is also good source for customers. But also like “Ice Cream”, which even if not Frozen Yogurt may be some concurrency if too many.
- In the locality itself, it can also be computer the distance between all the venues in order to find a place with the most number of potential customers.
- Using smaller geographical areas like Neighborhoods could improve the accuracy for the scores.