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Exploring Karachi Neighborhoods Report

1. Introduction

1.1 Background

Karachi is the largest and most populous metropolitan city in Pakistan. Karachi had an estimated population of more than 16 million people, which makes it the 7th largest urban agglomeration and the largest city in the Muslim world.

Karachi is the city of lights that never sleeps and it has always been a great attraction to the tourists for the variety of activities and tourist spots that it has to offer. Karachi is as renowned for its beaches and dining as it is for its architecture and atmosphere.

1.2 Problem Statement

Whenever a person is visiting a city they start looking for best places to visit during their stay. They primarily look for places based on the venue ratings across all venues and the average prices such that the locations fit in their budget.

Thus, our aim here is to identify places that someone can visit during their stay. Here, we'll explore the neighborhoods of different borough to find the 10 most common venues in each neighborhood and identify places that are fit for various individuals based on the data collected.

1.3 Interest

Expats who are considering visiting Karachi will be interested to explore its neighborhoods and common venues around each neighborhood.

2. Data Preparation

2.1 Using Foursquare Location Data

I have used the Foursquare API to retrieve information about the popular spots around the Neighborhood of Karachi. The popular spots returned depend on the highest rating and less price. Here I've chosen 10 popular spots for each district within a radius of 1 km.

2.2 Getting Coordinates of Major Districts : Geopy Client

Next objective is to get the coordinates of these districts using geocoder class of Geopy client.

2.3 Scraping Karachi District and Town from Wikipedia

We can get the data of different district and town through scraping different Wikipedia pages and create a dataframe using this information. For this, I've used requests and Beautifulsoup4 library to create a data-frame.