SUMMER BOOTCAMP PROJECT 2024
AIML
FOOD HUBS

YUKTI ARORA

INDEX

LIST OF TABLES:

- **FIRST FIVE ROWS OF DATASET**

- **LAST FIVE ROWS OF DATASET**

- **STATISTICAL SUMMARY OF DATASET**

- **STATISTICAL SUMMERY PER COLUMN**

- **DIFFERENT VALUE REPRESETATION**

- **AVERAGE RATING PER CUISINE**

LIST OF FIGURES

PROBLEM STATEMENT

The food aggregator company has stored the data of the different orders made by the registered customers in their online portal. They want to analyze the data to get a fair idea about the demand of different restaurants which will help them in enhancing their customer experience. Suppose you are hired as a Data Scientist in this company and the Data Science team has shared some of the key questions that need to be answered. Perform the data analysis to find answers to these questions that will help the company to improve the business.

DATA DESCRIPTION:

The data contains the different data related to a food order. The detailed data dictionary is given below.

Data Dictionary

- **order_id: Unique ID of the order**

- **customer_id: ID of the customer who ordered the food**

- **restaurant_name: Name of the restaurant**

- **cuisine_type: Cuisine ordered by the customer**

- **cost: Cost of the order**

- **day_of_the_week: Indicates whether the order is placed on a weekday or weekend (The weekday is from Monday to Friday and the weekend is Saturday and Sunday)**

- **rating: Rating given by the customer out of 5**

- **food_preparation_time: Time (in minutes) taken by the restaurant to prepare the food. This is calculated by taking the difference between the timestamps of the restaurant's order confirmation and the delivery person's pick-up confirmation.**

- **delivery_time: Time (in minutes) taken by the delivery person to deliver the food package. This is calculated by taking the difference between the timestamps of the delivery person's pick-up confirmation and drop-off information**

ANALYSIS:

- ORDER ANALYSIS

- CUSTOMER BEHAVIOUR

- RESTAURANT PERFORMANCE

- DEMAND PATTERNS

- OPERATIONAL EFFIECIENCY

- CUSTOMER INSIGHTS

Dataset info:

```
[15] df.info()

    <class 'pandas.core.frame.DataFrame'>
    RangeIndex: 1898 entries, 0 to 1897
    Data columns (total 9 columns):
     #   Column                 Non-Null Count   Dtype
    ---  ------                 --------------   -----
     0   order_id               1898 non-null    int64
     1   customer_id            1898 non-null    int64
     2   restaurant_name        1898 non-null    object
     3   cuisine_type           1895 non-null    object
     4   cost_of_the_order      1898 non-null    float64
     5   day_of_the_week        1898 non-null    object
     6   rating                 1898 non-null    object
     7   food_preparation_time  1896 non-null    float64
     8   delivery_time          1898 non-null    object
    dtypes: float64(2), int64(2), object(5)
    memory usage: 133.6+ KB
```
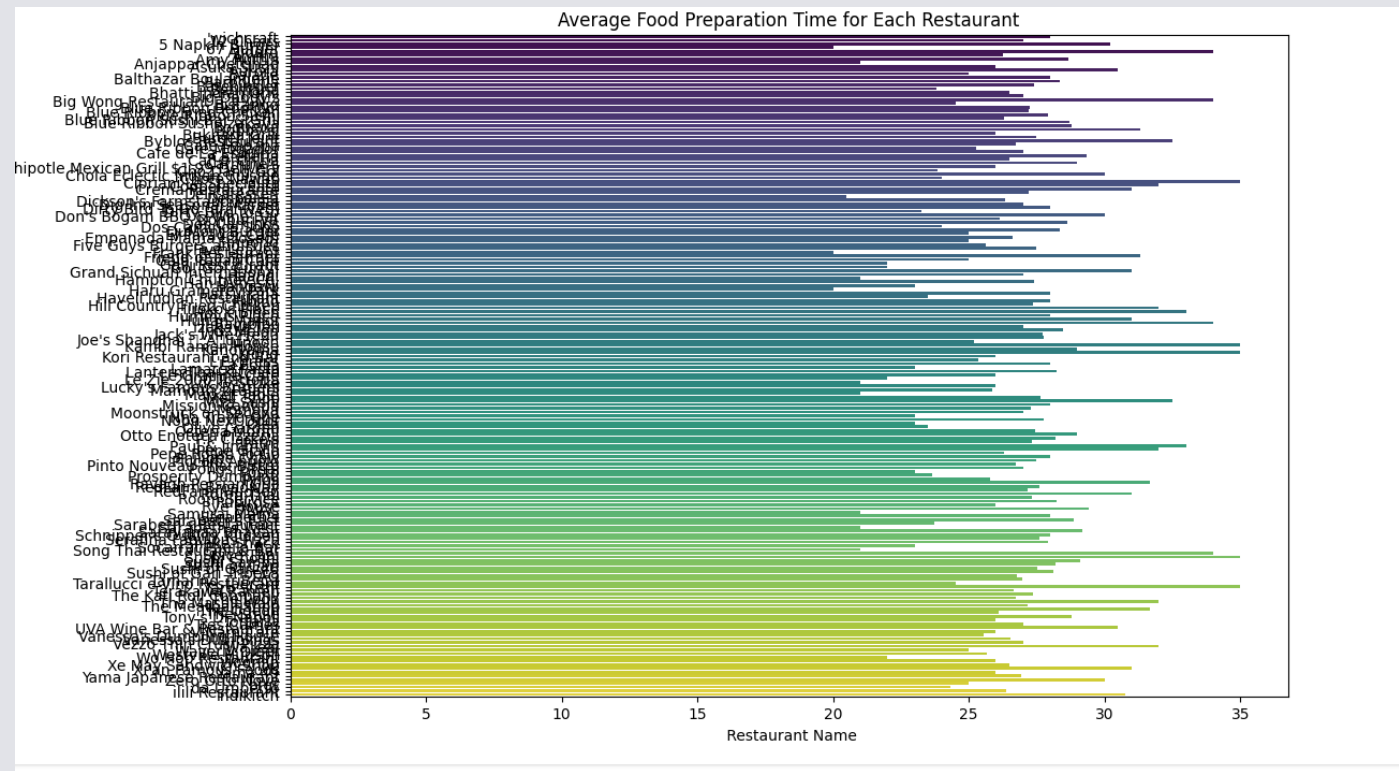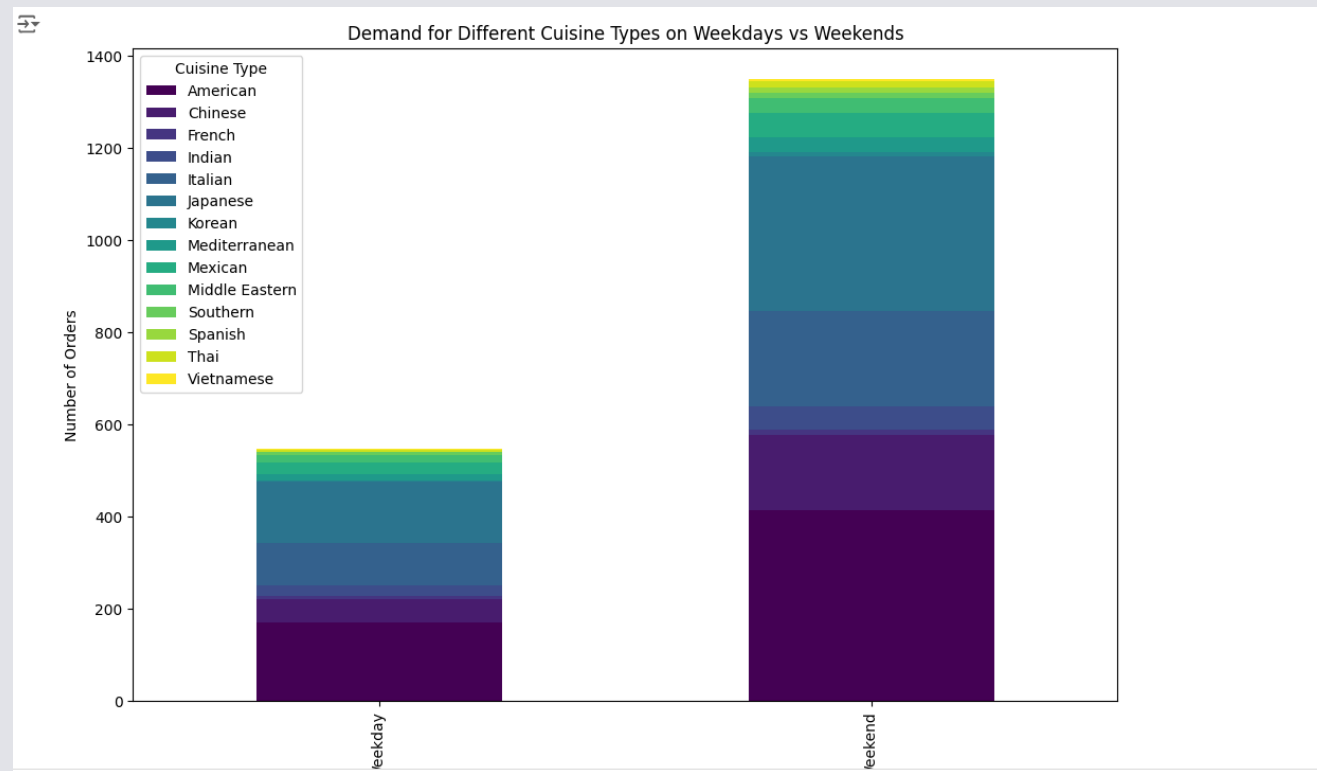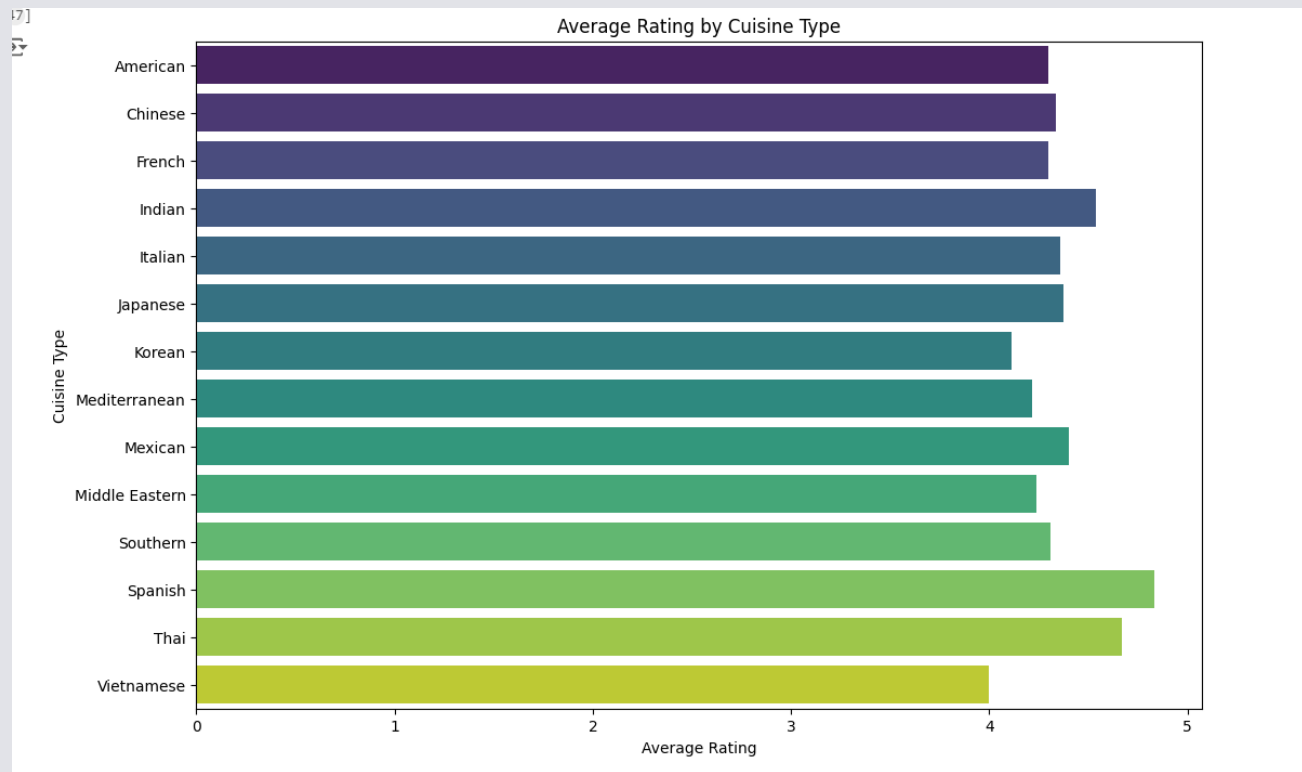
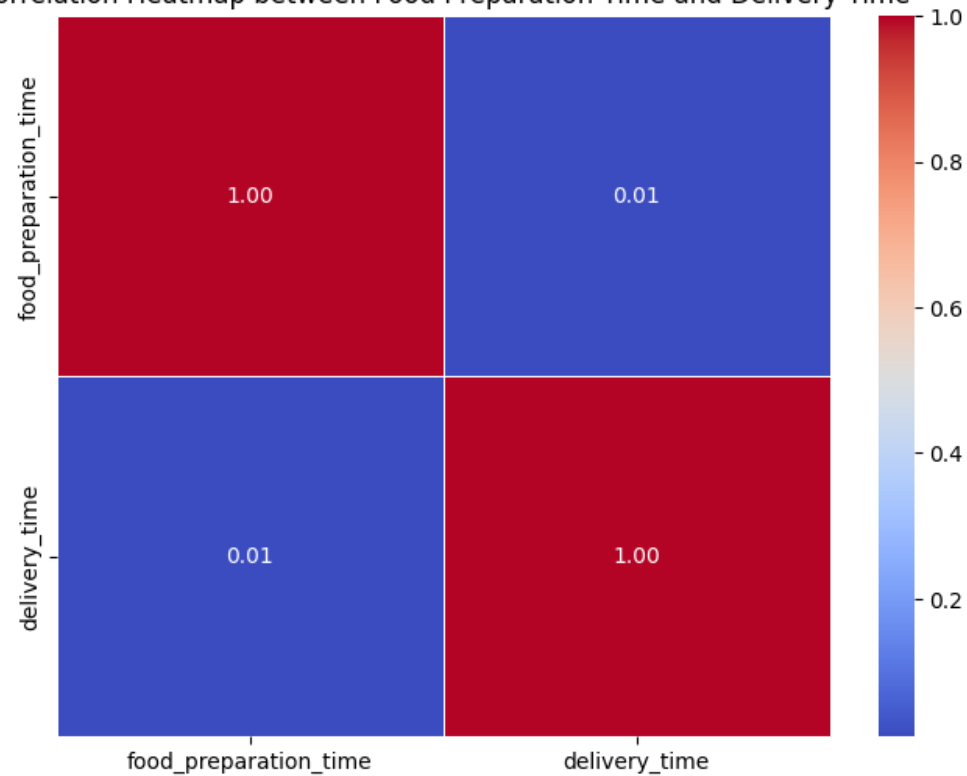# Order analysis:

Customer ratings:

Restaurant analysis:

Average Food Preparation Time for Each Restaurant

Demand patterns:

Demand for Different Cuisine Types on Weekdays vs Weekends

Operational efficiency:

Correlation heatmaps:

THANKYOU