

**BU EDGE CSE**

**Topic Name: Store Analysis in USA**

**Submitted to:**

**MD Erfan**

**Assistant Professor & Chairman**

**Cell: 01799598455**

**E-mail:** [**Irfan.bucse@gmail.com**](mailto:Irfan.bucse@gmail.com)

**Submitted by:**

**Aparna Nag**

**BU EDGE CSE Batch- 45**

**Phone Number: 01706166128**

**Department of Physics**

**University of Barishal**

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* **comparison with revenue**
* **The maximum and minimum data**A

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* **benefit with this database**
* **we can see how can we save our time**

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**Report on Store Analysis in USA**

**Abtract:**

Database structure and organize data in a way that makes retrieval and updates easy and logical.

 Relationships between different types of data can be defined (e.g., customer orders linked to customer details).

**Introduction:**

The dataset provides key details about various stores, including their names, operational types, and founding years. This information helps understand the variety of business models and historical timelines of establishments. Here's a brief explanation of these attributes:

1. **Store Name:**  
   Represents the unique name of each store. This is critical for identifying individual stores, distinguishing them from others, and analyzing store-specific data (e.g., performance, location-based trends).
2. **Type:**  
   Refers to the category or format of the store (e.g., supermarket, convenience store, department store). This classification aids in understanding the store's target audience, business strategies, and operational scale.
3. **Founding Year:**  
   Indicates the year a store was established. This provides historical insights into the store's longevity and helps analyze trends such as growth, market presence, and evolution in business practices over time.

**Importance:**

Analyzing these attributes can help answer questions like:

* Which store types dominate the market?
* What is the correlation between founding year and current revenue trends?
* How do older stores compare to newly established ones in terms of performance?

Would you like me to explore these attributes in your dataset? If so, I’ll try to extract the relevant data and provide a summary.

**Comparison with revenue**

To perform a **comparison with revenue**, the dataset should include the following attributes:

1. **Store Name** – To identify individual stores.
2. **Type** – To group stores by their category (e.g., supermarket, convenience store).
3. **Founding Year** – To analyze historical trends.
4. **Revenue** – To compare financial performance.

**Steps for Analysis:**

1. **Revenue by Store Name:**
   * Identify the highest and lowest revenue-generating stores.
   * Compare individual store performances.
2. **Revenue by Type:**
   * Analyze which store type generates the highest average revenue.
   * Spot trends across different business models.
3. **Revenue vs. Founding Year:**
   * Compare revenue trends across founding years.
   * Determine whether older stores have higher revenues compared to newer ones.
4. **Visualizations:**
   * Create bar charts, line graphs, or scatterplots to visualize comparisons.
   * Use heatmaps or grouped comparisons for deeper insights.

If your dataset contains these attributes, I can extract and analyze the information. Let me know if you'd like me to proceed!

**Benefit with database**

Databases offer a variety of benefits, making them essential for managing and analyzing data efficiently. Here are some key advantages:

**1. Data Organization**

* Databases structure and organize data in a way that makes retrieval and updates easy and logical.
* Relationships between different types of data can be defined (e.g., customer orders linked to customer details).

**2. Data Integrity and Consistency**

* Rules can be enforced to ensure data accuracy (e.g., no duplicate entries or invalid data types).
* Centralized data minimizes discrepancies caused by duplicate or conflicting entries.

**3. Scalability**

* Databases handle increasing amounts of data and users efficiently.
* Systems like relational databases (SQL) or NoSQL databases (e.g., MongoDB) are optimized for both small and large-scale operations.

**4. Data Security**

* Databases allow role-based access control to restrict who can view or edit data.
* Encryption and authentication mechanisms ensure sensitive data remains secure.

**5. Efficient Querying**

* Query languages like SQL make retrieving specific subsets of data quick and easy.
* Complex operations like filtering, aggregations, and joins can be performed in seconds.

**6. Data Sharing and Collaboration**

* Multiple users can access the same database simultaneously without affecting performance.
* Centralized access ensures that teams work with the most up-to-date data.

**7. Backup and Recovery**

* Databases often include features for automated backups and disaster recovery to prevent data

Discussion

1. **Revenue Performance**
   * Identify which stores are performing well versus underperforming based on maximum and minimum revenue.
   * Discuss factors contributing to high revenue (e.g., location, store type, age of the store).
   * Are certain store types (e.g., supermarkets, convenience stores) consistently generating higher revenue?
2. **Impact of Founding Year**
   * Explore whether older stores have a competitive advantage in terms of brand loyalty, market position, or revenue stability.
   * Do newer stores show rapid growth, possibly due to innovative business models or better adaptation to trends?
3. **Comparison Across Types**
   * Compare the revenue patterns across store types. For example, supermarkets may have high total revenue but lower revenue per square foot compared to convenience stores.
   * Discuss the operational challenges and opportunities unique to each type of store.
4. **Outliers and Trends**
   * Identify outliers in the dataset, such as a store with extremely high or low revenue.
   * Discuss whether these outliers are anomalies or representative of underlying trends.
5. **Geographical and Market Context**
   * If location data is available, explore whether regional differences play a role in revenue distribution.
   * Consider market size, competition, and economic conditions.

Conclusion

* **Perform detailed visualizations** like bar charts for revenue comparison, trend lines for founding year vs. revenue, or heatmaps for type-wise performance.
* **Dive into correlation analysis** between revenue and other attributes like founding year and store type.