

Algorithm Utilization:

- Use algorithms for efficient data processing, such as sorting and searching algorithms for managing customer data and order history.
- Implement recommendation algorithms to suggest products to customers based on their browsing and purchase history.
- Utilize graph algorithms to analyze and visualize customer networks and connections.

Dynamic Programming:

- Apply dynamic programming for optimizing resource allocation, such as inventory management and order fulfillment.
- Implement dynamic programming to calculate optimal pricing strategies based on market conditions and customer behavior.
- Use dynamic programming to manage and optimize advertising campaigns and budget allocation.

Optimal Memory Utilization:

- Optimize memory usage by efficiently storing and retrieving customer data, ensuring that only essential data is loaded into memory when needed.
- Implement caching mechanisms to reduce database queries and improve response times.
- Utilize memory-efficient data structures and algorithms to handle large datasets without causing memory bottlenecks.