

Assignment Database SQL MongoDB (Module 2)

Answers to Theoretical Questions

1. What are the Key Differences Between SQL and NoSQL Databases

Feature	SQL (Relational)	NoSQL (Non-relational)
Data Model	Tables with rows and columns	Documents, key-value pairs, graphs, etc.
Schema	Fixed schema	Dynamic or flexible schema
Scalability	Vertical scaling	Horizontal scaling
Transactions	Strong ACID compliance	Eventual consistency, some support ACID
Query Language	Structured Query Language (SQL)	Varies (e.g., MongoDB uses BSON queries)
Relationships	Supports joins	Embedded documents or manual references

SQL is ideal for structured data and complex queries, while NoSQL is better for scalability and flexibility.

2. Why MongoDB Is Good for Modern Applications

- **Document-Oriented:** Stores data in flexible, JSON-like documents.
 - **Schema-less:** Allows rapid development and iteration.
 - **Scalable:** Supports horizontal scaling via sharding.
 - **Real-Time Analytics:** Powerful aggregation framework.
 - **Cloud-Ready:** MongoDB Atlas offers managed cloud services.
 - **Developer-Friendly:** Native drivers for many languages including Python, Node.js, Java.
-

3. Explain the Concept of Collections in MongoDB

- A **collection** is analogous to a table in SQL.
 - It stores multiple **documents** (records), each in BSON format.
 - Documents within a collection can have different fields and structures.
 - Example: A `users` collection may contain documents with varying fields like `name`, `email`, `address`.
-

4. How does MongoDB ensure High Availability Using Replication

- MongoDB uses **replica sets** for redundancy and fault tolerance.
 - A replica set includes:
 - **Primary node**: Handles all write operations.
 - **Secondary nodes**: Replicate data from the primary.
 - If the primary fails, an automatic **failover** elects a new primary.
 - Ensures data availability and disaster recovery.
-

5. What are the main Benefits of MongoDB Atlas

- **Managed Service**: No need to handle infrastructure.
 - **Global Clusters**: Deploy databases close to users.
 - **Security**: Built-in encryption, access control, and compliance.
 - **Monitoring**: Real-time performance metrics and alerts.
 - **Scalability**: Auto-scaling based on workload.
 - **Backups**: Automated and on-demand backups.
-

6. what is the Role of Indexes in MongoDB

- Indexes improve query performance by reducing scan time.
 - Types of indexes:
 - **Single Field**: Index on one field.
 - **Compound**: Index on multiple fields.
 - **Text**: For full-text search.
 - **Geospatial**: For location-based queries.
 - **Hashed**: For sharding.
 - Without indexes, MongoDB performs a **collection scan**, which is slow for large datasets.
-

7. Describe the Stages of the MongoDB Aggregation Pipeline

- MongoDB processes data through a series of stages:
 - **\$match** : Filters documents.
 - **\$group** : Aggregates data (e.g., sum, count).
 - **\$project** : Reshapes documents.
 - **\$sort** : Orders documents.
 - **\$limit** / **\$skip** : Pagination.
 - **\$lookup** : Joins with other collections.
 - **\$unwind** : Deconstructs arrays.
 - Enables complex data transformations and analytics.
-

8. What is the Sharding vs Replication

Feature	Sharding	Replication
Purpose	Scalability	High availability
Mechanism	Splits data across shards	Copies data across nodes
Write Target	Multiple shards	Primary node only
Read Target	Shards or routers	Primary and secondaries

Sharding distributes data; replication duplicates it.

9. What is PyMongo and Why Is It Used

- **PyMongo** is the official MongoDB driver for Python.
 - Allows Python applications to:
 - Connect to MongoDB
 - Perform CRUD operations
 - Run queries and aggregations
 - Manage indexes and collections
 - Essential for integrating MongoDB with Python-based data workflows.
-

10. What are the ACID Properties in MongoDB Transactions

- **Atomicity:** All operations in a transaction succeed or none do.
 - **Consistency:** Database remains in a valid state.
 - **Isolation:** Transactions don't interfere with each other.
 - **Durability:** Changes persist even after crashes.
 - MongoDB supports multi-document ACID transactions since version 4.0.
-

11. What is the Purpose of MongoDB `explain()` Function

- Analyzes how MongoDB executes a query.
 - Reveals:
 - Index usage
 - Number of documents scanned
 - Query plan stages
 - Helps optimize performance by identifying slow queries.
-

12. How does Schema Validation in MongoDB

- MongoDB allows defining validation rules using **JSON Schema**.
- Ensures documents meet specific criteria (e.g., field types, required fields).
- Example:

```
{
  "bsonType": "object",
```

```
"required": ["name", "email"],
"properties": {
  "email": {"bsonType": "string"}
}
```

13. What is the difference between Primary vs Secondary Node in Replica Set

- **Primary:**
 - Accepts writes and reads.
 - Syncs data to secondaries.
- **Secondary:**
 - Read-only (unless configured otherwise).
 - Used for read scaling and backups.
 - Can become primary during failover.

14. What Security Mechanisms does in MongoDB

- **Authentication:** SCRAM, LDAP, x.509 certificates.
- **Authorization:** Role-based access control.
- **Encryption:** TLS/SSL for data in transit, encryption at rest.
- **Auditing:** Tracks access and changes.
- **IP Whitelisting:** Restricts access to trusted sources.

15. Explain the concept of Embedded Documents

- Store related data within a single document.
- Example: A `user` document with an embedded `address` field.
- Use when:
 - Data is tightly coupled.
 - Accessed together frequently.
- Improves read performance and reduces need for joins.

16. What are the Purpose of `$lookup` Stage

- Performs **joins** between collections.
- Example: Join `orders` with `customers` using `customer_id`.
- Syntax:

```
{
  "$lookup": {
    "from": "customers",
    "localField": "customer_id",
    "foreignField": "_id",
    "as": "customer_info"
  }
}
```



17. What are some Common Use Cases for MongoDB

- Content management systems
 - Real-time analytics dashboards
 - Mobile and web applications
 - IoT data storage
 - Product catalogs and inventory systems
 - Social media platforms
-

18. What are the Advantages of Horizontal Scaling

- MongoDB uses **sharding** to distribute data across servers.
 - Benefits:
 - Handles large datasets
 - Supports high throughput
 - Reduces bottlenecks
 - Enables geo-distributed deployments
-

19. How do MongoDB vs SQL Transactions

Feature	SQL Transactions	MongoDB Transactions
Scope	Multi-table, multi-row	Multi-document (since v4.0)
ACID Compliance	Strong	Supported but newer
Performance	Mature and optimized	Slight overhead in distributed setup

MongoDB transactions are flexible but less mature than SQL.

20. What are the main differences between Capped vs Regular Collections

Feature	Capped Collection	Regular Collection
Size	Fixed	Dynamic
Document Order	Preserved	Not guaranteed
Overwrites	Oldest documents overwritten	No automatic overwrite
Use Case	Logging, real-time feeds	General-purpose storage

21. What are the Purpose of `$match` Stage

- Filters documents in the aggregation pipeline.
 - Equivalent to SQL `WHERE` clause.
 - Example:

```
{ "$match": { "Region": "West" } }
```
-

22. How can a Securing Access to MongoDB

- Enable **authentication** and **authorization**
 - Use **TLS/SSL** for encrypted connections
 - Configure **firewalls** and **IP whitelists**
 - Apply **role-based access control**
 - Regularly audit and monitor access
-

23. what is MongoDB's WiredTiger Storage Engine

- Default engine in MongoDB.
 - Features:
 - Document-level concurrency
 - Compression for efficient storage
 - Checkpointing for durability
 - Improves performance and memory usage compared to older engines.
-

MongoDB Practical Assignment

```
In [3]: #!pip install pymongo pandas
```

```
In [4]: import pandas as pd
from pymongo import MongoClient
```

```
In [5]: import pandas as pd
from pymongo import MongoClient

# Load CSV with correct encoding
df = pd.read_csv("superstore.csv", encoding="ISO-8859-1") # or encoding="latin1"

# Connect to MongoDB
client = MongoClient("mongodb://localhost:27017/")
```

```
In [6]: db = client["superstore_db"]
orders = db["orders"]

# Insert data
orders.insert_many(df.to_dict("records"))
print("Data inserted successfully.")
```

Data inserted successfully.

```
In [18]: # Retrieve ALL Documents
```

```
for doc in orders.find().limit(50):  
    print(doc)
```

```
{'_id': ObjectId('689386512f20a8473aecf4bd'), 'Row ID': 1, 'Order ID': 'CA-2016-152156', 'Order Date': '11/8/2016', 'Ship Date': '11/11/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'CG-12520', 'Customer Name': 'Claire Gute', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Henderson', 'State': 'Kentucky', 'Postal Code': 42420, 'Region': 'South', 'Product ID': 'FUR-BO-10001798', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Bush Somerset Collection Bookcase', 'Sales': 261.96, 'Quantity': 2, 'Discount': 0.0, 'Profit': 41.9136}

{'_id': ObjectId('689386512f20a8473aecf4be'), 'Row ID': 2, 'Order ID': 'CA-2016-152156', 'Order Date': '11/8/2016', 'Ship Date': '11/11/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'CG-12520', 'Customer Name': 'Claire Gute', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Henderson', 'State': 'Kentucky', 'Postal Code': 42420, 'Region': 'South', 'Product ID': 'FUR-CH-10000454', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Hon Deluxe Fabric Upholstered Stacking Chairs, Rounded Back', 'Sales': 731.94, 'Quantity': 3, 'Discount': 0.0, 'Profit': 219.582}

{'_id': ObjectId('689386512f20a8473aecf4c0'), 'Row ID': 4, 'Order ID': 'US-2015-108966', 'Order Date': '10/11/2015', 'Ship Date': '10/18/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'SO-20335', 'Customer Name': "Sean O'Donnell", 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Fort Lauderdale', 'State': 'Florida', 'Postal Code': 33311, 'Region': 'South', 'Product ID': 'FUR-TA-10000577', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford CR4500 Series Slim Rectangular Table', 'Sales': 957.5775, 'Quantity': 5, 'Discount': 0.45, 'Profit': -383.031}

{'_id': ObjectId('689386512f20a8473aecf4c4'), 'Row ID': 8, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002275', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Mitel 5320 IP Phone VoIP phone', 'Sales': 907.152, 'Quantity': 6, 'Discount': 0.2, 'Profit': 90.7152}

{'_id': ObjectId('689386512f20a8473aecf4c6'), 'Row ID': 10, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'OFF-AP-10002892', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': 'Belkin F5C206VTEL 6 Outlet Surge', 'Sales': 114.9, 'Quantity': 5, 'Discount': 0.0, 'Profit': 34.47}

{'_id': ObjectId('689386512f20a8473aecf4c7'), 'Row ID': 11, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'FUR-TA-10001539', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Chromcraft Rectangular Conference Tables', 'Sales': 1706.184, 'Quantity': 9, 'Discount': 0.2, 'Profit': 85.3092}

{'_id': ObjectId('689386512f20a8473aecf4c8'), 'Row ID': 12, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002033', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Konftel 250 Conference\phone\Charcoal black', 'Sales': 911.424, 'Quantity': 4, 'Discount': 0.2, 'Profit': 68.3568}

{'_id': ObjectId('689386512f20a8473aecf4ca'), 'Row ID': 14, 'Order ID': 'CA-2016-161389', 'Order Date': '12/5/2016', 'Ship Date': '12/10/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'IM-15070', 'Customer Name': 'Irene Maddox', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington'}
```



```

on', 'Postal Code': 98103, 'Region': 'West', 'Product ID': 'OFF-BI-10003656', 'Ca
tegory': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'Fellowes
PB200 Plastic Comb Binding Machine', 'Sales': 407.976, 'Quantity': 3, 'Discount':
0.2, 'Profit': 132.5922}
{'_id': ObjectId('689386512f20a8473aecf4cb'), 'Row ID': 15, 'Order ID': 'US-2015-
118983', 'Order Date': '11/22/2015', 'Ship Date': '11/26/2015', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'HP-14815', 'Customer Name': 'Harold Pawlan', 'Segme
nt': 'Home Office', 'Country': 'United States', 'City': 'Fort Worth', 'State': 'T
exas', 'Postal Code': 76106, 'Region': 'Central', 'Product ID': 'OFF-AP-1000231
1', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name':
'Holmes Replacement Filter for HEPA Air Cleaner, Very Large Room, HEPA Filter',
'Sales': 68.81, 'Quantity': 5, 'Discount': 0.8, 'Profit': -123.858}
{'_id': ObjectId('689386512f20a8473aecf4cd'), 'Row ID': 17, 'Order ID': 'CA-2014-
105893', 'Order Date': '11/11/2014', 'Ship Date': '11/18/2014', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'PK-19075', 'Customer Name': 'Pete Kriz', 'Segment':
'Consumer', 'Country': 'United States', 'City': 'Madison', 'State': 'Wisconsin',
'Postal Code': 53711, 'Region': 'Central', 'Product ID': 'OFF-ST-10004186', 'Cate
gory': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Stur-D-Stor
Shelving, Vertical 5-Shelf: 72"H x 36"W x 18 1/2"D', 'Sales': 665.88, 'Quantity':
6, 'Discount': 0.0, 'Profit': 13.3176}
{'_id': ObjectId('689386512f20a8473aecf4ce'), 'Row ID': 18, 'Order ID': 'CA-2014-
167164', 'Order Date': '5/13/2014', 'Ship Date': '5/15/2014', 'Ship Mode': 'Secon
d Class', 'Customer ID': 'AG-10270', 'Customer Name': 'Alejandro Grove', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'West Jordan', 'State': 'Uta
h', 'Postal Code': 84084, 'Region': 'West', 'Product ID': 'OFF-ST-10000107', 'Cat
egory': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Fellowes S
uper Stor/Drawer', 'Sales': 55.5, 'Quantity': 2, 'Discount': 0.0, 'Profit': 9.99}
{'_id': ObjectId('689386512f20a8473aecf4d0'), 'Row ID': 20, 'Order ID': 'CA-2014-
143336', 'Order Date': '8/27/2014', 'Ship Date': '9/1/2014', 'Ship Mode': 'Second
Class', 'Customer ID': 'ZD-21925', 'Customer Name': 'Zuschuss Donatelli', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'San Francisco', 'State': 'Ca
lifornia', 'Postal Code': 94109, 'Region': 'West', 'Product ID': 'TEC-PH-1000194
9', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Cisco SP
A 501G IP Phone', 'Sales': 213.48, 'Quantity': 3, 'Discount': 0.2, 'Profit': 16.0
11}
{'_id': ObjectId('689386512f20a8473aecf4d3'), 'Row ID': 23, 'Order ID': 'CA-2016-
137330', 'Order Date': '12/9/2016', 'Ship Date': '12/13/2016', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'KB-16585', 'Customer Name': 'Ken Black', 'Segment':
'Corporate', 'Country': 'United States', 'City': 'Fremont', 'State': 'Nebraska',
'Postal Code': 68025, 'Region': 'Central', 'Product ID': 'OFF-AP-10001492', 'Cate
gory': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': "Acco Six
-Outlet Power Strip, 4' Cord Length", 'Sales': 60.34, 'Quantity': 7, 'Discount':
0.0, 'Profit': 15.6884}
{'_id': ObjectId('689386512f20a8473aecf4d4'), 'Row ID': 24, 'Order ID': 'US-2017-
156909', 'Order Date': '7/16/2017', 'Ship Date': '7/18/2017', 'Ship Mode': 'Secon
d Class', 'Customer ID': 'SF-20065', 'Customer Name': 'Sandra Flanagan', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pen
nsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'FUR-CH-1000277
4', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global De
luxe Stacking Chair, Gray', 'Sales': 71.372, 'Quantity': 2, 'Discount': 0.3, 'Pro
fit': -1.0196}
{'_id': ObjectId('689386512f20a8473aecf4d5'), 'Row ID': 25, 'Order ID': 'CA-2015-
106320', 'Order Date': '9/25/2015', 'Ship Date': '9/30/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'EB-13870', 'Customer Name': 'Emily Burns', 'Segment':
'Consumer', 'Country': 'United States', 'City': 'Orem', 'State': 'Utah', 'Postal
Code': 84057, 'Region': 'West', 'Product ID': 'FUR-TA-10000577', 'Category': 'Fur
niture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford CR4500 Series Slim R
ectangular Table', 'Sales': 1044.63, 'Quantity': 3, 'Discount': 0.0, 'Profit': 24
0.2649}
{'_id': ObjectId('689386512f20a8473aecf4d7'), 'Row ID': 27, 'Order ID': 'CA-2016-

```

```

121755', 'Order Date': '1/16/2016', 'Ship Date': '1/20/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'EH-13945', 'Customer Name': 'Eric Hoffmann', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90049, 'Region': 'West', 'Product ID': 'TEC-AC-10003027', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Imation\xa08GB Mini TravelDrive USB 2.0\xa0Flash Drive', 'Sales': 90.57, 'Quantity': 3, 'Discount': 0.0, 'Profit': 11.7741}
{'_id': ObjectId('689386512f20a8473aecf4d8'), 'Row ID': 28, 'Order ID': 'US-2015-150630', 'Order Date': '9/17/2015', 'Ship Date': '9/21/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pennsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'FUR-BO-10004834', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'River side Palais Royal Lawyers Bookcase, Royale Cherry Finish', 'Sales': 3083.43, 'Quantity': 7, 'Discount': 0.5, 'Profit': -1665.0522}
{'_id': ObjectId('689386512f20a8473aecf4da'), 'Row ID': 30, 'Order ID': 'US-2015-150630', 'Order Date': '9/17/2015', 'Ship Date': '9/21/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pennsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'FUR-FU-10004848', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Howard Miller 13-3/4" Diameter Brushed Chrome Round Wall Clock', 'Sales': 124.2, 'Quantity': 3, 'Discount': 0.2, 'Profit': 15.525}
{'_id': ObjectId('689386512f20a8473aecf4dc'), 'Row ID': 32, 'Order ID': 'US-2015-150630', 'Order Date': '9/17/2015', 'Ship Date': '9/21/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pennsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'OFF-AR-10004042', 'Category': 'Office Supplies', 'Sub-Category': 'Art', 'Product Name': 'BOSTON Model 1800 Electric Pencil Sharpeners, Putty/Woodgrain', 'Sales': 86.304, 'Quantity': 6, 'Discount': 0.2, 'Profit': 9.7092}
{'_id': ObjectId('689386512f20a8473aecf4e0'), 'Row ID': 36, 'Order ID': 'CA-2016-117590', 'Order Date': '12/8/2016', 'Ship Date': '12/10/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'GH-14485', 'Customer Name': 'Gene Hale', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Richardson', 'State': 'Texas', 'Postal Code': 75080, 'Region': 'Central', 'Product ID': 'TEC-PH-10004977', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'GE 30524EE4', 'Sales': 1097.544, 'Quantity': 7, 'Discount': 0.2, 'Profit': 123.4737}
{'_id': ObjectId('689386512f20a8473aecf4e1'), 'Row ID': 37, 'Order ID': 'CA-2016-117590', 'Order Date': '12/8/2016', 'Ship Date': '12/10/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'GH-14485', 'Customer Name': 'Gene Hale', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Richardson', 'State': 'Texas', 'Postal Code': 75080, 'Region': 'Central', 'Product ID': 'FUR-FU-10003664', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': "Electrix Architect's Clamp-On Swing Arm Lamp, Black", 'Sales': 190.92, 'Quantity': 5, 'Discount': 0.6, 'Profit': -147.963}
{'_id': ObjectId('689386512f20a8473aecf4e2'), 'Row ID': 38, 'Order ID': 'CA-2015-117415', 'Order Date': '12/27/2015', 'Ship Date': '12/31/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'SN-20710', 'Customer Name': 'Steve Nguyen', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'OFF-EN-10002986', 'Category': 'Office Supplies', 'Sub-Category': 'Envelopes', 'Product Name': '#10-4 1/8" x 9 1/2" Premium Diagonal Seam Envelopes', 'Sales': 113.328, 'Quantity': 9, 'Discount': 0.2, 'Profit': 35.415}
{'_id': ObjectId('689386512f20a8473aecf4e3'), 'Row ID': 39, 'Order ID': 'CA-2015-117415', 'Order Date': '12/27/2015', 'Ship Date': '12/31/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'SN-20710', 'Customer Name': 'Steve Nguyen', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'FUR-BO-10002545', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Atlantic M

```

```

etals Mobile 3-Shelf Bookcases, Custom Colors', 'Sales': 532.3992, 'Quantity': 3,
'Discount': 0.32, 'Profit': -46.9764}
{'_id': ObjectId('689386512f20a8473aecf4e4'), 'Row ID': 40, 'Order ID': 'CA-2015-
117415', 'Order Date': '12/27/2015', 'Ship Date': '12/31/2015', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'SN-20710', 'Customer Name': 'Steve Nguyen', 'Segmen
t': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Texa
s', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'FUR-CH-10004218',
'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': "Global Fabric
Manager's Chair, Dark Gray", 'Sales': 212.058, 'Quantity': 3, 'Discount': 0.3, 'P
rofit': -15.147}
{'_id': ObjectId('689386512f20a8473aecf4e5'), 'Row ID': 41, 'Order ID': 'CA-2015-
117415', 'Order Date': '12/27/2015', 'Ship Date': '12/31/2015', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'SN-20710', 'Customer Name': 'Steve Nguyen', 'Segmen
t': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Texa
s', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'TEC-PH-10000486',
'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Plantronics
HL10 Handset Lifter', 'Sales': 371.168, 'Quantity': 4, 'Discount': 0.2, 'Profit':
41.7564}
{'_id': ObjectId('689386512f20a8473aecf4e6'), 'Row ID': 42, 'Order ID': 'CA-2017-
120999', 'Order Date': '9/10/2017', 'Ship Date': '9/15/2017', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'LC-16930', 'Customer Name': 'Linda Cazamias', 'Segmen
t': 'Corporate', 'Country': 'United States', 'City': 'Naperville', 'State': 'Illi
nois', 'Postal Code': 60540, 'Region': 'Central', 'Product ID': 'TEC-PH-1000409
3', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Panasoni
c Kx-TS550', 'Sales': 147.168, 'Quantity': 4, 'Discount': 0.2, 'Profit': 16.5564}
{'_id': ObjectId('689386512f20a8473aecf4e7'), 'Row ID': 43, 'Order ID': 'CA-2016-
101343', 'Order Date': '7/17/2016', 'Ship Date': '7/22/2016', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'RA-19885', 'Customer Name': 'Ruben Ausman', 'Segmen
t': 'Corporate', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'Cal
ifornia', 'Postal Code': 90049, 'Region': 'West', 'Product ID': 'OFF-ST-1000347
9', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'El
don Base for stackable storage shelf, platinum', 'Sales': 77.88, 'Quantity': 2,
'Discount': 0.0, 'Profit': 3.894}
{'_id': ObjectId('689386512f20a8473aecf4e8'), 'Row ID': 44, 'Order ID': 'CA-2017-
139619', 'Order Date': '9/19/2017', 'Ship Date': '9/23/2017', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'ES-14080', 'Customer Name': 'Erin Smith', 'Segment':
'Corporate', 'Country': 'United States', 'City': 'Melbourne', 'State': 'Florida',
'Postal Code': 32935, 'Region': 'South', 'Product ID': 'OFF-ST-10003282', 'Catego
ry': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Advantus 10-D
rawer Portable Organizer, Chrome Metal Frame, Smoke Drawers', 'Sales': 95.616, 'Q
uantity': 2, 'Discount': 0.2, 'Profit': 9.5616}
{'_id': ObjectId('689386512f20a8473aecf4eb'), 'Row ID': 47, 'Order ID': 'CA-2014-
146703', 'Order Date': '10/20/2014', 'Ship Date': '10/25/2014', 'Ship Mode': 'Sec
ond Class', 'Customer ID': 'PO-18865', 'Customer Name': "Patrick O'Donnell", 'Seg
ment': 'Consumer', 'Country': 'United States', 'City': 'Westland', 'State': 'Mich
igan', 'Postal Code': 48185, 'Region': 'Central', 'Product ID': 'OFF-ST-1000171
3', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Go
uld Plastics 9-Pocket Panel Bin, 18-3/8w x 5-1/4d x 20-1/2h, Black', 'Sales': 21
1.96, 'Quantity': 4, 'Discount': 0.0, 'Profit': 8.4784}
{'_id': ObjectId('689386512f20a8473aecf4ef'), 'Row ID': 51, 'Order ID': 'CA-2015-
115742', 'Order Date': '4/18/2015', 'Ship Date': '4/22/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'DP-13000', 'Customer Name': 'Darren Powers', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'New Albany', 'State': 'India
na', 'Postal Code': 47150, 'Region': 'Central', 'Product ID': 'OFF-LA-10002762',
'Category': 'Office Supplies', 'Sub-Category': 'Labels', 'Product Name': 'Avery 4
85', 'Sales': 75.18, 'Quantity': 6, 'Discount': 0.0, 'Profit': 35.3346}
{'_id': ObjectId('689386512f20a8473aecf4f1'), 'Row ID': 53, 'Order ID': 'CA-2015-
115742', 'Order Date': '4/18/2015', 'Ship Date': '4/22/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'DP-13000', 'Customer Name': 'Darren Powers', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'New Albany', 'State': 'India

```

```

na', 'Postal Code': 47150, 'Region': 'Central', 'Product ID': 'FUR-CH-10003061',
'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global Leather Task Chair, Black', 'Sales': 89.99, 'Quantity': 1, 'Discount': 0.0, 'Profit': 17.0981}
{'_id': ObjectId('689386512f20a8473aecf4f3'), 'Row ID': 55, 'Order ID': 'CA-2016-105816', 'Order Date': '12/11/2016', 'Ship Date': '12/17/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JM-15265', 'Customer Name': 'Janet Molinari', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'New York City', 'State': 'New York', 'Postal Code': 10024, 'Region': 'East', 'Product ID': 'TEC-PH-10002447', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'AT&T CL83451 4-Handset Telephone', 'Sales': 1029.95, 'Quantity': 5, 'Discount': 0.0, 'Profit': 298.6855}
{'_id': ObjectId('689386512f20a8473aecf4f4'), 'Row ID': 56, 'Order ID': 'CA-2016-111682', 'Order Date': '6/17/2016', 'Ship Date': '6/18/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'TB-21055', 'Customer Name': 'Ted Butterfield', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Troy', 'State': 'New York', 'Postal Code': 12180, 'Region': 'East', 'Product ID': 'OFF-ST-10000604', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Home/Office Personal File Carts', 'Sales': 208.56, 'Quantity': 6, 'Discount': 0.0, 'Profit': 52.14}
{'_id': ObjectId('689386512f20a8473aecf4f6'), 'Row ID': 58, 'Order ID': 'CA-2016-111682', 'Order Date': '6/17/2016', 'Ship Date': '6/18/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'TB-21055', 'Customer Name': 'Ted Butterfield', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Troy', 'State': 'New York', 'Postal Code': 12180, 'Region': 'East', 'Product ID': 'FUR-CH-10003968', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Novimex Turbo Task Chair', 'Sales': 319.41, 'Quantity': 5, 'Discount': 0.1, 'Profit': 7.098}
{'_id': ObjectId('689386512f20a8473aecf4fd'), 'Row ID': 65, 'Order ID': 'CA-2015-135545', 'Order Date': '11/24/2015', 'Ship Date': '11/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'KM-16720', 'Customer Name': 'Kunst Miller', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'OFF-PA-10003892', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Xerox 1943', 'Sales': 146.73, 'Quantity': 3, 'Discount': 0.0, 'Profit': 68.9631}
{'_id': ObjectId('689386512f20a8473aecf4fe'), 'Row ID': 66, 'Order ID': 'CA-2015-135545', 'Order Date': '11/24/2015', 'Ship Date': '11/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'KM-16720', 'Customer Name': 'Kunst Miller', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-FU-10000397', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Luxo Economy Swing Arm Lamp', 'Sales': 79.76, 'Quantity': 4, 'Discount': 0.0, 'Profit': 22.3328}
{'_id': ObjectId('689386512f20a8473aecf4ff'), 'Row ID': 67, 'Order ID': 'US-2015-164175', 'Order Date': '4/30/2015', 'Ship Date': '5/5/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'PS-18970', 'Customer Name': 'Paul Stevenson', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Chicago', 'State': 'Illinois', 'Postal Code': 60610, 'Region': 'Central', 'Product ID': 'FUR-CH-10001146', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global Value Mid-Back Manager's Chair, Gray', 'Sales': 213.115, 'Quantity': 5, 'Discount': 0.3, 'Profit': -15.2225}
{'_id': ObjectId('689386512f20a8473aecf500'), 'Row ID': 68, 'Order ID': 'CA-2014-106376', 'Order Date': '12/5/2014', 'Ship Date': '12/10/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BS-11590', 'Customer Name': 'Brendan Sweed', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Gilbert', 'State': 'Arizona', 'Postal Code': 85234, 'Region': 'West', 'Product ID': 'OFF-AR-10002671', 'Category': 'Office Supplies', 'Sub-Category': 'Art', 'Product Name': 'Hunt BOSTON Model 1606 High-Volume Electric Pencil Sharpener, Beige', 'Sales': 1113.024, 'Quantity': 8, 'Discount': 0.2, 'Profit': 111.3024}
{'_id': ObjectId('689386512f20a8473aecf501'), 'Row ID': 69, 'Order ID': 'CA-2014-106376', 'Order Date': '12/5/2014', 'Ship Date': '12/10/2014', 'Ship Mode': 'Stan

```

```

dard Class', 'Customer ID': 'BS-11590', 'Customer Name': 'Brendan Sweed', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Gilbert', 'State': 'Arizona', 'Postal Code': 85234, 'Region': 'West', 'Product ID': 'TEC-PH-10002726', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'netTALK DUO VoIP Telephone Service', 'Sales': 167.968, 'Quantity': 4, 'Discount': 0.2, 'Profit': 62.988}
{'_id': ObjectId('689386512f20a8473aecf502'), 'Row ID': 70, 'Order ID': 'CA-2016-119823', 'Order Date': '6/4/2016', 'Ship Date': '6/6/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'KD-16270', 'Customer Name': 'Karen Daniels', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Springfield', 'State': 'Virginia', 'Postal Code': 22153, 'Region': 'South', 'Product ID': 'OFF-PA-10000482', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Snap-A-Way Black Print Carbonless Ruled Speed Letter, Triplicate', 'Sales': 75.88, 'Quantity': 2, 'Discount': 0.0, 'Profit': 35.6636}
{'_id': ObjectId('689386512f20a8473aecf505'), 'Row ID': 73, 'Order ID': 'US-2015-134026', 'Order Date': '4/26/2015', 'Ship Date': '5/2/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'JE-15745', 'Customer Name': 'Joel Eaton', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Memphis', 'State': 'Tennessee', 'Postal Code': 38109, 'Region': 'South', 'Product ID': 'FUR-CH-10000513', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'High-Back Leather Manager's Chair', 'Sales': 831.936, 'Quantity': 8, 'Discount': 0.2, 'Profit': -114.3912}
{'_id': ObjectId('689386512f20a8473aecf506'), 'Row ID': 74, 'Order ID': 'US-2015-134026', 'Order Date': '4/26/2015', 'Ship Date': '5/2/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'JE-15745', 'Customer Name': 'Joel Eaton', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Memphis', 'State': 'Tennessee', 'Postal Code': 38109, 'Region': 'South', 'Product ID': 'FUR-FU-10003708', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Tenex Traditional Chairmats for Medium Pile Carpet, Standard Lip, 36" x 48"', 'Sales': 97.04, 'Quantity': 2, 'Discount': 0.2, 'Profit': 1.213}
{'_id': ObjectId('689386512f20a8473aecf507'), 'Row ID': 75, 'Order ID': 'US-2015-134026', 'Order Date': '4/26/2015', 'Ship Date': '5/2/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'JE-15745', 'Customer Name': 'Joel Eaton', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Memphis', 'State': 'Tennessee', 'Postal Code': 38109, 'Region': 'South', 'Product ID': 'OFF-ST-10004123', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Safco Industrial Wire Shelving System', 'Sales': 72.784, 'Quantity': 1, 'Discount': 0.2, 'Profit': -18.196}
{'_id': ObjectId('689386512f20a8473aecf50c'), 'Row ID': 80, 'Order ID': 'CA-2016-127208', 'Order Date': '6/12/2016', 'Ship Date': '6/15/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'SC-20770', 'Customer Name': 'Stewart Carmichael', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Decatur', 'State': 'Alabama', 'Postal Code': 35601, 'Region': 'South', 'Product ID': 'OFF-AP-10002118', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': '1.7 Cubic Foot Compact "Cube" Office Refrigerators', 'Sales': 208.16, 'Quantity': 1, 'Discount': 0.0, 'Profit': 56.2032}
{'_id': ObjectId('689386512f20a8473aecf510'), 'Row ID': 84, 'Order ID': 'CA-2015-149734', 'Order Date': '9/3/2015', 'Ship Date': '9/8/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'JC-16105', 'Customer Name': 'Julie Creighton', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Durham', 'State': 'North Carolina', 'Postal Code': 27707, 'Region': 'South', 'Product ID': 'OFF-EN-10000927', 'Category': 'Office Supplies', 'Sub-Category': 'Envelopes', 'Product Name': 'Jet-Pak Recycled Peel 'N' Seal Padded Mailers', 'Sales': 200.984, 'Quantity': 7, 'Discount': 0.2, 'Profit': 62.8075}
{'_id': ObjectId('689386512f20a8473aecf511'), 'Row ID': 85, 'Order ID': 'US-2017-119662', 'Order Date': '11/13/2017', 'Ship Date': '11/16/2017', 'Ship Mode': 'Premium Class', 'Customer ID': 'CS-12400', 'Customer Name': 'Christopher Schild', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Chicago', 'State': 'Illinois', 'Postal Code': 60623, 'Region': 'Central', 'Product ID': 'OFF-ST-10003656', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name':

```

```
'Safco Industrial Wire Shelving', 'Sales': 230.376, 'Quantity': 3, 'Discount': 0.2, 'Profit': -48.9549}
{'_id': ObjectId('689386512f20a8473aecf512'), 'Row ID': 86, 'Order ID': 'CA-2017-140088', 'Order Date': '5/28/2017', 'Ship Date': '5/30/2017', 'Ship Mode': 'Second Class', 'Customer ID': 'PO-18865', 'Customer Name': "Patrick O'Donnell", 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Columbia', 'State': 'South Carolina', 'Postal Code': 29203, 'Region': 'South', 'Product ID': 'FUR-CH-10000863', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Novimex Swivel Fabric Task Chair', 'Sales': 301.96, 'Quantity': 2, 'Discount': 0.0, 'Profit': 33.2156}
{'_id': ObjectId('689386512f20a8473aecf515'), 'Row ID': 89, 'Order ID': 'CA-2016-159695', 'Order Date': '4/5/2016', 'Ship Date': '4/10/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'GM-14455', 'Customer Name': 'Gary Mitchum', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77095, 'Region': 'Central', 'Product ID': 'OFF-ST-10003442', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Eldon Portable Mobile Manager', 'Sales': 158.368, 'Quantity': 7, 'Discount': 0.2, 'Profit': 13.8572}
{'_id': ObjectId('689386512f20a8473aecf517'), 'Row ID': 91, 'Order ID': 'CA-2016-109806', 'Order Date': '9/17/2016', 'Ship Date': '9/22/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JS-15685', 'Customer Name': 'Jim Sink', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90036, 'Region': 'West', 'Product ID': 'TEC-PH-10004093', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Panasonic Kx-TS550', 'Sales': 73.584, 'Quantity': 2, 'Discount': 0.2, 'Profit': 8.2782}
{'_id': ObjectId('689386512f20a8473aecf51a'), 'Row ID': 94, 'Order ID': 'CA-2015-149587', 'Order Date': '1/31/2015', 'Ship Date': '2/5/2015', 'Ship Mode': 'Second Class', 'Customer ID': 'KB-16315', 'Customer Name': 'Karl Braun', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Minneapolis', 'State': 'Minnesota', 'Postal Code': 55407, 'Region': 'Central', 'Product ID': 'FUR-FU-10003799', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Seth Thomas 13 1/2" Wall Clock', 'Sales': 53.34, 'Quantity': 3, 'Discount': 0.0, 'Profit': 16.5354}
```

In [8]: *# Count Total Documents*

```
total_docs = orders.count_documents({})
print(f"Total documents: {total_docs}")
```

Total documents: 15139

In [21]: *# Fetch Orders from "West" Region*

```
west_orders = orders.find({"Region": "West"}).limit(50)
for order in west_orders:
    print(order)
```

```
{'_id': ObjectId('689386512f20a8473aecf4c4'), 'Row ID': 8, 'Order ID': 'CA-2014-15812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002275', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Mitel 5320 IP Phone VoIP phone', 'Sales': 907.152, 'Quantity': 6, 'Discount': 0.2, 'Profit': 90.7152}

{'_id': ObjectId('689386512f20a8473aecf4c6'), 'Row ID': 10, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'OFF-AP-10002892', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': 'Belkin F5C206VTEL 6 Outlet Surge', 'Sales': 114.9, 'Quantity': 5, 'Discount': 0.0, 'Profit': 34.47}

{'_id': ObjectId('689386512f20a8473aecf4c7'), 'Row ID': 11, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'FUR-TA-10001539', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Chromcraft Rectangular Conference Tables', 'Sales': 1706.184, 'Quantity': 9, 'Discount': 0.2, 'Profit': 85.3092}

{'_id': ObjectId('689386512f20a8473aecf4c8'), 'Row ID': 12, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002033', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Konftel 250 Conference\phone\Charcoal black', 'Sales': 911.424, 'Quantity': 4, 'Discount': 0.2, 'Profit': 68.3568}

{'_id': ObjectId('689386512f20a8473aecf4ca'), 'Row ID': 14, 'Order ID': 'CA-2016-161389', 'Order Date': '12/5/2016', 'Ship Date': '12/10/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'IM-15070', 'Customer Name': 'Irene Maddox', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington', 'Postal Code': 98103, 'Region': 'West', 'Product ID': 'OFF-BI-10003656', 'Category': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'Fellowes PB200 Plastic Comb Binding Machine', 'Sales': 407.976, 'Quantity': 3, 'Discount': 0.2, 'Profit': 132.5922}

{'_id': ObjectId('689386512f20a8473aecf4ce'), 'Row ID': 18, 'Order ID': 'CA-2014-167164', 'Order Date': '5/13/2014', 'Ship Date': '5/15/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'AG-10270', 'Customer Name': 'Alejandro Grove', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'West Jordan', 'State': 'Utah', 'Postal Code': 84084, 'Region': 'West', 'Product ID': 'OFF-ST-10000107', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Fellowes Super Stor/Drawer', 'Sales': 55.5, 'Quantity': 2, 'Discount': 0.0, 'Profit': 9.99}

{'_id': ObjectId('689386512f20a8473aecf4d0'), 'Row ID': 20, 'Order ID': 'CA-2014-143336', 'Order Date': '8/27/2014', 'Ship Date': '9/1/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'ZD-21925', 'Customer Name': 'Zuschuss Donatelli', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'San Francisco', 'State': 'California', 'Postal Code': 94109, 'Region': 'West', 'Product ID': 'TEC-PH-10001949', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Cisco SPA 501G IP Phone', 'Sales': 213.48, 'Quantity': 3, 'Discount': 0.2, 'Profit': 16.011}

{'_id': ObjectId('689386512f20a8473aecf4d5'), 'Row ID': 25, 'Order ID': 'CA-2015-106320', 'Order Date': '9/25/2015', 'Ship Date': '9/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'EB-13870', 'Customer Name': 'Emily Burns', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Orem', 'State': 'Utah', 'Postal Code': 84057, 'Region': 'West', 'Product ID': 'FUR-TA-10000577', 'Category': 'Fur
```

```

niture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford CR4500 Series Slim Rectangular Table', 'Sales': 1044.63, 'Quantity': 3, 'Discount': 0.0, 'Profit': 240.2649}
{'_id': ObjectId('689386512f20a8473aecf4d7'), 'Row ID': 27, 'Order ID': 'CA-2016-121755', 'Order Date': '1/16/2016', 'Ship Date': '1/20/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'EH-13945', 'Customer Name': 'Eric Hoffmann', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90049, 'Region': 'West', 'Product ID': 'TEC-AC-10003027', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Imation\x008GB Mini TravelDrive USB 2.0\x00Flash Drive', 'Sales': 90.57, 'Quantity': 3, 'Discount': 0.0, 'Profit': 11.7741}
{'_id': ObjectId('689386512f20a8473aecf4e7'), 'Row ID': 43, 'Order ID': 'CA-2016-101343', 'Order Date': '7/17/2016', 'Ship Date': '7/22/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'RA-19885', 'Customer Name': 'Ruben Ausman', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90049, 'Region': 'West', 'Product ID': 'OFF-ST-10003479', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Eldon Base for stackable storage shelf, platinum', 'Sales': 77.88, 'Quantity': 2, 'Discount': 0.0, 'Profit': 3.894}
{'_id': ObjectId('689386512f20a8473aecf4fd'), 'Row ID': 65, 'Order ID': 'CA-2015-135545', 'Order Date': '11/24/2015', 'Ship Date': '11/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'KM-16720', 'Customer Name': 'Kunst Miller', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'OFF-PA-10003892', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Xerox 1943', 'Sales': 146.73, 'Quantity': 3, 'Discount': 0.0, 'Profit': 68.9631}
{'_id': ObjectId('689386512f20a8473aecf4fe'), 'Row ID': 66, 'Order ID': 'CA-2015-135545', 'Order Date': '11/24/2015', 'Ship Date': '11/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'KM-16720', 'Customer Name': 'Kunst Miller', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-FU-10000397', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Luxo Economy Swing Arm Lamp', 'Sales': 79.76, 'Quantity': 4, 'Discount': 0.0, 'Profit': 22.3328}
{'_id': ObjectId('689386512f20a8473aecf500'), 'Row ID': 68, 'Order ID': 'CA-2014-106376', 'Order Date': '12/5/2014', 'Ship Date': '12/10/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BS-11590', 'Customer Name': 'Brendan Sweed', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Gilbert', 'State': 'Arizona', 'Postal Code': 85234, 'Region': 'West', 'Product ID': 'OFF-AR-10002671', 'Category': 'Office Supplies', 'Sub-Category': 'Art', 'Product Name': 'Hunt BOSTON Model 1606 High-Volume Electric Pencil Sharpener, Beige', 'Sales': 1113.024, 'Quantity': 8, 'Discount': 0.2, 'Profit': 111.3024}
{'_id': ObjectId('689386512f20a8473aecf501'), 'Row ID': 69, 'Order ID': 'CA-2014-106376', 'Order Date': '12/5/2014', 'Ship Date': '12/10/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BS-11590', 'Customer Name': 'Brendan Sweed', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Gilbert', 'State': 'Arizona', 'Postal Code': 85234, 'Region': 'West', 'Product ID': 'TEC-PH-10002726', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'netTALK DUO VoIP Telephone Service', 'Sales': 167.968, 'Quantity': 4, 'Discount': 0.2, 'Profit': 62.988}
{'_id': ObjectId('689386512f20a8473aecf517'), 'Row ID': 91, 'Order ID': 'CA-2016-109806', 'Order Date': '9/17/2016', 'Ship Date': '9/22/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JS-15685', 'Customer Name': 'Jim Sink', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90036, 'Region': 'West', 'Product ID': 'TEC-PH-10004093', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Panasonic Kx-TS550', 'Sales': 73.584, 'Quantity': 2, 'Discount': 0.2, 'Profit': 8.2782}
{'_id': ObjectId('689386512f20a8473aecf51e'), 'Row ID': 98, 'Order ID': 'CA-2017-157833', 'Order Date': '6/17/2017', 'Ship Date': '6/20/2017', 'Ship Mode': 'Premium Class', 'Customer ID': 'KD-16345', 'Customer Name': 'Katherine Ducich', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90036, 'Region': 'West', 'Product ID': 'TEC-PH-10004093', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Panasonic Kx-TS550', 'Sales': 73.584, 'Quantity': 2, 'Discount': 0.2, 'Profit': 8.2782}

```



```

nt': 'Consumer', 'Country': 'United States', 'City': 'San Francisco', 'State': 'C
alifornia', 'Postal Code': 94122, 'Region': 'West', 'Product ID': 'OFF-BI-1000172
1', 'Category': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'Tr
imflex Flexible Post Binders', 'Sales': 51.312, 'Quantity': 3, 'Discount': 0.2,
'Profit': 17.9592}
{'_id': ObjectId('689386512f20a8473aecf524'), 'Row ID': 104, 'Order ID': 'US-2015
-156867', 'Order Date': '11/13/2015', 'Ship Date': '11/17/2015', 'Ship Mode': 'St
andard Class', 'Customer ID': 'LC-16870', 'Customer Name': 'Lena Cacioppo', 'Segm
ent': 'Consumer', 'Country': 'United States', 'City': 'Aurora', 'State': 'Colorad
o', 'Postal Code': 80013, 'Region': 'West', 'Product ID': 'TEC-AC-10001552', 'Cat
egory': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Logitech K3
50 2.4Ghz Wireless Keyboard', 'Sales': 238.896, 'Quantity': 6, 'Discount': 0.2,
'Profit': -26.8758}
{'_id': ObjectId('689386512f20a8473aecf525'), 'Row ID': 105, 'Order ID': 'US-2015
-156867', 'Order Date': '11/13/2015', 'Ship Date': '11/17/2015', 'Ship Mode': 'St
andard Class', 'Customer ID': 'LC-16870', 'Customer Name': 'Lena Cacioppo', 'Segm
ent': 'Consumer', 'Country': 'United States', 'City': 'Aurora', 'State': 'Colorad
o', 'Postal Code': 80013, 'Region': 'West', 'Product ID': 'FUR-FU-10004006', 'Cat
egory': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Deflect-o Du
raMat Lighweight, Studded, Beveled Mat for Low Pile Carpeting', 'Sales': 102.36,
'Quantity': 3, 'Discount': 0.2, 'Profit': -3.8385}
{'_id': ObjectId('689386512f20a8473aecf532'), 'Row ID': 118, 'Order ID': 'CA-2015
-110457', 'Order Date': '3/2/2015', 'Ship Date': '3/6/2015', 'Ship Mode': 'Standa
rd Class', 'Customer ID': 'DK-13090', 'Customer Name': 'Dave Kipp', 'Segment': 'C
onsumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington',
'Postal Code': 98103, 'Region': 'West', 'Product ID': 'FUR-TA-10001768', 'Categor
y': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Hon Racetrack Confere
nce Tables', 'Sales': 787.53, 'Quantity': 3, 'Discount': 0.0, 'Profit': 165.3813}
{'_id': ObjectId('689386512f20a8473aecf53c'), 'Row ID': 128, 'Order ID': 'US-2017
-107272', 'Order Date': '11/5/2017', 'Ship Date': '11/12/2017', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'TS-21610', 'Customer Name': 'Troy Staebel', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Phoenix', 'State': 'Arizon
a', 'Postal Code': 85023, 'Region': 'West', 'Product ID': 'OFF-ST-10002974', 'Cat
egory': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Trav-L-Fil
e Heavy-Duty Shuttle II, Black', 'Sales': 243.992, 'Quantity': 7, 'Discount': 0.
2, 'Profit': 30.499}
{'_id': ObjectId('689386512f20a8473aecf53d'), 'Row ID': 129, 'Order ID': 'US-2016
-125969', 'Order Date': '11/6/2016', 'Ship Date': '11/10/2016', 'Ship Mode': 'Sec
ond Class', 'Customer ID': 'LS-16975', 'Customer Name': 'Lindsay Shagiari', 'Segm
ent': 'Home Office', 'Country': 'United States', 'City': 'Los Angeles', 'State':
'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-CH-10001
146', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global
Task Chair, Black', 'Sales': 81.424, 'Quantity': 2, 'Discount': 0.2, 'Profit': -
9.1602}
{'_id': ObjectId('689386512f20a8473aecf53e'), 'Row ID': 130, 'Order ID': 'US-2016
-125969', 'Order Date': '11/6/2016', 'Ship Date': '11/10/2016', 'Ship Mode': 'Sec
ond Class', 'Customer ID': 'LS-16975', 'Customer Name': 'Lindsay Shagiari', 'Segm
ent': 'Home Office', 'Country': 'United States', 'City': 'Los Angeles', 'State':
'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-FU-10003
773', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'El
don Cleatmat Plus Chair Mats for High Pile Carpets', 'Sales': 238.56, 'Quantity':
3, 'Discount': 0.0, 'Profit': 26.2416}
{'_id': ObjectId('689386512f20a8473aecf546'), 'Row ID': 138, 'Order ID': 'CA-2016
-145583', 'Order Date': '10/13/2016', 'Ship Date': '10/19/2016', 'Ship Mode': 'St
andard Class', 'Customer ID': 'LC-16885', 'Customer Name': 'Lena Creighton', 'Seg
ment': 'Consumer', 'Country': 'United States', 'City': 'Roseville', 'State': 'Cal
ifornia', 'Postal Code': 95661, 'Region': 'West', 'Product ID': 'OFF-BI-1000478
1', 'Category': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'GB
C Wire Binding Strips', 'Sales': 76.176, 'Quantity': 3, 'Discount': 0.2, 'Profi
t': 26.6616}

```

```
{'_id': ObjectId('689386512f20a8473aecf547'), 'Row ID': 139, 'Order ID': 'CA-2016-145583', 'Order Date': '10/13/2016', 'Ship Date': '10/19/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'LC-16885', 'Customer Name': 'Lena Creighton', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Roseville', 'State': 'California', 'Postal Code': 95661, 'Region': 'West', 'Product ID': 'OFF-SU-10001218', 'Category': 'Office Supplies', 'Sub-Category': 'Supplies', 'Product Name': 'Fiskars Softgrip Scissors', 'Sales': 65.88, 'Quantity': 6, 'Discount': 0.0, 'Profit': 18.4464}
{'_id': ObjectId('689386512f20a8473aecf54c'), 'Row ID': 144, 'Order ID': 'CA-2017-106180', 'Order Date': '9/18/2017', 'Ship Date': '9/23/2017', 'Ship Mode': 'Standard Class', 'Customer ID': 'SH-19975', 'Customer Name': 'Sally Hughsby', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Francisco', 'State': 'California', 'Postal Code': 94122, 'Region': 'West', 'Product ID': 'OFF-PA-10004327', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Xerox 1911', 'Sales': 143.7, 'Quantity': 3, 'Discount': 0.0, 'Profit': 68.976}
{'_id': ObjectId('689386512f20a8473aecf54e'), 'Row ID': 146, 'Order ID': 'CA-2015-110744', 'Order Date': '9/7/2015', 'Ship Date': '9/12/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'HA-14920', 'Customer Name': 'Helen Andreada', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Pasadena', 'State': 'California', 'Postal Code': 91104, 'Region': 'West', 'Product ID': 'OFF-ST-10003656', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Safco Industrial Wire Shelving', 'Sales': 671.93, 'Quantity': 7, 'Discount': 0.0, 'Profit': 20.1579}
{'_id': ObjectId('689386512f20a8473aecf554'), 'Row ID': 152, 'Order ID': 'CA-2016-158834', 'Order Date': '3/13/2016', 'Ship Date': '3/16/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'TW-21025', 'Customer Name': 'Tamara Willingham', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Scottsdale', 'State': 'Arizona', 'Postal Code': 85254, 'Region': 'West', 'Product ID': 'OFF-AP-10000326', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': 'Belkin 7 Outlet SurgeMaster Surge Protector with Phone Protection', 'Sales': 157.92, 'Quantity': 5, 'Discount': 0.2, 'Profit': 17.766}
{'_id': ObjectId('689386512f20a8473aecf555'), 'Row ID': 153, 'Order ID': 'CA-2016-158834', 'Order Date': '3/13/2016', 'Ship Date': '3/16/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'TW-21025', 'Customer Name': 'Tamara Willingham', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Scottsdale', 'State': 'Arizona', 'Postal Code': 85254, 'Region': 'West', 'Product ID': 'TEC-PH-10001254', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Jabra BIZ 2300 Duo QD Duo Corded Headset', 'Sales': 203.184, 'Quantity': 2, 'Discount': 0.2, 'Profit': 15.2388}
{'_id': ObjectId('689386512f20a8473aecf556'), 'Row ID': 154, 'Order ID': 'CA-2015-124919', 'Order Date': '5/31/2015', 'Ship Date': '6/2/2015', 'Ship Mode': 'Premium Class', 'Customer ID': 'SP-20650', 'Customer Name': 'Stephanie Phelps', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Jose', 'State': 'California', 'Postal Code': 95123, 'Region': 'West', 'Product ID': 'OFF-PA-10001950', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Southworth 25% Cotton Antique Laid Paper & Envelopes', 'Sales': 58.38, 'Quantity': 7, 'Discount': 0.0, 'Profit': 26.271}
{'_id': ObjectId('689386512f20a8473aecf557'), 'Row ID': 155, 'Order ID': 'CA-2015-124919', 'Order Date': '5/31/2015', 'Ship Date': '6/2/2015', 'Ship Mode': 'Premium Class', 'Customer ID': 'SP-20650', 'Customer Name': 'Stephanie Phelps', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Jose', 'State': 'California', 'Postal Code': 95123, 'Region': 'West', 'Product ID': 'OFF-PA-10002254', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Xerox 1883', 'Sales': 105.52, 'Quantity': 4, 'Discount': 0.0, 'Profit': 48.5392}
{'_id': ObjectId('689386512f20a8473aecf558'), 'Row ID': 156, 'Order ID': 'CA-2015-124919', 'Order Date': '5/31/2015', 'Ship Date': '6/2/2015', 'Ship Mode': 'Premium Class', 'Customer ID': 'SP-20650', 'Customer Name': 'Stephanie Phelps', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Jose', 'State': 'California', 'Postal Code': 95123, 'Region': 'West', 'Product ID': 'OFF-ST-10001590', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Tenex
```

Personal Project File with Scoop Front Design, Black', 'Sales': 80.88, 'Quantity': 6, 'Discount': 0.0, 'Profit': 21.0288}

{'_id': ObjectId('689386512f20a8473aecf55a'), 'Row ID': 158, 'Order ID': 'CA-2014-104269', 'Order Date': '3/1/2014', 'Ship Date': '3/6/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'DB-13060', 'Customer Name': 'Dave Brooks', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington', 'Postal Code': 98115, 'Region': 'West', 'Product ID': 'FUR-CH-10004063', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global Deluxe High-Back Manager's Chair', 'Sales': 457.568, 'Quantity': 2, 'Discount': 0.2, 'Profit': 51.4764}

{'_id': ObjectId('689386512f20a8473aecf569'), 'Row ID': 173, 'Order ID': 'CA-2014-118962', 'Order Date': '8/5/2014', 'Ship Date': '8/9/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'CS-12130', 'Customer Name': 'Chad Sievert', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'OFF-PA-10001144', 'Category': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Xerox 1913', 'Sales': 110.96, 'Quantity': 2, 'Discount': 0.0, 'Profit': 53.2608}

{'_id': ObjectId('689386512f20a8473aecf56a'), 'Row ID': 174, 'Order ID': 'CA-2014-118962', 'Order Date': '8/5/2014', 'Ship Date': '8/9/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'CS-12130', 'Customer Name': 'Chad Sievert', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-CH-10003817', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global Value Steno Chair, Gray', 'Sales': 340.144, 'Quantity': 7, 'Discount': 0.2, 'Profit': 21.259}

{'_id': ObjectId('689386512f20a8473aecf577'), 'Row ID': 187, 'Order ID': 'CA-2014-123260', 'Order Date': '8/26/2014', 'Ship Date': '8/30/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'FM-14290', 'Customer Name': 'Frank Merwin', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-AC-10002323', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'San Disk Ultra 32 GB MicroSDHC Class 10 Memory Card', 'Sales': 176.8, 'Quantity': 8, 'Discount': 0.0, 'Profit': 22.984}

{'_id': ObjectId('689386512f20a8473aecf586'), 'Row ID': 202, 'Order ID': 'CA-2014-133690', 'Order Date': '8/3/2014', 'Ship Date': '8/5/2014', 'Ship Mode': 'Premium Class', 'Customer ID': 'BS-11755', 'Customer Name': 'Bruce Stewart', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Denver', 'State': 'Colorado', 'Postal Code': 80219, 'Region': 'West', 'Product ID': 'FUR-TA-10004289', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'BoxOffice By Design Rectangular and Half-Moon Meeting Room Tables', 'Sales': 218.75, 'Quantity': 2, 'Discount': 0.5, 'Profit': -161.875}

{'_id': ObjectId('689386512f20a8473aecf58a'), 'Row ID': 206, 'Order ID': 'CA-2017-108329', 'Order Date': '12/9/2017', 'Ship Date': '12/14/2017', 'Ship Mode': 'Standard Class', 'Customer ID': 'LE-16810', 'Customer Name': 'Laurel Elliston', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Whittier', 'State': 'California', 'Postal Code': 90604, 'Region': 'West', 'Product ID': 'TEC-PH-10001918', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Nortel Business Series Terminal T7208 Digital phone', 'Sales': 444.768, 'Quantity': 4, 'Discount': 0.2, 'Profit': 44.4768}

{'_id': ObjectId('689386512f20a8473aecf596'), 'Row ID': 218, 'Order ID': 'CA-2016-130162', 'Order Date': '10/28/2016', 'Ship Date': '11/1/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JH-15910', 'Customer Name': 'Jonathan Howell', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'OFF-ST-10001328', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Personal Filing Tote with Lid, Black/Gray', 'Sales': 93.06, 'Quantity': 6, 'Discount': 0.0, 'Profit': 26.0568}

{'_id': ObjectId('689386512f20a8473aecf597'), 'Row ID': 219, 'Order ID': 'CA-2016-130162', 'Order Date': '10/28/2016', 'Ship Date': '11/1/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JH-15910', 'Customer Name': 'Jonathan Howell', 'Seg

```

ment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'C
alifornia', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-1000256
3', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Adtran 1
202752G1', 'Sales': 302.376, 'Quantity': 3, 'Discount': 0.2, 'Profit': 22.6782}
{'_id': ObjectId('689386512f20a8473aecf5b6'), 'Row ID': 250, 'Order ID': 'CA-2016
-154739', 'Order Date': '12/10/2016', 'Ship Date': '12/15/2016', 'Ship Mode': 'Se
cond Class', 'Customer ID': 'LH-17155', 'Customer Name': 'Logan Haushalter', 'Seg
ment': 'Consumer', 'Country': 'United States', 'City': 'San Francisco', 'State':
'California', 'Postal Code': 94109, 'Region': 'West', 'Product ID': 'FUR-CH-10002
965', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global
Leather Highback Executive Chair with Pneumatic Height Adjustment, Black', 'Sale
s': 321.568, 'Quantity': 2, 'Discount': 0.2, 'Profit': 28.1372}
{'_id': ObjectId('689386512f20a8473aecf5b8'), 'Row ID': 252, 'Order ID': 'CA-2016
-145625', 'Order Date': '9/11/2016', 'Ship Date': '9/17/2016', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'KC-16540', 'Customer Name': 'Kelly Collister', 'Segm
ent': 'Consumer', 'Country': 'United States', 'City': 'San Diego', 'State': 'Cali
fornia', 'Postal Code': 92037, 'Region': 'West', 'Product ID': 'TEC-AC-10003832',
'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Logitec
h\x0aP710e Mobile Speakerphone', 'Sales': 3347.37, 'Quantity': 13, 'Discount': 0.
0, 'Profit': 636.0003}
{'_id': ObjectId('689386512f20a8473aecf5c6'), 'Row ID': 266, 'Order ID': 'CA-2015
-155040', 'Order Date': '11/10/2015', 'Ship Date': '11/15/2015', 'Ship Mode': 'St
andard Class', 'Customer ID': 'AH-10210', 'Customer Name': 'Alan Hwang', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Brentwood', 'State': 'Califo
rnia', 'Postal Code': 94513, 'Region': 'West', 'Product ID': 'TEC-AC-10004469',
'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Microso
ft Sculpt Comfort Mouse', 'Sales': 79.9, 'Quantity': 2, 'Discount': 0.0, 'Profi
t': 35.156}
{'_id': ObjectId('689386512f20a8473aecf5cb'), 'Row ID': 271, 'Order ID': 'CA-2017
-163979', 'Order Date': '12/28/2017', 'Ship Date': '1/2/2018', 'Ship Mode': 'Seco
nd Class', 'Customer ID': 'KH-16690', 'Customer Name': 'Kristen Hastings', 'Segme
nt': 'Corporate', 'Country': 'United States', 'City': 'San Francisco', 'State':
'California', 'Postal Code': 94110, 'Region': 'West', 'Product ID': 'OFF-ST-10003
208', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name':
'Adjustable Depth Letter/Legal Cart', 'Sales': 725.84, 'Quantity': 4, 'Discount':
0.0, 'Profit': 210.4936}
{'_id': ObjectId('689386512f20a8473aecf5cc'), 'Row ID': 272, 'Order ID': 'CA-2015
-155334', 'Order Date': '7/30/2015', 'Ship Date': '7/31/2015', 'Ship Mode': 'Prem
ium Class', 'Customer ID': 'HA-14920', 'Customer Name': 'Helen Andreada', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'San Francisco', 'State': 'Ca
lifornia', 'Postal Code': 94109, 'Region': 'West', 'Product ID': 'TEC-AC-1000362
8', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Log
itech 910-002974 M325 Wireless Mouse for Web Scrolling', 'Sales': 209.93, 'Quanti
ty': 7, 'Discount': 0.0, 'Profit': 92.3692}
{'_id': ObjectId('689386512f20a8473aecf5d7'), 'Row ID': 283, 'Order ID': 'CA-2015
-130890', 'Order Date': '11/2/2015', 'Ship Date': '11/6/2015', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'JO-15280', 'Customer Name': "Jas O'Carroll", 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'Cali
fornia', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-TA-10002903',
'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bevis Round B
ullnose 29" High Table Top', 'Sales': 1038.84, 'Quantity': 5, 'Discount': 0.2, 'P
rofit': 51.942}
{'_id': ObjectId('689386512f20a8473aecf5d8'), 'Row ID': 284, 'Order ID': 'CA-2015
-130883', 'Order Date': '9/26/2015', 'Ship Date': '10/2/2015', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segm
ent': 'Consumer', 'Country': 'United States', 'City': 'Portland', 'State': 'Orego
n', 'Postal Code': 97206, 'Region': 'West', 'Product ID': 'OFF-PA-10000474', 'Cat
egory': 'Office Supplies', 'Sub-Category': 'Paper', 'Product Name': 'Easy-staple
paper', 'Sales': 141.76, 'Quantity': 5, 'Discount': 0.2, 'Profit': 47.844}
{'_id': ObjectId('689386512f20a8473aecf5d9'), 'Row ID': 285, 'Order ID': 'CA-2015

```

```
-130883', 'Order Date': '9/26/2015', 'Ship Date': '10/2/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Portland', 'State': 'Oregon', 'Postal Code': 97206, 'Region': 'West', 'Product ID': 'TEC-AC-10001956', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Microsoft Arc Touch Mouse', 'Sales': 239.8, 'Quantity': 5, 'Discount': 0.2, 'Profit': 47.96}
{'_id': ObjectId('689386512f20a8473aecf5e2'), 'Row ID': 294, 'Order ID': 'CA-2014-111451', 'Order Date': '12/26/2014', 'Ship Date': '12/28/2014', 'Ship Mode': 'Premium Class', 'Customer ID': 'KL-16555', 'Customer Name': 'Kelly Lampkin', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Colorado Springs', 'State': 'Colorado', 'Postal Code': 80906, 'Region': 'West', 'Product ID': 'FUR-FU-10004091', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Howard Miller 13" Diameter Goldtone Round Wall Clock', 'Sales': 300.416, 'Quantity': 8, 'Discount': 0.2, 'Profit': 78.8592}
{'_id': ObjectId('689386512f20a8473aecf5e3'), 'Row ID': 295, 'Order ID': 'CA-2014-111451', 'Order Date': '12/26/2014', 'Ship Date': '12/28/2014', 'Ship Mode': 'Premium Class', 'Customer ID': 'KL-16555', 'Customer Name': 'Kelly Lampkin', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Colorado Springs', 'State': 'Colorado', 'Postal Code': 80906, 'Region': 'West', 'Product ID': 'FUR-CH-10001891', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Global Deluxe Office Fabric Chairs', 'Sales': 230.352, 'Quantity': 3, 'Discount': 0.2, 'Profit': 20.1558}
{'_id': ObjectId('689386512f20a8473aecf5e4'), 'Row ID': 296, 'Order ID': 'CA-2014-111451', 'Order Date': '12/26/2014', 'Ship Date': '12/28/2014', 'Ship Mode': 'Premium Class', 'Customer ID': 'KL-16555', 'Customer Name': 'Kelly Lampkin', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Colorado Springs', 'State': 'Colorado', 'Postal Code': 80906, 'Region': 'West', 'Product ID': 'FUR-FU-10002918', 'Category': 'Furniture', 'Sub-Category': 'Furnishings', 'Product Name': 'Eldon ClusterMat Chair Mat with Cordless Antistatic Protection', 'Sales': 218.352, 'Quantity': 3, 'Discount': 0.2, 'Profit': -24.5646}
```

In [22]: *# Find Orders Where "Sales" is Greater Than 500*

```
high_sales = orders.find({"Sales": {"$gt": 500}}).limit(50)
for order in high_sales:
    print(order)
```

```
{'_id': ObjectId('689386512f20a8473aecf4be'), 'Row ID': 2, 'Order ID': 'CA-2016-152156', 'Order Date': '11/8/2016', 'Ship Date': '11/11/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'CG-12520', 'Customer Name': 'Claire Gute', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Henderson', 'State': 'Kentucky', 'Postal Code': 42420, 'Region': 'South', 'Product ID': 'FUR-CH-10000454', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Hon Deluxe Fabric Upholstered Stacking Chairs, Rounded Back', 'Sales': 731.94, 'Quantity': 3, 'Discount': 0.0, 'Profit': 219.582}

{'_id': ObjectId('689386512f20a8473aecf4c0'), 'Row ID': 4, 'Order ID': 'US-2015-108966', 'Order Date': '10/11/2015', 'Ship Date': '10/18/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'SO-20335', 'Customer Name': "Sean O'Donnell", 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Fort Lauderdale', 'State': 'Florida', 'Postal Code': 33311, 'Region': 'South', 'Product ID': 'FUR-TA-10000577', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford CR4500 Series Slim Rectangular Table', 'Sales': 957.5775, 'Quantity': 5, 'Discount': 0.45, 'Profit': -383.031}

{'_id': ObjectId('689386512f20a8473aecf4c4'), 'Row ID': 8, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002275', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Mitel 5320 IP Phone VoIP phone', 'Sales': 907.152, 'Quantity': 6, 'Discount': 0.2, 'Profit': 90.7152}

{'_id': ObjectId('689386512f20a8473aecf4c7'), 'Row ID': 11, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'FUR-TA-10001539', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Chromcraft Rectangular Conference Tables', 'Sales': 1706.184, 'Quantity': 9, 'Discount': 0.2, 'Profit': 85.3092}

{'_id': ObjectId('689386512f20a8473aecf4c8'), 'Row ID': 12, 'Order ID': 'CA-2014-115812', 'Order Date': '6/9/2014', 'Ship Date': '6/14/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'BH-11710', 'Customer Name': 'Brosina Hoffman', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90032, 'Region': 'West', 'Product ID': 'TEC-PH-10002033', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Konftel 250 Conference\phone\Charcoal black', 'Sales': 911.424, 'Quantity': 4, 'Discount': 0.2, 'Profit': 68.3568}

{'_id': ObjectId('689386512f20a8473aecf4cd'), 'Row ID': 17, 'Order ID': 'CA-2014-105893', 'Order Date': '11/11/2014', 'Ship Date': '11/18/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'PK-19075', 'Customer Name': 'Pete Kriz', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Madison', 'State': 'Wisconsin', 'Postal Code': 53711, 'Region': 'Central', 'Product ID': 'OFF-ST-10004186', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Stur-D-Stor Shelving, Vertical 5-Shelf: 72"H x 36"W x 18 1/2"D', 'Sales': 665.88, 'Quantity': 6, 'Discount': 0.0, 'Profit': 13.3176}

{'_id': ObjectId('689386512f20a8473aecf4d5'), 'Row ID': 25, 'Order ID': 'CA-2015-106320', 'Order Date': '9/25/2015', 'Ship Date': '9/30/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'EB-13870', 'Customer Name': 'Emily Burns', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Orem', 'State': 'Utah', 'Postal Code': 84057, 'Region': 'West', 'Product ID': 'FUR-TA-10000577', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford CR4500 Series Slim Rectangular Table', 'Sales': 1044.63, 'Quantity': 3, 'Discount': 0.0, 'Profit': 240.2649}

{'_id': ObjectId('689386512f20a8473aecf4d8'), 'Row ID': 28, 'Order ID': 'US-2015-150630', 'Order Date': '9/17/2015', 'Ship Date': '9/21/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'TB-21520', 'Customer Name': 'Tracy Blumstein', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pe
```

```

nnsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'FUR-BO-100048
34', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'River
side Palais Royal Lawyers Bookcase, Royale Cherry Finish', 'Sales': 3083.43, 'Qua
ntity': 7, 'Discount': 0.5, 'Profit': -1665.0522}
{'_id': ObjectId('689386512f20a8473aecf4e0'), 'Row ID': 36, 'Order ID': 'CA-2016-
117590', 'Order Date': '12/8/2016', 'Ship Date': '12/10/2016', 'Ship Mode': 'Prem
ium Class', 'Customer ID': 'GH-14485', 'Customer Name': 'Gene Hale', 'Segment':
'Corporate', 'Country': 'United States', 'City': 'Richardson', 'State': 'Texas',
'Postal Code': 75080, 'Region': 'Central', 'Product ID': 'TEC-PH-10004977', 'Cate
gory': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'GE 30524EE4', 'Sa
les': 1097.544, 'Quantity': 7, 'Discount': 0.2, 'Profit': 123.4737}
{'_id': ObjectId('689386512f20a8473aecf4e3'), 'Row ID': 39, 'Order ID': 'CA-2015-
117415', 'Order Date': '12/27/2015', 'Ship Date': '12/31/2015', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'SN-20710', 'Customer Name': 'Steve Nguyen', 'Segmen
t': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Tesa
s', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'FUR-BO-10002545',
'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Atlantic M
etals Mobile 3-Shelf Bookcases, Custom Colors', 'Sales': 532.3992, 'Quantity': 3,
'Discount': 0.32, 'Profit': -46.9764}
{'_id': ObjectId('689386512f20a8473aecf4f3'), 'Row ID': 55, 'Order ID': 'CA-2016-
105816', 'Order Date': '12/11/2016', 'Ship Date': '12/17/2016', 'Ship Mode': 'Sta
ndard Class', 'Customer ID': 'JM-15265', 'Customer Name': 'Janet Molinari', 'Segm
ent': 'Corporate', 'Country': 'United States', 'City': 'New York City', 'State':
'New York', 'Postal Code': 10024, 'Region': 'East', 'Product ID': 'TEC-PH-1000244
7', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'AT&T CL8
3451 4-Handset Telephone', 'Sales': 1029.95, 'Quantity': 5, 'Discount': 0.0, 'Pro
fit': 298.6855}
{'_id': ObjectId('689386512f20a8473aecf500'), 'Row ID': 68, 'Order ID': 'CA-2014-
106376', 'Order Date': '12/5/2014', 'Ship Date': '12/10/2014', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'BS-11590', 'Customer Name': 'Brendan Sweed', 'Segmen
t': 'Corporate', 'Country': 'United States', 'City': 'Gilbert', 'State': 'Arizon
a', 'Postal Code': 85234, 'Region': 'West', 'Product ID': 'OFF-AR-10002671', 'Cat
egory': 'Office Supplies', 'Sub-Category': 'Art', 'Product Name': 'Hunt BOSTON Mo
del 1606 High-Volume Electric Pencil Sharpener, Beige', 'Sales': 1113.024, 'Quant
ity': 8, 'Discount': 0.2, 'Profit': 111.3024}
{'_id': ObjectId('689386512f20a8473aecf505'), 'Row ID': 73, 'Order ID': 'US-2015-
134026', 'Order Date': '4/26/2015', 'Ship Date': '5/2/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'JE-15745', 'Customer Name': 'Joel Eaton', 'Segment':
'Consumer', 'Country': 'United States', 'City': 'Memphis', 'State': 'Tennessee',
'Postal Code': 38109, 'Region': 'South', 'Product ID': 'FUR-CH-10000513', 'Catego
ry': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': "High-Back Leather Ma
nager's Chair", 'Sales': 831.936, 'Quantity': 8, 'Discount': 0.2, 'Profit': -114.
3912}
{'_id': ObjectId('689386512f20a8473aecf532'), 'Row ID': 118, 'Order ID': 'CA-2015-
110457', 'Order Date': '3/2/2015', 'Ship Date': '3/6/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'DK-13090', 'Customer Name': 'Dave Kipp', 'Segment': 'C
onsumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington',
'Postal Code': 98103, 'Region': 'West', 'Product ID': 'FUR-TA-10001768', 'Categor
y': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Hon Racetrack Confere
nce Tables', 'Sales': 787.53, 'Quantity': 3, 'Discount': 0.0, 'Profit': 165.3813}
{'_id': ObjectId('689386512f20a8473aecf539'), 'Row ID': 125, 'Order ID': 'US-2014-
152030', 'Order Date': '12/26/2014', 'Ship Date': '12/28/2014', 'Ship Mode': 'Se
cond Class', 'Customer ID': 'AD-10180', 'Customer Name': 'Alan Dominguez', 'Segme
nt': 'Home Office', 'Country': 'United States', 'City': 'Houston', 'State': 'Tesa
s', 'Postal Code': 77041, 'Region': 'Central', 'Product ID': 'FUR-CH-10004063',
'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': "Global Deluxe
High-Back Manager's Chair", 'Sales': 600.558, 'Quantity': 3, 'Discount': 0.3, 'Pr
ofit': -8.5794}
{'_id': ObjectId('689386512f20a8473aecf53a'), 'Row ID': 126, 'Order ID': 'US-2014-
134614', 'Order Date': '9/20/2014', 'Ship Date': '9/25/2014', 'Ship Mode': 'Stan

```

```

dard Class', 'Customer ID': 'PF-19165', 'Customer Name': 'Philip Fox', 'Segment':
'Consumer', 'Country': 'United States', 'City': 'Bloomington', 'State': 'Illinoi
s', 'Postal Code': 61701, 'Region': 'Central', 'Product ID': 'FUR-TA-10004534',
'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bevis 44 x 96
Conference Tables', 'Sales': 617.7, 'Quantity': 6, 'Discount': 0.5, 'Profit': -40
7.682}
{'_id': ObjectId('689386512f20a8473aecf54d'), 'Row ID': 145, 'Order ID': 'CA-2017
-155376', 'Order Date': '12/22/2017', 'Ship Date': '12/27/2017', 'Ship Mode': 'St
andard Class', 'Customer ID': 'SG-20080', 'Customer Name': 'Sandra Glassco', 'Seg
ment': 'Consumer', 'Country': 'United States', 'City': 'Independence', 'State':
'Missouri', 'Postal Code': 64055, 'Region': 'Central', 'Product ID': 'OFF-AP-1000
1058', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Nam
e': 'Sanyo 2.5 Cubic Foot Mid-Size Office Refrigerators', 'Sales': 839.43, 'Quant
ity': 3, 'Discount': 0.0, 'Profit': 218.2518}
{'_id': ObjectId('689386512f20a8473aecf54e'), 'Row ID': 146, 'Order ID': 'CA-2015
-110744', 'Order Date': '9/7/2015', 'Ship Date': '9/12/2015', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'HA-14920', 'Customer Name': 'Helen Andreada', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Pasadena', 'State': 'Califor
nia', 'Postal Code': 91104, 'Region': 'West', 'Product ID': 'OFF-ST-10003656', 'C
ategory': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Safco In
dustrial Wire Shelving', 'Sales': 671.93, 'Quantity': 7, 'Discount': 0.0, 'Profi
t': 20.1579}
{'_id': ObjectId('689386512f20a8473aecf552'), 'Row ID': 150, 'Order ID': 'CA-2016
-114489', 'Order Date': '12/5/2016', 'Ship Date': '12/9/2016', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'JE-16165', 'Customer Name': 'Justin Ellison', 'Segmen
t': 'Corporate', 'Country': 'United States', 'City': 'Franklin', 'State': 'Wisco
nsin', 'Postal Code': 53132, 'Region': 'Central', 'Product ID': 'FUR-CH-1000045
4', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Hon Delux
e Fabric Upholstered Stacking Chairs, Rounded Back', 'Sales': 1951.84, 'Quantit
y': 8, 'Discount': 0.0, 'Profit': 585.552}
{'_id': ObjectId('689386512f20a8473aecf55c'), 'Row ID': 160, 'Order ID': 'CA-2016
-114104', 'Order Date': '11/20/2016', 'Ship Date': '11/24/2016', 'Ship Mode': 'St
andard Class', 'Customer ID': 'NP-18670', 'Customer Name': 'Nora Paige', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Edmond', 'State': 'Oklahom
a', 'Postal Code': 73034, 'Region': 'Central', 'Product ID': 'TEC-PH-10004536',
'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Avaya 5420 D
igital phone', 'Sales': 944.93, 'Quantity': 7, 'Discount': 0.0, 'Profit': 236.232
5}
{'_id': ObjectId('689386512f20a8473aecf562'), 'Row ID': 166, 'Order ID': 'CA-2014
-139892', 'Order Date': '9/8/2014', 'Ship Date': '9/12/2014', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'BM-11140', 'Customer Name': 'Becky Martin', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'San Antonio', 'State': 'Texa
s', 'Postal Code': 78207, 'Region': 'Central', 'Product ID': 'TEC-MA-10000822',
'Category': 'Technology', 'Sub-Category': 'Machines', 'Product Name': 'Lexmark MX
611dhe Monochrome Laser Printer', 'Sales': 8159.952, 'Quantity': 8, 'Discount':
0.4, 'Profit': -1359.992}
{'_id': ObjectId('689386512f20a8473aecf564'), 'Row ID': 168, 'Order ID': 'CA-2014
-139892', 'Order Date': '9/8/2014', 'Ship Date': '9/12/2014', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'BM-11140', 'Customer Name': 'Becky Martin', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'San Antonio', 'State': 'Texa
s', 'Postal Code': 78207, 'Region': 'Central', 'Product ID': 'FUR-CH-10004287',
'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'SAFCO Arco Fo
lding Chair', 'Sales': 1740.06, 'Quantity': 9, 'Discount': 0.3, 'Profit': -24.85
8}
{'_id': ObjectId('689386512f20a8473aecf573'), 'Row ID': 183, 'Order ID': 'CA-2014
-158274', 'Order Date': '11/19/2014', 'Ship Date': '11/24/2014', 'Ship Mode': 'Se
cond Class', 'Customer ID': 'RM-19675', 'Customer Name': 'Robert Marley', 'Segmen
t': 'Home Office', 'Country': 'United States', 'City': 'Monroe', 'State': 'Louis
iana', 'Postal Code': 71203, 'Region': 'South', 'Product ID': 'TEC-PH-10003273',
'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'AT&T TR1909

```



```

W', 'Sales': 503.96, 'Quantity': 4, 'Discount': 0.0, 'Profit': 131.0296}
{'_id': ObjectId('689386512f20a8473aecf57a'), 'Row ID': 190, 'Order ID': 'CA-2015-102281', 'Order Date': '10/12/2015', 'Ship Date': '10/14/2015', 'Ship Mode': 'Premium Class', 'Customer ID': 'MP-17470', 'Customer Name': 'Mark Packer', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'New York City', 'State': 'New York', 'Postal Code': 10035, 'Region': 'East', 'Product ID': 'FUR-BO-10002613', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Atlantic Metals Mobile 4-Shelf Bookcases, Custom Colors', 'Sales': 899.136, 'Quantity': 4, 'Discount': 0.2, 'Profit': 112.392}
{'_id': ObjectId('689386512f20a8473aecf57d'), 'Row ID': 193, 'Order ID': 'CA-2015-102281', 'Order Date': '10/12/2015', 'Ship Date': '10/14/2015', 'Ship Mode': 'Premium Class', 'Customer ID': 'MP-17470', 'Customer Name': 'Mark Packer', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'New York City', 'State': 'New York', 'Postal Code': 10035, 'Region': 'East', 'Product ID': 'FUR-BO-10002545', 'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Atlantic Metals Mobile 3-Shelf Bookcases, Custom Colors', 'Sales': 626.352, 'Quantity': 3, 'Discount': 0.2, 'Profit': 46.9764}
{'_id': ObjectId('689386512f20a8473aecf594'), 'Row ID': 216, 'Order ID': 'CA-2015-146262', 'Order Date': '1/2/2015', 'Ship Date': '1/9/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'VW-21775', 'Customer Name': 'Victoria Wilson', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Medina', 'State': 'Ohio', 'Postal Code': 44256, 'Region': 'East', 'Product ID': 'TEC-MA-10000864', 'Category': 'Technology', 'Sub-Category': 'Machines', 'Product Name': 'Cisco 9971 IP Video Phone Charcoal', 'Sales': 1188.0, 'Quantity': 9, 'Discount': 0.7, 'Profit': -950.4}
{'_id': ObjectId('689386512f20a8473aecf59f'), 'Row ID': 227, 'Order ID': 'CA-2015-163055', 'Order Date': '8/9/2015', 'Ship Date': '8/16/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'DS-13180', 'Customer Name': 'David Smith', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Detroit', 'State': 'Michigan', 'Postal Code': 48227, 'Region': 'Central', 'Product ID': 'FUR-TA-10003748', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bevis 36 x 72 Conference Tables', 'Sales': 622.45, 'Quantity': 5, 'Discount': 0.0, 'Profit': 136.939}
{'_id': ObjectId('689386512f20a8473aecf5a5'), 'Row ID': 233, 'Order ID': 'US-2017-100930', 'Order Date': '4/7/2017', 'Ship Date': '4/12/2017', 'Ship Mode': 'Standard Class', 'Customer ID': 'CS-12400', 'Customer Name': 'Christopher Schild', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Tampa', 'State': 'Florida', 'Postal Code': 33614, 'Region': 'South', 'Product ID': 'FUR-TA-10003473', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bretford Rectangular Conference Table Tops', 'Sales': 620.6145, 'Quantity': 3, 'Discount': 0.45, 'Profit': -248.2458}
{'_id': ObjectId('689386512f20a8473aecf5a8'), 'Row ID': 236, 'Order ID': 'US-2017-100930', 'Order Date': '4/7/2017', 'Ship Date': '4/12/2017', 'Ship Mode': 'Standard Class', 'Customer ID': 'CS-12400', 'Customer Name': 'Christopher Schild', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Tampa', 'State': 'Florida', 'Postal Code': 33614, 'Region': 'South', 'Product ID': 'TEC-AC-10003832', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Logitech \xa0P710e Mobile Speakerphone', 'Sales': 617.976, 'Quantity': 3, 'Discount': 0.2, 'Profit': -7.7247}
{'_id': ObjectId('689386512f20a8473aecf5b1'), 'Row ID': 245, 'Order ID': 'CA-2014-131926', 'Order Date': '6/1/2014', 'Ship Date': '6/6/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'DW-13480', 'Customer Name': 'Dianna Wilson', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'Lakeville', 'State': 'Minnesota', 'Postal Code': 55044, 'Region': 'Central', 'Product ID': 'FUR-CH-10004063', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': "Global Deluxe High-Back Manager's Chair", 'Sales': 2001.86, 'Quantity': 7, 'Discount': 0.0, 'Profit': 580.5394}
{'_id': ObjectId('689386512f20a8473aecf5b4'), 'Row ID': 248, 'Order ID': 'CA-2014-131926', 'Order Date': '6/1/2014', 'Ship Date': '6/6/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'DW-13480', 'Customer Name': 'Dianna Wilson', 'Segment':

```

```

'Home Office', 'Country': 'United States', 'City': 'Lakeville', 'State': 'Minnesota', 'Postal Code': 55044, 'Region': 'Central', 'Product ID': 'OFF-AP-10002945', 'Category': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': "Honeywell Enviracaire Portable HEPA Air Cleaner for 17' x 22' Room", 'Sales': 1503.25, 'Quantity': 5, 'Discount': 0.0, 'Profit': 496.0725}
{'_id': ObjectId('689386512f20a8473aecf5b8'), 'Row ID': 252, 'Order ID': 'CA-2016-145625', 'Order Date': '9/11/2016', 'Ship Date': '9/17/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'KC-16540', 'Customer Name': 'Kelly Collister', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'San Diego', 'State': 'California', 'Postal Code': 92037, 'Region': 'West', 'Product ID': 'TEC-AC-10003832', 'Category': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'Logitech h\x0P710e Mobile Speakerphone', 'Sales': 3347.37, 'Quantity': 13, 'Discount': 0.0, 'Profit': 636.0003}
{'_id': ObjectId('689386512f20a8473aecf5be'), 'Row ID': 258, 'Order ID': 'US-2015-159982', 'Order Date': '11/28/2015', 'Ship Date': '12/4/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'DR-12880', 'Customer Name': 'Dan Reichenbach', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Chicago', 'State': 'Illinois', 'Postal Code': 60623, 'Region': 'Central', 'Product ID': 'TEC-PH-10001580', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Logitech Mobile Speakerphone P710e -\xa0speaker phone', 'Sales': 647.904, 'Quantity': 6, 'Discount': 0.2, 'Profit': 56.6916}
{'_id': ObjectId('689386512f20a8473aecf5c3'), 'Row ID': 263, 'Order ID': 'US-2014-106992', 'Order Date': '9/19/2014', 'Ship Date': '9/21/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'SB-20290', 'Customer Name': 'Sean Braxton', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77036, 'Region': 'Central', 'Product ID': 'TEC-MA-10000822', 'Category': 'Technology', 'Sub-Category': 'Machines', 'Product Name': 'Lexmark MX611dhe Monochrome Laser Printer', 'Sales': 3059.982, 'Quantity': 3, 'Discount': 0.4, 'Profit': -509.997}
{'_id': ObjectId('689386512f20a8473aecf5c4'), 'Row ID': 264, 'Order ID': 'US-2014-106992', 'Order Date': '9/19/2014', 'Ship Date': '9/21/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'SB-20290', 'Customer Name': 'Sean Braxton', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77036, 'Region': 'Central', 'Product ID': 'TEC-MA-10003353', 'Category': 'Technology', 'Sub-Category': 'Machines', 'Product Name': 'Xerox WorkCentre 6505DN Laser Multifunction Printer', 'Sales': 2519.958, 'Quantity': 7, 'Discount': 0.4, 'Profit': -251.9958}
{'_id': ObjectId('689386512f20a8473aecf5cb'), 'Row ID': 271, 'Order ID': 'CA-2017-163979', 'Order Date': '12/28/2017', 'Ship Date': '1/2/2018', 'Ship Mode': 'Second Class', 'Customer ID': 'KH-16690', 'Customer Name': 'Kristen Hastings', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Francisco', 'State': 'California', 'Postal Code': 94110, 'Region': 'West', 'Product ID': 'OFF-ST-10003208', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Adjustable Depth Letter/Legal Cart', 'Sales': 725.84, 'Quantity': 4, 'Discount': 0.0, 'Profit': 210.4936}
{'_id': ObjectId('689386512f20a8473aecf5d6'), 'Row ID': 282, 'Order ID': 'US-2015-161991', 'Order Date': '9/26/2015', 'Ship Date': '9/28/2015', 'Ship Mode': 'Second Class', 'Customer ID': 'SC-20725', 'Customer Name': 'Steven Cartwright', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Houston', 'State': 'Texas', 'Postal Code': 77070, 'Region': 'Central', 'Product ID': 'TEC-PH-10001760', 'Category': 'Technology', 'Sub-Category': 'Phones', 'Product Name': 'Bose SoundLink Bluetooth Speaker', 'Sales': 1114.4, 'Quantity': 7, 'Discount': 0.2, 'Profit': 376.11}
{'_id': ObjectId('689386512f20a8473aecf5d7'), 'Row ID': 283, 'Order ID': 'CA-2015-130890', 'Order Date': '11/2/2015', 'Ship Date': '11/6/2015', 'Ship Mode': 'Standard Class', 'Customer ID': 'JO-15280', 'Customer Name': "Jas O'Carroll", 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90004, 'Region': 'West', 'Product ID': 'FUR-TA-10002903', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Bevis Round Bullnose 29" High Table Top', 'Sales': 1038.84, 'Quantity': 5, 'Discount': 0.2, 'P

```

```

profit': 51.942}
{'_id': ObjectId('689386512f20a8473aecf5dd'), 'Row ID': 289, 'Order ID': 'CA-2016-112697', 'Order Date': '12/18/2016', 'Ship Date': '12/20/2016', 'Ship Mode': 'Second Class', 'Customer ID': 'AH-10195', 'Customer Name': 'Alan Haines', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Tamarac', 'State': 'Florida', 'Postal Code': 33319, 'Region': 'South', 'Product ID': 'OFF-SU-10000646', 'Category': 'Office Supplies', 'Sub-Category': 'Supplies', 'Product Name': 'Premier Automatic Letter Opener', 'Sales': 961.48, 'Quantity': 5, 'Discount': 0.2, 'Profit': -204.3145}
{'_id': ObjectId('689386512f20a8473aecf5e8'), 'Row ID': 300, 'Order ID': 'CA-2016-142545', 'Order Date': '10/28/2016', 'Ship Date': '11/3/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'JD-15895', 'Customer Name': 'Jonathan Doherty', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Belleville', 'State': 'New Jersey', 'Postal Code': 7109, 'Region': 'East', 'Product ID': 'OFF-ST-10002756', 'Category': 'Office Supplies', 'Sub-Category': 'Storage', 'Product Name': 'Tennisco Stur-D-Stor Boltless Shelving, 5 Shelves, 24" Deep, Sand', 'Sales': 1082.48, 'Quantity': 8, 'Discount': 0.0, 'Profit': 10.8248}
{'_id': ObjectId('689386512f20a8473aecf5fb'), 'Row ID': 319, 'Order ID': 'CA-2014-164973', 'Order Date': '11/4/2014', 'Ship Date': '11/9/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'NM-18445', 'Customer Name': 'Nathan Mautz', 'Segment': 'Home Office', 'Country': 'United States', 'City': 'New York City', 'State': 'New York', 'Postal Code': 10024, 'Region': 'East', 'Product ID': 'TEC-MA-10002927', 'Category': 'Technology', 'Sub-Category': 'Machines', 'Product Name': 'Canon imageCLASS MF7460 Monochrome Digital Laser Multifunction Copier', 'Sales': 3991.98, 'Quantity': 2, 'Discount': 0.0, 'Profit': 1995.99}
{'_id': ObjectId('689386512f20a8473aecf605'), 'Row ID': 329, 'Order ID': 'US-2016-141544', 'Order Date': '8/30/2016', 'Ship Date': '9/1/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'PO-18850', 'Customer Name': "Patrick O'Brill", 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pennsylvania', 'Postal Code': 19143, 'Region': 'East', 'Product ID': 'FUR-CH-10003312', 'Category': 'Furniture', 'Sub-Category': 'Chairs', 'Product Name': 'Hon 2090 \x93Pillow Soft\x94 Series Mid Back Swivel/Tilt Chairs', 'Sales': 786.744, 'Quantity': 4, 'Discount': 0.3, 'Profit': -258.5016}
{'_id': ObjectId('689386512f20a8473aecf60c'), 'Row ID': 336, 'Order ID': 'CA-2015-137946', 'Order Date': '9/1/2015', 'Ship Date': '9/4/2015', 'Ship Mode': 'Second Class', 'Customer ID': 'DB-13615', 'Customer Name': 'Doug Bickford', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Los Angeles', 'State': 'California', 'Postal Code': 90045, 'Region': 'West', 'Product ID': 'TEC-CO-10001449', 'Category': 'Technology', 'Sub-Category': 'Copiers', 'Product Name': 'Hewlett Packard LaserJet 3310 Copier', 'Sales': 959.984, 'Quantity': 2, 'Discount': 0.2, 'Profit': 335.9944}
{'_id': ObjectId('689386512f20a8473aecf60f'), 'Row ID': 339, 'Order ID': 'CA-2014-129924', 'Order Date': '7/12/2014', 'Ship Date': '7/17/2014', 'Ship Mode': 'Standard Class', 'Customer ID': 'AC-10420', 'Customer Name': 'Alyssa Crouse', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'San Francisco', 'State': 'California', 'Postal Code': 94122, 'Region': 'West', 'Product ID': 'FUR-TA-10004575', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Hon 5100 Series Wood Tables', 'Sales': 698.352, 'Quantity': 3, 'Discount': 0.2, 'Profit': -17.4588}
{'_id': ObjectId('689386512f20a8473aecf612'), 'Row ID': 342, 'Order ID': 'CA-2014-122336', 'Order Date': '4/13/2014', 'Ship Date': '4/17/2014', 'Ship Mode': 'Second Class', 'Customer ID': 'JD-15895', 'Customer Name': 'Jonathan Doherty', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Philadelphia', 'State': 'Pennsylvania', 'Postal Code': 19140, 'Region': 'East', 'Product ID': 'OFF-BI-10003656', 'Category': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'Fellows PB200 Plastic Comb Binding Machine', 'Sales': 509.97, 'Quantity': 10, 'Discount': 0.7, 'Profit': -407.976}
{'_id': ObjectId('689386512f20a8473aecf61e'), 'Row ID': 354, 'Order ID': 'CA-2016-129714', 'Order Date': '9/1/2016', 'Ship Date': '9/3/2016', 'Ship Mode': 'Premium Class', 'Customer ID': 'AB-10060', 'Customer Name': 'Adam Bellavance', 'Segment':

```

```
t': 'Home Office', 'Country': 'United States', 'City': 'New York City', 'State':
'New York', 'Postal Code': 10009, 'Region': 'East', 'Product ID': 'OFF-BI-1000499
5', 'Category': 'Office Supplies', 'Sub-Category': 'Binders', 'Product Name': 'GB
C DocuBind P400 Electric Binding System', 'Sales': 4355.168, 'Quantity': 4, 'Disc
ount': 0.2, 'Profit': 1415.4296}
{'_id': ObjectId('689386512f20a8473aecf624'), 'Row ID': 360, 'Order ID': 'CA-2017
-155698', 'Order Date': '3/8/2017', 'Ship Date': '3/11/2017', 'Ship Mode': 'Premi
um Class', 'Customer ID': 'VB-21745', 'Customer Name': 'Victoria Brennan', 'Segme
nt': 'Corporate', 'Country': 'United States', 'City': 'Columbus', 'State': 'Georg
ia', 'Postal Code': 31907, 'Region': 'South', 'Product ID': 'OFF-AP-10001124', 'C
ategory': 'Office Supplies', 'Sub-Category': 'Appliances', 'Product Name': 'Belki
n 8 Outlet SurgeMaster II Gold Surge Protector with Phone Protection', 'Sales': 6
47.84, 'Quantity': 8, 'Discount': 0.0, 'Profit': 168.4384}
{'_id': ObjectId('689386512f20a8473aecf62e'), 'Row ID': 370, 'Order ID': 'CA-2016
-155516', 'Order Date': '10/21/2016', 'Ship Date': '10/21/2016', 'Ship Mode': 'Sa
me Day', 'Customer ID': 'MK-17905', 'Customer Name': 'Michael Kennedy', 'Segmen
t': 'Corporate', 'Country': 'United States', 'City': 'Manchester', 'State': 'Conn
ecticut', 'Postal Code': 6040, 'Region': 'East', 'Product ID': 'FUR-BO-10002545',
'Category': 'Furniture', 'Sub-Category': 'Bookcases', 'Product Name': 'Atlantic M
etals Mobile 3-Shelf Bookcases, Custom Colors', 'Sales': 1043.92, 'Quantity': 4,
'Discount': 0.0, 'Profit': 271.4192}
{'_id': ObjectId('689386512f20a8473aecf632'), 'Row ID': 374, 'Order ID': 'US-2014
-119137', 'Order Date': '7/23/2014', 'Ship Date': '7/27/2014', 'Ship Mode': 'Stan
dard Class', 'Customer ID': 'AG-10900', 'Customer Name': 'Arthur Gainer', 'Segmen
t': 'Consumer', 'Country': 'United States', 'City': 'Tucson', 'State': 'Arizona',
'Postal Code': 85705, 'Region': 'West', 'Product ID': 'TEC-AC-10003911', 'Categor
y': 'Technology', 'Sub-Category': 'Accessories', 'Product Name': 'NETGEAR AC1750
Dual Band Gigabit\Smart WiFi Router', 'Sales': 1023.936, 'Quantity': 8, 'Disco
unt': 0.2, 'Profit': 179.1888}
{'_id': ObjectId('689386512f20a8473aecf636'), 'Row ID': 378, 'Order ID': 'US-2017
-134481', 'Order Date': '8/27/2017', 'Ship Date': '9/1/2017', 'Ship Mode': 'Stand
ard Class', 'Customer ID': 'AR-10405', 'Customer Name': 'Allen Rosenblatt', 'Segm
ent': 'Corporate', 'Country': 'United States', 'City': 'Franklin', 'State': 'Mass
achusetts', 'Postal Code': 2038, 'Region': 'East', 'Product ID': 'FUR-TA-1000491
5', 'Category': 'Furniture', 'Sub-Category': 'Tables', 'Product Name': 'Office Im
pressions End Table, 20-1/2"H x 24"W x 20"D', 'Sales': 1488.424, 'Quantity': 7,
'Discount': 0.3, 'Profit': -297.6848}
```

In [11]: *# Top 3 Orders by Profit*

```
top_profit = orders.find().sort("Profit", -1).limit(3)
for order in top_profit:
    print(order)
```

```
{'_id': ObjectId('68938a04ffb1b9388a7152d6'), 'Row ID': 6827, 'Order ID': 'CA-2016-118689', 'Order Date': '10/2/2016', 'Ship Date': '10/9/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'TC-20980', 'Customer Name': 'Tamara Chand', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Lafayette', 'State': 'Indiana', 'Postal Code': 47905, 'Region': 'Central', 'Product ID': 'TEC-CO-10004722', 'Category': 'Technology', 'Sub-Category': 'Copiers', 'Product Name': 'Canon image CLASS 2200 Advanced Copier', 'Sales': 17499.95, 'Quantity': 5, 'Discount': 0.0, 'Profit': 8399.976}
{'_id': ObjectId('689386512f20a8473aed0f67'), 'Row ID': 6827, 'Order ID': 'CA-2016-118689', 'Order Date': '10/2/2016', 'Ship Date': '10/9/2016', 'Ship Mode': 'Standard Class', 'Customer ID': 'TC-20980', 'Customer Name': 'Tamara Chand', 'Segment': 'Corporate', 'Country': 'United States', 'City': 'Lafayette', 'State': 'Indiana', 'Postal Code': 47905, 'Region': 'Central', 'Product ID': 'TEC-CO-10004722', 'Category': 'Technology', 'Sub-Category': 'Copiers', 'Product Name': 'Canon image CLASS 2200 Advanced Copier', 'Sales': 17499.95, 'Quantity': 5, 'Discount': 0.0, 'Profit': 8399.976}
{'_id': ObjectId('689386512f20a8473aed1496'), 'Row ID': 8154, 'Order ID': 'CA-2017-140151', 'Order Date': '3/23/2017', 'Ship Date': '3/25/2017', 'Ship Mode': 'Premium Class', 'Customer ID': 'RB-19360', 'Customer Name': 'Raymond Buch', 'Segment': 'Consumer', 'Country': 'United States', 'City': 'Seattle', 'State': 'Washington', 'Postal Code': 98115, 'Region': 'West', 'Product ID': 'TEC-CO-10004722', 'Category': 'Technology', 'Sub-Category': 'Copiers', 'Product Name': 'Canon imageCLASS 2200 Advanced Copier', 'Sales': 13999.96, 'Quantity': 4, 'Discount': 0.0, 'Profit': 6719.9808}
```

In [12]: *# Update Ship mode from "First Class" to "Premium Class"*

```
result = orders.update_many(
    {"Ship Mode": "First Class"},
    {"$set": {"Ship Mode": "Premium Class"}}
)
print(f"Updated {result.modified_count} documents.")
```

Updated 1538 documents.

In [13]: *# Delete Orders where sales < 50*

```
deleted = orders.delete_many({"Sales": {"$lt": 50}})
print(f"Deleted {deleted.deleted_count} documents.")
```

Deleted 4849 documents.

In [14]: *# Group Orders by Region and calculate Total sales*

```
pipeline = [
    {"$group": {"_id": "$Region", "total_sales": {"$sum": "$Sales"}}}
]
region_sales = orders.aggregate(pipeline)
for region in region_sales:
    print(region)
```

```
{'_id': 'South', 'total_sales': 752046.624}
{'_id': 'Central', 'total_sales': 959223.6916}
{'_id': 'West', 'total_sales': 1389373.239}
{'_id': 'East', 'total_sales': 1302275.41}
```

In [15]: *# Fetch ALL Distinct Ship Modes*

```
ship_modes = orders.distinct("Ship Mode")
print("Distinct Ship Modes:", ship_modes)
```

Distinct Ship Modes: ['Premium Class', 'Same Day', 'Second Class', 'Standard Class']

In [16]: *# count Orders per Category*

```
pipeline = [  
    {"$group": {"_id": "$Category", "count": {"$sum": 1}}}]  
category_counts = orders.aggregate(pipeline)  
for category in category_counts:  
    print(category)
```

```
{'_id': 'Furniture', 'count': 3146}  
{'_id': 'Technology', 'count': 2992}  
{'_id': 'Office Supplies', 'count': 4152}
```