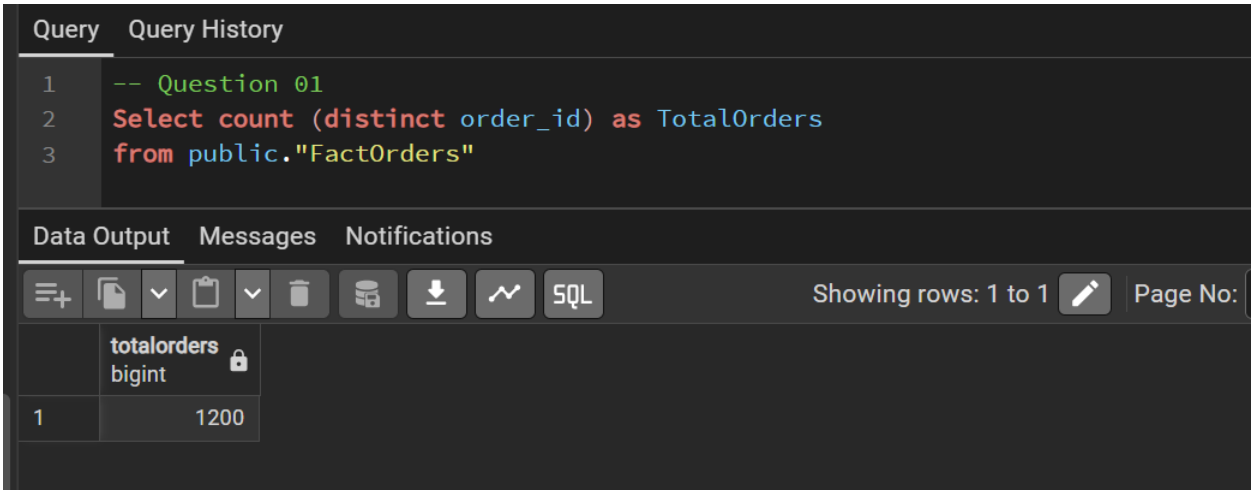
Business Question

Customer & Order Fundamentals

Question 01 : How many total orders has UrbanCart received so far?

Answer : Total Order Number is 1200

SQL Query :

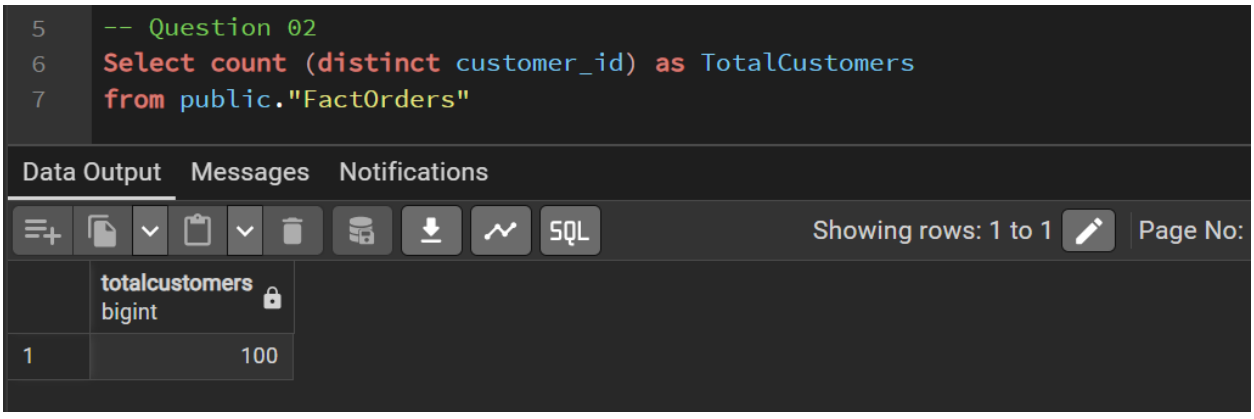


Business Insight : UrbanCart has processed a total of 1,200 orders, indicating a healthy level of customer activity on the platform. This order volume suggests consistent demand across products and cities. With this scale, UrbanCart has a strong foundation to optimize operations, marketing strategies, and customer retention initiatives.

Question 02 : How many unique customers have placed at least one order?

Answer : Total unique customer number is 100

SQL Query :



Busines Insight: The platform has 100 unique customers who have placed at least one order, indicating an active and engaged customer base. When compared with the total number of orders, this suggests that several customers are making repeat purchases. UrbanCart can further grow revenue by focusing on customer retention and repeat-order strategies.

Question 03 : Which cities generate the highest number of orders?

Answer : Barishal city and highest order number is 173

SQL Query :

```
-- Question 03
Select c.city, count(o.order_id) as TotalOrders
From public."FactOrders" o
Join "DimCustomers" c
on o.customer_id = c.customer_id
group by c.city
order by TotalOrders Desc
Limit 1;
```

Data Output | Messages | Graph Visualiser | Notifications

Showing rows: 1 to 1 | Page No:

	city text	totalorders bigint
1	Barishal	173

Busines Insight : The analysis shows that Barishal generates the highest number of orders, with a total of 173 orders, making it UrbanCart's top-performing city by order volume. This indicates strong customer demand and engagement in this location. UrbanCart can prioritize Barishal for targeted marketing campaigns, faster delivery services, and inventory planning to further capitalize on this demand.

Question 04 : What percentage of customers have placed more than one order?

Answer : 100%

SQL Query :

```sql
-- Question 04
WITH CustomerOrders AS (
    SELECT customer_id, COUNT(order_id) AS OrderCount
    FROM "FactOrders"
    GROUP BY customer_id
)
SELECT
    ROUND(
        100.0 * SUM(CASE WHEN OrderCount > 1 THEN 1 ELSE 0 END) / COUNT(*),
        2
    ) AS RepeatCustomerPercentage
FROM CustomerOrders;
```

Data Output | Messages | Graph Visualiser | Notifications

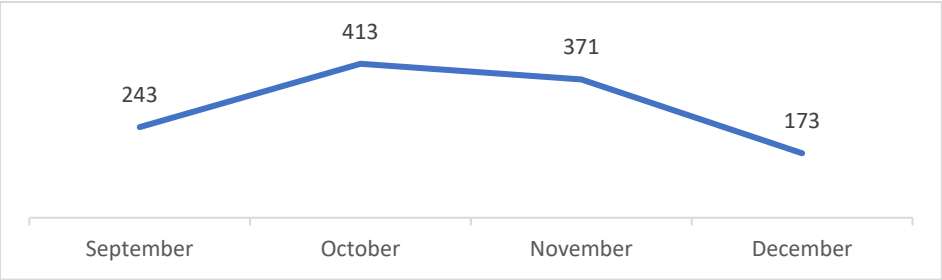
Showing rows: 1 to 1 | Page No: 1

	repeatcustomerpercentage numeric
1	100.00

Business Insight: The analysis shows that **100% of customers have placed more than one order**, indicating extremely strong repeat purchasing behavior on the platform. This suggests a high level of customer satisfaction and loyalty among UrbanCart users. UrbanCart can capitalize on this by strengthening loyalty programs and personalized offers to further increase lifetime customer value.

Question 05 : What is the monthly trend of total orders over time?

Answer :



SQL Query :

```sql
-- Question 05
SELECT
    DATE_TRUNC('month', order_date::date) AS OrderMonth,
    COUNT(order_id) AS TotalOrders
FROM "FactOrders"
GROUP BY DATE_TRUNC('month', order_date::date)
ORDER BY OrderMonth;
```

Data Output | Messages | Graph Visualiser | Notifications

Showing rows: 1 to 4 | Page No:

	ordermonth timestamp with time zone	totalorders bigint
1	2025-09-01 00:00:00+00	243
2	2025-10-01 00:00:00+00	413
3	2025-11-01 00:00:00+00	371
4	2025-12-01 00:00:00+00	173

Business Insight: This trend shows whether UrbanCart's order volume is increasing or decreasing over time. It helps analyze seasonality, campaign impact, and overall business growth patterns.

Revenue & Product Performance

Question 06 : What is the total revenue generated by UrbanCart?
Answer : Total revenue is 22,45,122 taka
SQL Query :

```sql
-- Question 06
SELECT
    SUM(foi.quantity * p.unit_price) AS TotalRevenue
FROM "FactOrderItems" foi
JOIN "DimProducts" p
    ON foi.product_id = p.product_id;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No:

	totalrevenue numeric
1	2245122

Business Insight: UrbanCart has generated a total revenue of 2,245,122, reflecting strong overall sales performance across its product portfolio. This level of revenue indicates healthy customer demand and effective order conversion. With this revenue base, UrbanCart is well positioned to focus on scaling high-performing products and optimizing pricing and promotional strategies.

Question 07 : Which product categories contribute the most to total revenue?

Answer : Fashion Category 5,13,550 taka

SQL Query :

```sql
-- Question 07
SELECT
    p.category,
    SUM(foi.quantity * p.unit_price) AS CategoryRevenue
FROM "FactOrderItems" foi
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY p.category
ORDER BY CategoryRevenue DESC
limit 1;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No:

	category text	categoryrevenue numeric
1	Fashion	513550

Business Insight: This analysis shows which product categories generate the highest revenue. UrbanCart can focus more on these categories to make promotions and inventory planning more effective.

Question 08 : Which individual products generate the highest revenue?

Answer : Power Bank 10000mAh 3,04,000 taka

SQL Query :

```sql
-- Question 08
SELECT
    p.product_name,
    SUM(foi.quantity * p.unit_price) AS ProductRevenue
FROM "FactOrderItems" foi
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY p.product_name
ORDER BY ProductRevenue DESC
LIMIT 1;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No:

	product_name text	productrevenue numeric
1	Power Bank 10000m...	304000

Business Insight :

The analysis shows that Power Bank 10000mAh is the highest revenue-generating product, contributing 304,000 in total revenue. This indicates strong demand and high customer willingness to spend on this product. UrbanCart should prioritize this item for inventory planning, premium placement, and cross-selling with complementary products to maximize revenue.

Question 09 : What is the Average Order Value (AOV) and Average Basket Size?

Answer : Average order value 1870.94 and Average Basket Size 9.96

SQL Query :

```sql
-- Question 09
WITH OrderSummary AS (
    SELECT
        o.order_id,
        SUM(foi.quantity * p.unit_price) AS OrderValue,
        SUM(foi.quantity) AS TotalItems
    FROM "FactOrders" o
    JOIN "FactOrderItems" foi
        ON o.order_id = foi.order_id
    JOIN "DimProducts" p
        ON foi.product_id = p.product_id
    GROUP BY o.order_id
)
SELECT
    ROUND(AVG(OrderValue), 2) AS AverageOrderValue,
    ROUND(AVG(TotalItems), 2) AS AverageBasketSize
FROM OrderSummary;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No:

	averageordervalue numeric	averagebasketsize numeric
1	1870.94	9.96

Business Insight:

The average order value on UrbanCart is 1,870.94, while customers purchase an average of 9.96 items per order, indicating healthy basket sizes. This suggests that customers are willing to buy multiple items in a single transaction. UrbanCart can further increase revenue by introducing bundle offers and volume-based discounts to encourage higher-value purchases.

Question 10 : Which products are at risk of stock-out due to high sales volume and low inventory?

Answer :

product_name	totalsold	stock
Power Bank 10000mAh	320	90
Wallet (Men)	281	150
Horlicks 500g	272	180
Ladies Bag	237	150

SQL Query :

```sql
-- Question 10
SELECT
    p.product_name,
    SUM(foi.quantity) AS TotalSold,
    p.stock
FROM "FactOrderItems" foi
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY p.product_name, p.stock
HAVING p.stock < 200
ORDER BY TotalSold DESC;
```

Data Output | Messages | Notifications

Showing rows: 1 to 4 | Page No: 1

	product_name text	totalsold numeric	stock bigint
1	Power Bank 10000mAh	320	90
2	Wallet (Men)	281	150
3	Horlicks 500g	272	180
4	Ladies Bag	237	150

Business Insight:

The analysis highlights several high-selling products, such as Power Bank 10000mAh, Wallet (Men), and Horlicks 500g, that currently have relatively low stock levels. These products are at risk of stock-out due to strong sales demand compared to available inventory. UrbanCart should prioritize restocking these items to avoid lost sales and maintain customer satisfaction.

Customer Behavior & Segmentation

Question 11 : Which customers contribute the highest total revenue?

Answer :

customer_id	full_name	totalrevenue
70	Raisa	42516

SQL Query :

```sql
-- Question 11
SELECT
    c.customer_id,
    c.full_name,
    SUM(foi.quantity * p.unit_price) AS TotalRevenue
FROM "FactOrders" o
JOIN "DimCustomers" c
    ON o.customer_id = c.customer_id
JOIN "FactOrderItems" foi
    ON o.order_id = foi.order_id
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY c.customer_id, c.full_name
ORDER BY TotalRevenue DESC
LIMIT 1;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No: 1

	customer_id [PK] bigint	full_name text	totalrevenue numeric
1	70	Raisa	42516

Business Insight:

The analysis shows that Raisa is the highest revenue-contributing customer, generating a total of 42,516 in revenue. This indicates strong purchasing power and high engagement from this customer. UrbanCart should prioritize such high-value customers with personalized offers, loyalty rewards, and exclusive promotions to maximize lifetime value.

Question 12 : What is the average number of products purchased per order?

Answer **:** Average Products per order 9.96

SQL Query **:**

```sql
-- Question 12
WITH OrderItemsCount AS (
    SELECT
        order_id,
        SUM(quantity) AS TotalItems
    FROM "FactOrderItems"
    GROUP BY order_id
)
SELECT
    ROUND(AVG(TotalItems), 2) AS AvgProductsPerOrder
FROM OrderItemsCount;
```

Data Output | Messages | Notifications

Showing rows: 1 to 1 | Page No:

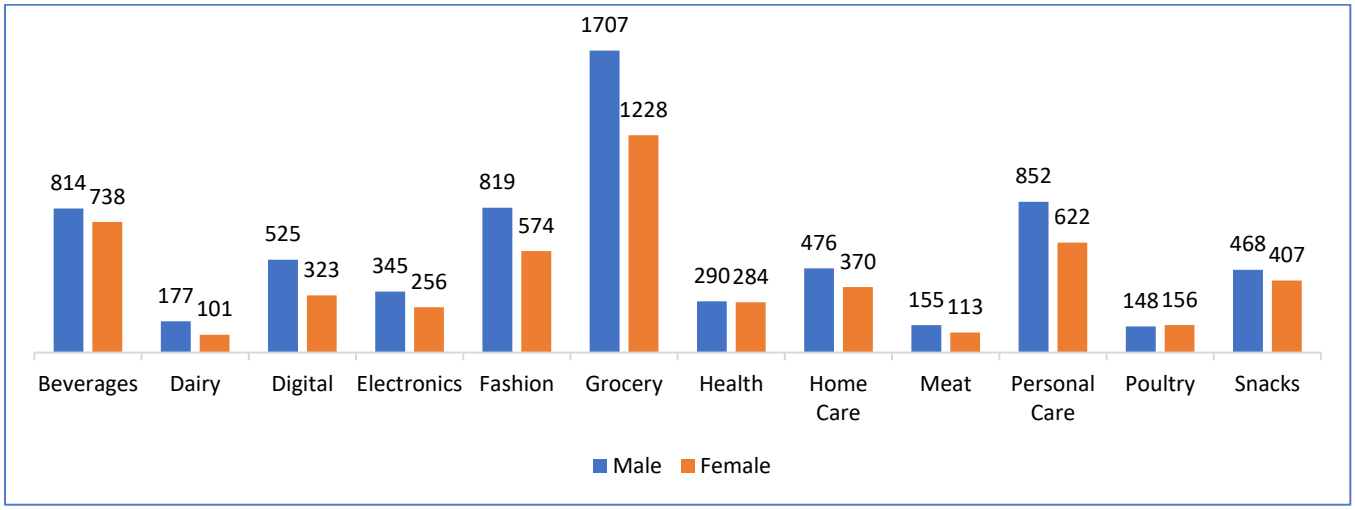
	avgproductsperorder numeric
1	9.96

Business Insight:

The analysis shows that customers purchase an average of 9.96 products per order, indicating strong multi-item buying behavior. This suggests that shoppers are comfortable adding multiple products to their carts in a single transaction. UrbanCart can further increase order value by promoting bundles, add-on recommendations, and volume-based discounts.

Question 13 : Do male and female customers show different purchasing patterns by category?

Answer **:** Gender wise purchasing pattern is shown below



SQL Query :

```sql
-- Question 13
SELECT
    c."Gender",
    p.category,
    SUM(foi.quantity) AS TotalQuantityPurchased
FROM "FactOrders" o
JOIN "DimCustomers" c
    ON o.customer_id = c.customer_id
JOIN "FactOrderItems" foi
    ON o.order_id = foi.order_id
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY c."Gender", p.category
ORDER BY c."Gender", TotalQuantityPurchased DESC;
```

Data Output | Messages | Notifications

Showing rows: 1 to 24 | Page No:

	Gender text	category text	totalquantitypurchased numeric
1	Female	Grocery	1228
2	Female	Beverages	738
3	Female	Personal Ca...	622

Business Insight: This analysis highlights clear differences in category-wise purchasing behavior between male and female customers. Male customers dominate some categories, while female

customers are more active in others. These insights enable UrbanCart to run gender-specific campaigns, improve personalization, and increase conversion rates more efficiently.

Question 14 : Which cities have the highest average order value (AOV)?
Answer : Rajshahi and average order value 2010.42 taka
SQL Query :

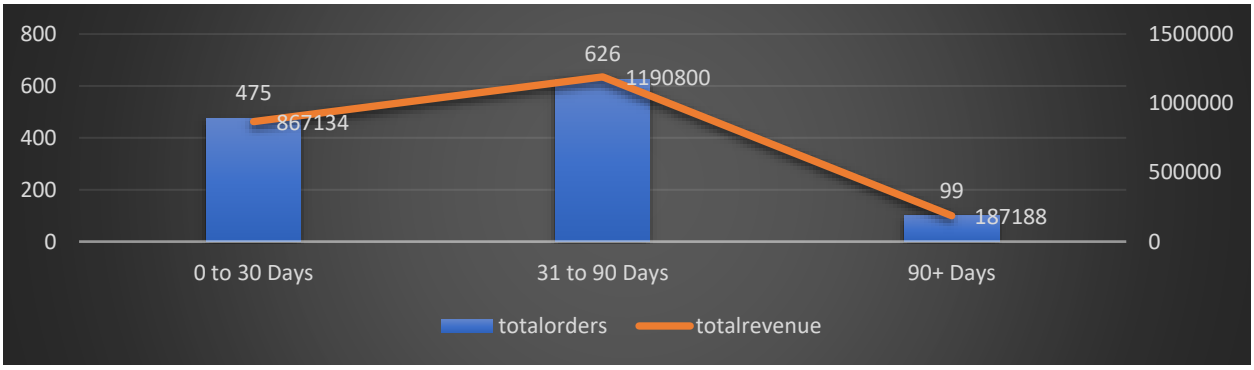
```sql
-- Question 14
WITH OrderValue AS (
    SELECT
        o.order_id,
        c.city,
        SUM(foi.quantity * p.unit_price) AS OrderAmount
    FROM "FactOrders" o
    JOIN "DimCustomers" c
        ON o.customer_id = c.customer_id
    JOIN "FactOrderItems" foi
        ON o.order_id = foi.order_id
    JOIN "DimProducts" p
        ON foi.product_id = p.product_id
    GROUP BY o.order_id, c.city
)
SELECT
    city,
    ROUND(AVG(OrderAmount), 2) AS AverageOrderValue
FROM OrderValue
GROUP BY city
ORDER BY AverageOrderValue DESC
Limit 1;
```

Data Output Messages Notifications

Business Insight: This analysis shows that customers from Rajshahi spend the most on average, with an average order value of 2010.42, indicating it is a premium market for UrbanCart. By introducing fast delivery, premium product offerings, and targeted special deals in this city, UrbanCart can further increase both average order value and total revenue.

Question 15 : How does customer purchasing behavior change over time since account creation?

Answer :



SQL Query :

```sql
-- Question 15
SELECT
    CASE
        WHEN (o.order_date::date - c.created_at::date) <= 30 THEN '0-30 days'
        WHEN (o.order_date::date - c.created_at::date) <= 90 THEN '31-90 days'
        ELSE '90+ days'
    END AS CustomerAgeGroup,
    COUNT(DISTINCT o.order_id) AS TotalOrders,
    ROUND(SUM(foi.quantity * p.unit_price), 2) AS TotalRevenue
FROM "FactOrders" o
JOIN "DimCustomers" c
    ON o.customer_id = c.customer_id
JOIN "FactOrderItems" foi
    ON o.order_id = foi.order_id
JOIN "DimProducts" p
    ON foi.product_id = p.product_id
GROUP BY CustomerAgeGroup
ORDER BY CustomerAgeGroup;
```

Data Output | Messages | Notifications

Showing rows: 1 to 3 | Page No: 1

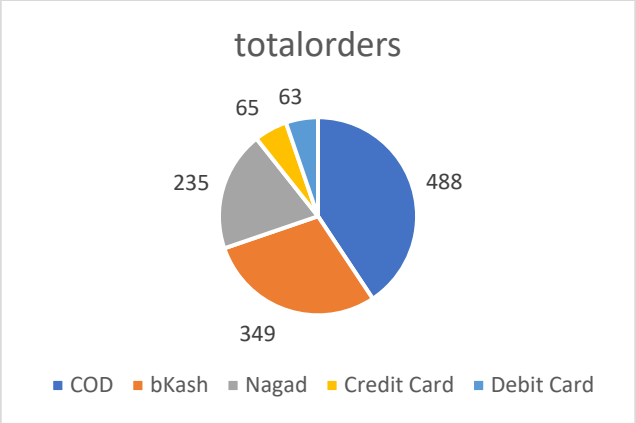
customeragegroup text	totalorders bigint	totalrevenue numeric

Business Insight: This analysis illustrates how purchasing behavior changes between new and existing customers over time. The chart shows that order volume and revenue peak in the mid lifecycle (31–90 days) and then drop sharply after 90 days. If purchasing declines over time, UrbanCart should launch re-engagement campaigns or retention offers to prevent customer churn and sustain revenue.

Payment & Order Flow Insight

Question 16 : Which payment methods are used most frequently?

Answer :



SQL Query :

```sql
-- Payment & Order Flow Insights
-- Question 16
SELECT
    "method",
    COUNT(order_id) AS TotalOrders
FROM "FactPayment"
GROUP BY "method"
ORDER BY TotalOrders DESC;
```

Data Output | Messages | Notifications

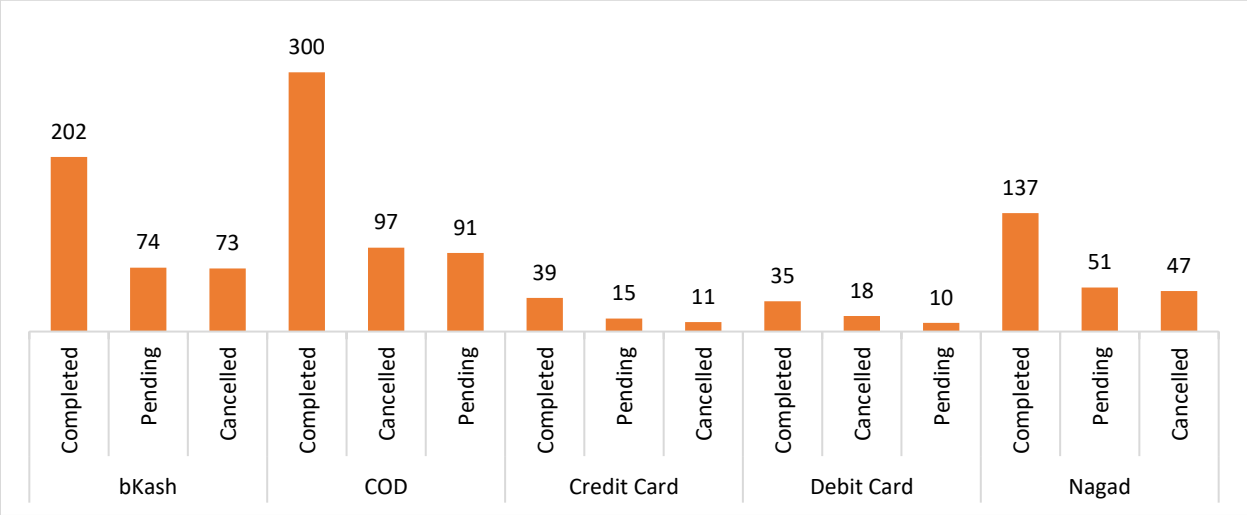
Showing rows: 1 to 5 | Page No:

	method text	totalorders bigint
1	COD	488
2	bKash	349
3	Nagad	235
4	Credit Ca...	65
5	Debit Card	63

Business Insight: Cash on Delivery (COD) is the most frequently used payment method, followed by bKash and Nagad, indicating a strong customer preference for cash and mobile wallet payments. Credit and debit card usage is comparatively low, suggesting limited adoption of card-based transactions. UrbanCart should prioritize COD and mobile payments while using incentives to increase card payment adoption.

Question 17 : Is there any relationship between payment method and order status?

Answer :



SQL Query :

```sql
-- Question 17
SELECT
    p.method,
    o.status,
    COUNT(o.order_id) AS TotalOrders
FROM "FactOrders" o
JOIN "FactPayment" p
    ON o.order_id = p.order_id
GROUP BY p.method, o.status
ORDER BY p.method, TotalOrders DESC;
```

Data Output | Messages | Notifications

Showing rows: 1 to 15 | Page No:

	method text	status text	totalorders bigint
1	bKash	Comple...	202
2	bKash	Pending	74
3	bKash	Cancell...	73
4	COD	Comple...	300
5	COD	Cancell...	97
6	COD	Pending	91

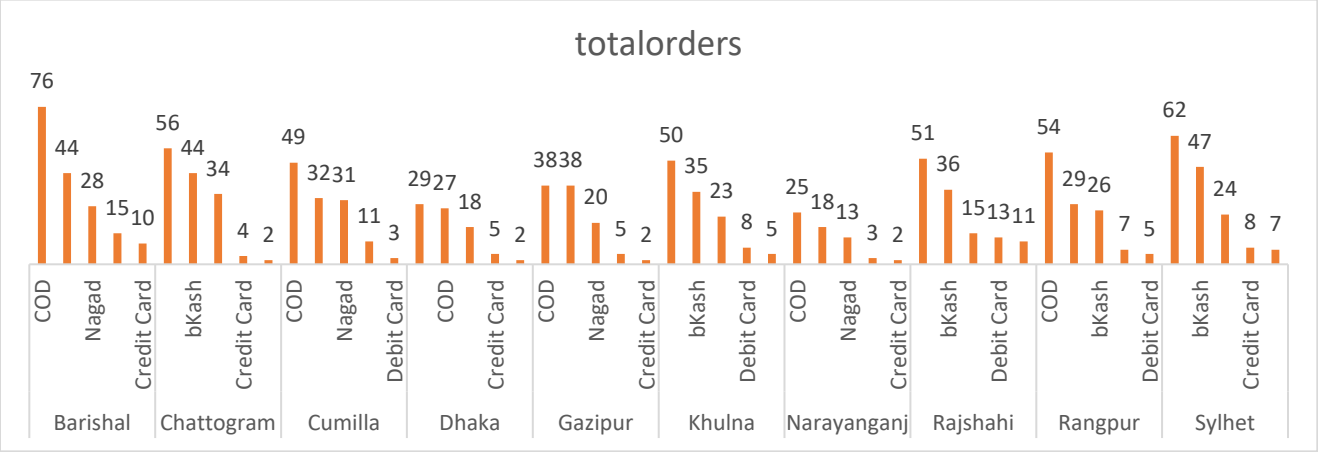
Total rows: 15 | Query complete 00:00:00.342

Business Insight : The results show that COD has the highest number of completed orders, but it also records a relatively high number of cancelled and pending orders compared to other payment methods. In contrast, bKash demonstrates a more balanced distribution with a higher

completion rate and fewer cancellations. This suggests that encouraging digital payments like bKash could help reduce order cancellations and improve overall order completion efficiency.

Question 18 : Do certain cities prefer specific payment methods?

Answer :



SQL Query :

```sql
-- Question 18
SELECT
    c.city,
    p.method,
    COUNT(o.order_id) AS TotalOrders
FROM "FactOrders" o
JOIN "DimCustomers" c
    ON o.customer_id = c.customer_id
JOIN "FactPayment" p
    ON o.order_id = p.order_id
GROUP BY c.city, p.method
ORDER BY c.city, TotalOrders DESC;
```

Data Output | Messages | Notifications

Showing rows: 1 to 50 | Page No: 1

	city text	method text	totalorders bigint
9	Chattogram	Credit Ca...	4
10	Chattogram	Debit Card	2
11	Cumilla	COD	49
12	Cumilla	bKash	32
13	Cumilla	Nagad	31

Business Insight : The chart shows that **Cash on Delivery (COD)** is the most preferred payment method across almost all cities, consistently generating the highest number of orders. Mobile wallet payments such as **bKash** and **Nagad** also show strong adoption but vary by city, indicating localized preferences. UrbanCart can improve checkout efficiency by prioritizing COD while tailoring city-specific promotions for popular digital payment methods.

Question 19 : Are higher-value orders associated with specific payment methods?

Answer : Yes, higher-value orders are primarily associated with **Nagad**, as it has the highest average order value among all payment methods.

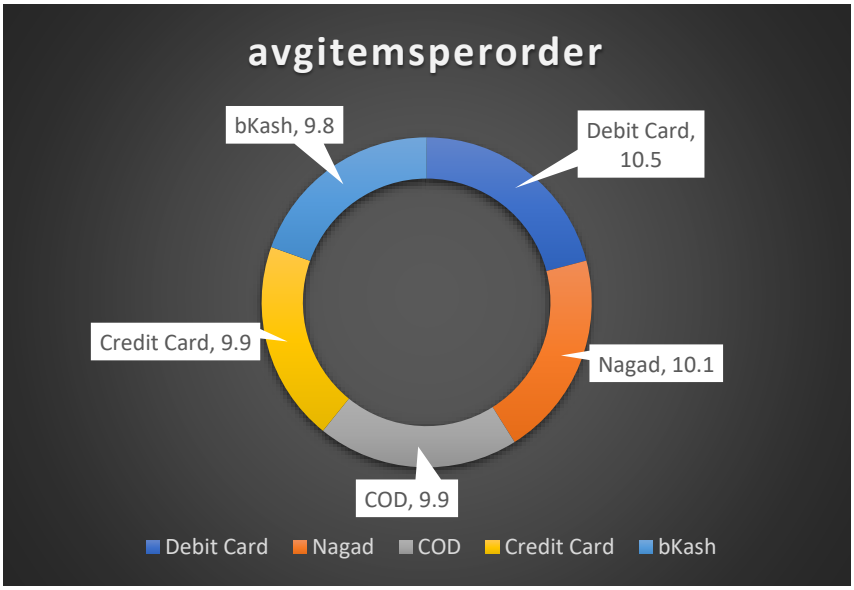
SQL Query :

```sql
-- Question 19
WITH OrderValue AS (
    SELECT
        o.order_id,
        p.method,
        SUM(foi.quantity * d.unit_price) AS OrderAmount
    FROM "FactOrders" o
    JOIN "FactPayment" p
        ON o.order_id = p.order_id
    JOIN "FactOrderItems" foi
        ON o.order_id = foi.order_id
    JOIN "DimProducts" d
        ON foi.product_id = d.product_id
    GROUP BY o.order_id, p.method
)
SELECT
    method,
    ROUND(AVG(OrderAmount), 2) AS AvgOrderValue
FROM OrderValue
GROUP BY method
ORDER BY AvgOrderValue DESC
limit 1;
```

Business Insight : Customers using Nagad and credit cards tend to place higher-value orders, indicating stronger spending intent in these payment channels. UrbanCart can maximize revenue by promoting these payment methods through exclusive discounts or cashback offers. Lower-value COD orders suggest an opportunity to encourage digital payments for higher basket sizes.

Question 20 : What is the average number of items per order by payment method?

Answer :



SQL Query :

```sql
-- Question 20
WITH OrderItems AS (
    SELECT
        o.order_id,
        p.method,
        SUM(foi.quantity) AS TotalItems
    FROM "FactOrders" o
    JOIN "FactPayment" p
        ON o.order_id = p.order_id
    JOIN "FactOrderItems" foi
        ON o.order_id = foi.order_id
    GROUP BY o.order_id, p.method
)
SELECT
    method,
    ROUND(AVG(TotalItems), 2) AS AvgItemsPerOrder
FROM OrderItems
GROUP BY method
ORDER BY AvgItemsPerOrder DESC;
```

Data Output | Messages | Notifications

SQL | Showing rows: 1 to 5 | Page No: 1

method	avgitemsperorder

Business Insight : The chart indicates that Debit Card and Nagad users purchase slightly more items per order compared to other payment methods. COD, Credit Card, and bKash show similar but marginally lower average basket sizes. UrbanCart can increase overall basket size by promoting bundle offers or incentives specifically targeted at high-performing payment methods like Debit Card and Nagad.

Advanced Product & Basket Analysis

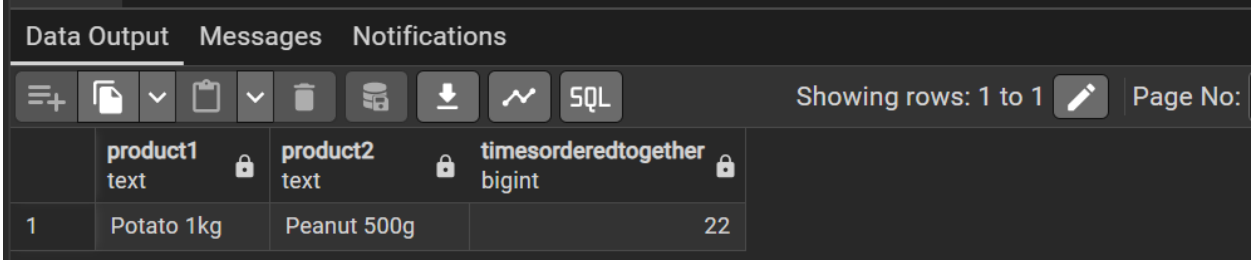
Question 21 : Which products are most frequently ordered together?

Answer :

product1	product2	timesorderedtogether
Potato 1kg	Peanut 500g	22

SQL Query :

```sql
-- Question 21
SELECT
    p1.product_name AS Product1,
    p2.product_name AS Product2,
    COUNT(*) AS TimesOrderedTogether
FROM "FactOrderItems" foi1
JOIN "FactOrderItems" foi2
    ON foi1.order_id = foi2.order_id
    AND foi1.product_id < foi2.product_id
JOIN "DimProducts" p1
    ON foi1.product_id = p1.product_id
JOIN "DimProducts" p2
    ON foi2.product_id = p2.product_id
GROUP BY p1.product_name, p2.product_name
ORDER BY TimesOrderedTogether DESC
LIMIT 1;
```



Business Insight: The analysis shows that Potato 1kg and Peanut 500g are the most frequently ordered together, appearing together in 22 orders. This indicates a strong complementary buying pattern between these two products. UrbanCart can bundle or recommend these items together to increase cross-selling and improve average basket size.

Question 22 : Which product pairs appear most often across all orders?

Answer :

SL	producta	productb	pairfrequency
1	Potato 1kg	Peanut 500g	22
2	Farm Fresh Milk 1L	Potato 1kg	21
3	Miniket Rice 5kg	Power Bank 10000mAh	18
4	Fresh Sugar 1kg	Sprite 1L	18
5	Onion 1kg	Shoes Polish	18
6	Flour (Atta) 2kg	Cap	18
7	Bru Coffee 200g	Oral Saline (ORS)	17
8	ACI Pure Salt 1kg	Farm Fresh Milk 1L	17
9	Biscuits (Mixed)	Sprite 1L	17
10	Fresh Sugar 1kg	Oral Saline (ORS)	17

SQL Query :

```sql
-- Question 22
SELECT
    p1.product_name AS ProductA,
    p2.product_name AS ProductB,
    COUNT(*) AS PairFrequency
FROM "FactOrderItems" f1
JOIN "FactOrderItems" f2
    ON f1.order_id = f2.order_id
    AND f1.product_id < f2.product_id
JOIN "DimProducts" p1
    ON f1.product_id = p1.product_id
JOIN "DimProducts" p2
    ON f2.product_id = p2.product_id
GROUP BY p1.product_name, p2.product_name
ORDER BY PairFrequency DESC
LIMIT 10;
```

Data Output | Messages | Notifications

SQL | Showing rows: 1 to 10 | Page No:

	producta text	productb text	pairfrequency bigint
8	ACI Pure Salt 1kg	Farm Fresh Milk 1L	17

Business Insight: The results show several product pairs that are frequently purchased together, with Potato 1kg and Peanut 500g being the most common combination. The presence of multiple high-frequency pairs across everyday grocery and household items indicates strong cross-buying behavior among customers. UrbanCart can leverage these insights by creating targeted bundles, combo discounts, or “frequently bought together” recommendations to increase average basket size and drive additional revenue.

Question 23 : Are there product pairs that consistently drive higher order values?

Answer :

SL	producta	productb	avgordervalue
1	Nazirshail Rice 5kg	Power Bank 10000mAh	4518
2	Ladies Bag	Power Bank 10000mAh	4200
3	Broiler Chicken (whole)	Power Bank 10000mAh	3736
4	Taaza Black Tea 400g	Power Bank 10000mAh	3610
5	T-shirt (Men)	Power Bank 10000mAh	3464
6	Vim Dishwashing Bar	Power Bank 10000mAh	3452
7	Lux Soap 100g	Power Bank 10000mAh	3405
8	Miniket Rice 5kg	Ladies Bag	3400
9	Power Bank 10000mAh	Earphones	3388
10	T-shirt (Women)	Power Bank 10000mAh	3287

SQL Query :

```sql
-- Question 23
WITH OrderPairs AS (
    SELECT
        o.order_id,
        p1.product_name AS ProductA,
        p2.product_name AS ProductB,
        SUM(
            (f1.quantity * p1.unit_price) +
            (f2.quantity * p2.unit_price)
        ) AS OrderValue
    FROM "FactOrders" o
    JOIN "FactOrderItems" f1
        ON o.order_id = f1.order_id
    JOIN "FactOrderItems" f2
        ON o.order_id = f2.order_id
        AND f1.product_id < f2.product_id
    JOIN "DimProducts" p1
        ON f1.product_id = p1.product_id
    JOIN "DimProducts" p2
        ON f2.product_id = p2.product_id
    GROUP BY o.order_id, p1.product_name, p2.product_name
)
SELECT
    ProductA,
    ProductB,
    ROUND(AVG(OrderValue), 2) AS AvgOrderValue
FROM OrderPairs
GROUP BY ProductA, ProductB
ORDER BY AvgOrderValue DESC
LIMIT 10;
```

Business Insight: The results show that product pairs involving Power Bank 10000mAh consistently generate the highest average order values, especially when combined with high-demand items like rice, apparel, and household products. This indicates that customers are willing to spend significantly more when high-value electronic accessories are included in their

baskets. UrbanCart can maximize revenue by strategically bundling Power Bank 10000mAh with frequently purchased products and promoting these combinations as premium cross-sell offers.

Question 24 : Which product combinations could be recommended as bundles to increase revenue?

Answer :

bundleproduct1	bundleproduct2	bundlefrequency
Potato 1kg	Peanut 500g	22
Farm Fresh Milk 1L	Potato 1kg	21

SQL Query :

```sql
-- Question 24
SELECT
    p1.product_name AS BundleProduct1,
    p2.product_name AS BundleProduct2,
    COUNT(*) AS BundleFrequency
FROM "FactOrderItems" f1
JOIN "FactOrderItems" f2
    ON f1.order_id = f2.order_id
    AND f1.product_id < f2.product_id
JOIN "DimProducts" p1 ON f1.product_id = p1.product_id
JOIN "DimProducts" p2 ON f2.product_id = p2.product_id
GROUP BY p1.product_name, p2.product_name
HAVING COUNT(*) > 20
ORDER BY BundleFrequency DESC;
```

Data Output | Messages | Notifications

Showing rows: 1 to 2 | Page No:

	bundleproduct1 text	bundleproduct2 text	bundlefrequency bigint
1	Potato 1kg	Peanut 500g	22
2	Farm Fresh Milk 1L	Potato 1kg	21

Business Insight: The analysis identifies Potato 1kg & Peanut 500g and Farm Fresh Milk 1L & Potato 1kg as the most frequent product combinations, each appearing together in over 20 orders. These strong and repeatable purchasing patterns indicate high potential for bundle creation. UrbanCart can increase revenue and basket size by offering these pairs as discounted combo deals or promoting them through “recommended bundles” on the product page and checkout flow.

Question 25 : Which products should UrbanCart promote together to maximize cross-selling opportunities?

Answer :

SL	product_name	ordersappeared
1	Lifebuoy Soap 100g	138
2	Potato 1kg	127
3	Bru Coffee 200g	127
4	Peanut 500g	126
5	Flour (Atta) 2kg	125
6	Sprite 1L	124
7	Nazirshail Rice 5kg	124
8	Clear Men Shampoo 180ml	122
9	Oral Saline (ORS)	120
10	Power Bank 10000mAh	120

SQL Query :

```
344  -- Question 25
345  SELECT
346      p.product_name,
347      COUNT(DISTINCT foi.order_id) AS OrdersAppeared
348  FROM "FactOrderItems" foi
349  JOIN "DimProducts" p
350      ON foi.product_id = p.product_id
351  GROUP BY p.product_name
352  ORDER BY OrdersAppeared DESC
353  LIMIT 10;
```

Data Output | Messages | Notifications

Showing rows: 1 to 10 | Page No:

	product_name text	ordersappeared bigint
1	Lifebuoy Soap 100g	138
2	Potato 1kg	127
3	Bru Coffee 200g	127
4	Peanut 500g	126
5	Flour (Atta) 2kg	125
6	Sprite 1L	124

Total rows: 10 | Query complete 00:00:00.442

Business Insight: The analysis shows that Lifebuoy Soap 100g, Potato 1kg, and Bru Coffee 200g appear in the highest number of orders, making them the strongest cross-selling anchor products. These items are frequently purchased alongside other products, indicating broad customer appeal and high basket penetration. UrbanCart should prioritize these products in recommendation widgets, bundle offers, and promotional placements to maximize cross-selling and increase average order value.