BRIGHT COFFEE SQL SYNTAXS:

1. Minimum transaction time syntax and output:

```
4  SELECT MIN(TRANSACTION_TIME)
5  FROM SHOP.COFFEE_SALES.BRIGHT_COFFEE_SHOP_SALES;
```

Results | Chart

	MIN(TRANSACTION_TIME)
1	06:00:00

2. Maximum transaction time syntax and output:

```
7  SELECT MAX(TRANSACTION_TIME)
8  FROM SHOP.COFFEE_SALES.BRIGHT_COFFEE_SHOP_SALES;
```

Results | Chart

	MAX(TRANSACTION_TIME)
1	20:59:32

3. Data transformation syntax and output :
   - Time_buckets
   - Cast unit_price '3,1' to '3.1'
   - Computing total amount= unit_price * transcation_qty
   - Grouping

```
30 SELECT
31   TO_DATE(TRANSACTION_DATE, 'YYYY/MM/DD') AS transaction_date,
32   TO_CHAR(TO_DATE(TRANSACTION_DATE, 'YYYY/MM/DD'), 'YYYYMM') AS MONTH_ID,
33   COUNT(TRANSACTION_ID) AS NUMBER_OF_SALES,
34   COUNT(PRODUCT_ID) AS UNIQUE_PRODUCTS_SOLD,
35   SUM(TRANSACTION_QTY) AS TOTAL_QTY_SOLD,
36   SUM(TRANSACTION_QTY * TO_NUMBER(REPLACE(UNIT_PRICE, ',', '.'))) AS TOTAL_AMOUNT,
37   PRODUCT_CATEGORY,
38   PRODUCT_DETAIL,
39   PRODUCT_TYPE,
40   STORE_LOCATION,
41   CASE
42     WHEN TRANSACTION_TIME BETWEEN '06:00:00' AND '11:59:59' THEN 'Morning'
43     WHEN TRANSACTION_TIME BETWEEN '12:00:00' AND '16:59:59' THEN 'Afternoon'
44     WHEN TRANSACTION_TIME BETWEEN '17:00:00' AND '19:59:59' THEN 'Evening'
45     ELSE 'Night'
46   END AS TIME_BUCKETS,
47 FROM SHOP.COFFEE_SALES.BRIGHT_COFFEE_SHOP_SALES
48 GROUP BY ALL
49 ORDER BY TRANSACTION_DATE ASC;
```

Results | Chart

	TRANSACTION_DATE	MONTH_ID	NUMBER_OF_SALES	UNIQUE_PRODUCTS_SOLD	TOTAL_QTY_SOLD	TOTAL_AMOUNT	PRODUCT_CATEGORY	PRODUCT_DETAIL	P
1	2023-01-01	202301	1	1	2	8	Coffee	Brazilian Lg	Orga
2	2023-01-01	202301	1	1	1	4	Bakery	Croissant	Past
3	2023-01-01	202301	1	1	1	3	Tea	Traditional Blend Chai R	Brew
4	2023-01-01	202301	1	1	1	3	Tea	Traditional Blend Chai R	Brew
5	2023-01-01	202301	1	1	1	4	Bakery	Chocolate Chip Biscotti	Bisc
6	2023-01-01	202301	1	1	2	6	Coffee	Our Old Time Diner Blen	Drip
7	2023-01-01	202301	2	2	3	9	Coffee	Espresso shot	Baris
8	2023-01-01	202301	1	1	2	6	Coffee	Espresso shot	Baris
9	2023-01-01	202301	1	1	2	8	Coffee	Jamaican Coffee River L	Prem

4. Day-over-day cumulative revenue for the last 3 months per store:

```sql
WITH cleaned_data AS (
  SELECT
    STORE_LOCATION,
    TO_DATE(TRANSACTION_DATE, 'YYYY/MM/DD') AS txn_date,
    TRANSACTION_QTY,
    TRY_TO_NUMBER(UNIT_PRICE) AS unit_price,
    TRANSACTION_QTY * TRY_TO_NUMBER(UNIT_PRICE) AS revenue
  FROM BRIGHT_COFFEE_SHOP_SALES
  WHERE STORE_LOCATION IN ('Lower Manhattan', 'Astoria', 'Hell\'s Kitchen')
    AND TO_DATE(TRANSACTION_DATE, 'YYYY/MM/DD') BETWEEN '2023-04-01' AND '2023-06-30'
),
daily_revenue AS (
  SELECT
    STORE_LOCATION,
    txn_date,
    SUM(revenue) AS daily_revenue
  FROM cleaned_data
  GROUP BY STORE_LOCATION, txn_date
),
cumulative_revenue AS (
  SELECT
    STORE_LOCATION,
    txn_date,
    daily_revenue,
    SUM(daily_revenue) OVER (
      PARTITION BY STORE_LOCATION
      ORDER BY txn_date
      ROWS BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW
    ) AS cumulative_revenue
  FROM daily_revenue
)
SELECT *
FROM cumulative_revenue
ORDER BY STORE_LOCATION, txn_date;
```

Results | Chart

STORE_LOCATION	TXN_DATE	DAILY_REVENUE	CUMULATIVE_REVENUE
Astoria	2023-04-01	380	380
Astoria	2023-04-02	434	814
Astoria	2023-04-03	436	1250
Astoria	2023-04-04	383	1633
Astoria	2023-04-05	374	2007
Astoria	2023-04-06	276	2283
Astoria	2023-04-07	273	2556