1. Show list of transactions occurring in February 2018 with SHIPPED status.

SELECT \*

FROM sql\_coba.transactionss

WHERE DATE(transaction\_date) BETWEEN '2018-02-01' AND '2018-02-28' AND status= 'SHIPPED'

1. Show list of transactions occurring from midnight to 9 AM

SELECT \*

FROM sql\_coba.transactionss

WHERE TIME(transaction\_date) BETWEEN '00:00:00' AND '09:00:00'

1. Show a list of only the last transactions from each vendor

SELECT MAX(transaction\_date), vendor

FROM sql\_coba.transactionss

GROUP BY vendor

SELECT t.\*

FROM sql\_coba.transactionss t

INNER JOIN (

SELECT MAX(transaction\_date) as MaxDate, vendor

FROM sql\_coba.transactionss

GROUP BY vendor

) b ON t.transaction\_date = b.MaxDate AND t.vendor = b.vendor

1. Show a list of only the second last transactions from each vendor

SELECT t.\*

FROM transactionss t

-- group by vendor

WHERE t.transaction\_date = (SELECT t2.transaction\_date

FROM transactionss t2

WHERE t2.vendor = t.vendor

order by t2.transaction\_date desc

limit 1,1);

1. Count the transactions from each vendor with the status CANCELLED per day

SELECT COUNT(\*) as counted\_cancelled\_transaction, vendor

FROM transactionss

WHERE `status` = 'CANCELLED'

GROUP BY vendor

1. Show a list of customers who made more than 1 SHIPPED purchases

SELECT customer\_id, state, COUNT(\*)

FROM sql\_coba.transactionss

WHERE state = 'SHIPPED'

GROUP BY customer\_id

HAVING COUNT(state) >1

1. Show the total transactions (volume) and category of each vendors by following these criteria:  
   a. *Superb*: More than 2 SHIPPED and 0 CANCELLED transactions  
   b. *Good*: More than 2 SHIPPED and 1 or more CANCELLED transactions  
   c. *Normal*: other than Superb and Good criteria  
   Order the vendors by the best category (Superb, Good, Normal), then by the biggest transaction volume

SELECT vendor,

(CASE WHEN COUNT(state = 'SHIPPED') > 2 AND COUNT(state = 'CANCELLED') = 0

THEN 'superb'

WHEN COUNT(state = 'SHIPPED') > 2 AND COUNT(state = 'CANCELLED') >= 1

THEN 'good'

ELSE 'Normal'

END) as category, COUNT(\*) total\_transaction

FROM sql\_coba.transactionss

GROUP BY vendor;

1. Group the transactions by hour of *transaction\_date*

SELECT EXTRACT(HOUR FROM transaction\_date) as 'hour of the day', COUNT(\*) as 'total transaction'

FROM transactionss

GROUP BY EXTRACT(HOUR FROM transaction\_date)

1. Group the transactions by day and statuses as the example below

SELECT DATE (transaction\_date) as 'hour of the day',

SUM(CASE

WHEN state = 'SHIPPED' THEN 1

ELSE 0

END) as 'SHIPPED',

SUM(CASE

WHEN state = 'CANCELLED' THEN 1

ELSE 0

END) as 'CANCELLED',

SUM(CASE

WHEN state = 'PROCESSING' THEN 1

ELSE 0

END) as 'PROCESSING'

FROM transactionss

GROUP BY DATE(transaction\_date)

1. Calculate the average, minimum and maximum of days interval of each transaction (how many days from one transaction to the next)

SELECT ROUND(AVG(diffDays)) as 'Average Interval',

MIN(diffDays) as 'Minimum interval',

MAX(diffDays) as 'Maximum interval'

FROM (

SELECT DATEDIFF((SELECT transaction\_date

FROM transactionss t

WHERE t. transaction\_date > t1.transaction\_date

ORDER BY t.transaction\_date

LIMIT 1

), transaction\_date) diffDays

FROM transactionss t1

) t1