**QUESTION 1**

1. Write a query to return number of unique customers from the state of Karnataka

**Columns required: state\_name, customers**

**ANS - SELECT**

count(distinct(customer\_id) customers,

state as state\_name

**FROM**

customers

**WHERE**

state = ‘Karnataka’

1. Write a query to show the name of the state with second highest number of stores available to customers

**Columns required: state\_name, stores**

**ANS – SELECT**

Count(store\_id) as stores,

State as state\_name

**FROM**

Stores

**GROUP BY**

State

**ORDER BY**

Count(store\_id) **DESC**

**LIMIT** 2 **OFFSET** 1

1. Write a query to show 10 worst performing staff based on commission earned, where commission earned is 15% of total order value (Order value to be calculated as product of quantity and list price with discount subtracted from the total)

**Columns required: staff\_id, orders\_sold, commission\_earned**

**ANS – WITH**

Tab1 **AS**

( **SELECT**

\*,

((OI.list\_price\*OI.quantity) – OI.discount) as Order\_value

**FROM**

Staff S **JOIN** Orders O

**ON** S.staff\_id = O.staff\_id

**JOIN** Order\_items OI

**ON** O.order\_id = OI.order\_id

**JOIN** Store ST

**ON** ST.store\_id = O.store\_id ),

Tab2 **AS**

**( SELECT**

**\*,**

**(**0.15\*Order\_value) as commision\_earned

FROM

Tab1),

SELECT

S.staff\_id,

sum(commision\_earned) as commision\_earned,

count(order\_id) as order\_sold

FROM

Tab2

GROUP BY

ST.state

ORDER BY

Sum(commision\_earned) ASC

LIMIT 10

1. Write a query to show the number of orders per category where there has been a delay of over 1 week between order purchased to shipped

**Columns required: category\_name, orders**

**ANS – WITH**

Tab1 **AS**

**( SELECT**

**\***

**FROM**

Orders O JOIN Orders\_items OI

ON O.order\_id = OI.order\_id

JOIN product P

ON P.product\_id = OI.product\_id

JOIN categories C

P.category\_id = c.category\_id ),

Tab2 AS

( SELECT

O.order\_id,

C.category\_name,

Datediff(O.shipped\_date,O.order\_date) as timetaken

FROM

Tab1

WHERE

Datediff(O.shipped\_date,O.order\_date) > 7 )

SELECT

Count(order\_id) as orders,

Category\_name as category

FROM

Tab2

GROUP BY

Category\_name

1. Write a query to return customer id, and the first and last name as a single string for the top 3 customers by single order value (Order value to be calculated as product of quantity and list price with discount subtracted from the total). In the same view also show the next highest purchase made by the customer

**Columns required: customer\_id, full\_name, highest\_purchase, second\_highest\_purchase**

**ANS – WITH**

Tab1 **AS**

**( SELECT**

**\*,**

((OI.list\_price\*OI.quantity) – OI.discount) as Order\_value

**FROM**

customers C JOIN orders O

ON C. customers\_id = O. customer\_id

JOIN order\_item OI

ON O.order\_id = OI.order\_id),

Tab2 AS

( SELECT

**QUESTION 3**

1. Find the number of employees inside the Office at “2019-06-01 15:05:00”

ANS- WITH

Cte AS

(select \* from movement\_tracker where created at = “2019-06-01 15:05:00”),

select count(distinct(employee\_id)) as employee\_inside from cte where action = “In”

1. Measure the number of hours spent by each employee inside the office since the day they started (Account for a current shift if she/he is working)

Ans- WITH

Cte1 AS

( select \* from movement\_tracker where action = ‘In’)

Cte2 AS

( select \* from movement\_tracker where action = ‘Out’)

Cte3 AS

( Select cte1.employee\_id, Datediff(cte2.created\_at – cte1.created\_at) as time\_spent

from cte1 join cte2 on cte1.employee\_id= cte2.employee\_id)

select employee\_id,

Sum(time\_spent) as total\_time

From cte3 group by employee\_id order by employee\_id

1. Measure the number of hours spent by each employee inside the office between “2019-04-01 15:00:00” and “2019-04-04 11:00:00”

ANS- WITH

Cte1 AS

( select \* from movement\_tracker where action = ‘In’ and created\_at is between “2019-04-01 15:00:00” and “2019-04-04 11:00:00”)

Cte2 AS

( select \* from movement\_tracker where action = ‘Out’ and created\_at is between “2019-04-01 15:00:00” and “2019-04-04 11:00:00”))

Cte3 AS

( Select cte1.employee\_id, Datediff(cte2.created\_at – cte1.created\_at) as time\_spent

from cte1 join cte2 on cte1.employee\_id= cte2.employee\_id)

select employee\_id,

Sum(time\_spent) as total\_time

From cte3 group by employee\_id order by employee\_id