**ROAD ACCIDENT SQL QUERIES**

**(Table: road\_accident)**

**A. KPI’s**

**1. Total Casualties CY:**

Select sum(number\_of\_casualties) as CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'



**2. CY Accidents**

Select Count(Distinct accident\_index) as CY\_Accidents

From road\_accident

Where YEAR(accident\_date) = '2022'

****

**3. Total Fatal Casualties taken place CY**

Select Sum(number\_of\_casualties) as CY\_Fatal\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022' AND accident\_severity = 'Fatal'

**4. Total Serious Casualties taken place CY**

Select Sum(number\_of\_casualties) as CY\_Serious\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022' AND accident\_severity = 'Serious'



**5. Total Slight Casualties taken place CY**

Select Sum(number\_of\_casualties) as CY\_Slight\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022' AND accident\_severity = 'Slight'



**6. Casualties by Vehicle\_Type CY(2022)**

--SELECT DISTINCT vehicle\_type FROM road\_accident ORDER BY vehicle\_type;

Select

CASE

When vehicle\_type in ('Agricultural vehicle') then 'Agricultural'

When vehicle\_type in ('Bus or coach (17 or more pass seats)', 'Minibus (8 - 16 passenger seats)') then 'Bus'

When vehicle\_type in ('Car', 'Taxi/Private hire car') then 'Car'

When vehicle\_type in ('Motorcycle 125cc and under', 'Motorcycle 50cc and under', 'Motorcycle over 125cc and up to 500cc', 'Motorcycle over 500cc', 'Pedal cycle') then 'Bike'

When vehicle\_type in ('Goods 7.5 tonnes mgw and over', 'Goods over 3.5t. and under 7.5t', 'Van / Goods 3.5 tonnes mgw or under') then 'Van'

Else 'Other'

End as vehicle\_group,

Sum(number\_of\_casualties) AS CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'

Group by

CASE

When vehicle\_type in ('Agricultural vehicle') then 'Agricultural'

When vehicle\_type in ('Bus or coach (17 or more pass seats)', 'Minibus (8 - 16 passenger seats)') then 'Bus'

When vehicle\_type in ('Car', 'Taxi/Private hire car') then 'Car'

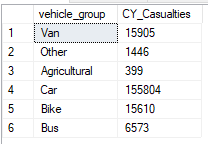
When vehicle\_type in ('Motorcycle 125cc and under', 'Motorcycle 50cc and under', 'Motorcycle over 125cc and up to 500cc', 'Motorcycle over 500cc', 'Pedal cycle') then 'Bike'

When vehicle\_type in ('Goods 7.5 tonnes mgw and over', 'Goods over 3.5t. and under 7.5t', 'Van / Goods 3.5 tonnes mgw or under') then 'Van'

Else 'Other'

End

***Output:***

****

**7. Monthly Casualties in CY(2022)**Select DATENAME(Month, accident\_date) as Month\_Name, Sum(Number\_of\_casualties) AS CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'

Group by DATENAME(Month, accident\_date)

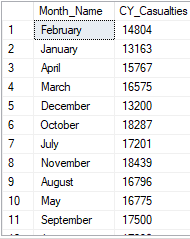
-- Monthly Casualties in PY(2021)

Select DATENAME(Month, accident\_date) as Month\_Name, Sum(Number\_of\_casualties) AS PY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2021'

Group by DATENAME(Month, accident\_date)

****

**8. Casualties by Road\_Type in CY(2022)**

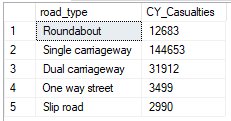
Select road\_type, Sum(number\_of\_casualties) as CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'

Group by road\_type

***Output***

****

**9. % Casualties by Urban/Rural in CY(2022)**

Select urban\_or\_rural\_area, Cast(Cast(Sum(number\_of\_casualties) as decimal (10,2))\*100

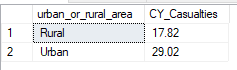
/(Select Cast(Sum(number\_of\_casualties)as decimal (10,2)) from road\_accident) as decimal (10,2)) as CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'

Group by urban\_or\_rural\_area

***Output***

******

**10. % Casualties by Light Condition in CY(2022)**

--Select Distinct light\_conditions from road\_accident order by light\_conditions

Select

Case

When light\_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit', 'Darkness - lights unlit', 'Darkness - no lighting') then 'Night'

Else 'Day'

End as light\_condition,

Cast(Cast(Sum(number\_of\_casualties) as decimal (10,2))\*100

/(Select Cast(Sum(number\_of\_casualties)as decimal (10,2)) from road\_accident Where YEAR(accident\_date) = '2022') as decimal (10,2)) as CY\_Casualties

From road\_accident

Where YEAR(accident\_date) = '2022'

Group by

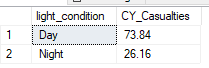
Case

When light\_conditions in ('Darkness - lighting unknown', 'Darkness - lights lit', 'Darkness - lights unlit', 'Darkness - no lighting') then 'Night'

Else 'Day'

End

***Output***

****

**11. Top 10 Casualties by Location**

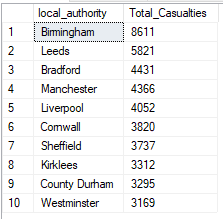
Select Top 10 local\_authority, Sum(number\_of\_casualties) as Total\_Casualties

From road\_accident

Group by local\_authority

Order by Total\_Casualties Desc

***Output***

****