

ROAD ACCIDENT REPORT SQL QUERIES

CY Casualties

```
SELECT SUM(number_of_casualties) AS CY_casualties
FROM road_accident
WHERE YEAR(accident_date)= '2022';
```

	CY_casualties
1	195737

CY Accidents

```
SELECT COUNT(accident_index) AS CY_accidents
FROM road_accident
WHERE YEAR(accident_date)= '2022';
```

	CY_accidents
1	144419

Sum of Fatal casualties

```
SELECT SUM(number_of_casualties) AS Fatal_casualties
FROM road_accident
WHERE accident_severity= 'Fatal'
```

	Fatal_casualties
1	7135

CY serious casualties

```
SELECT SUM(number_of_casualties) AS CY_Serious_casualties
FROM road_accident
WHERE YEAR(accident_date)= '2022' AND accident_severity= 'Serious'
```

	CY_Serious_casualties
1	27045

Percentage of Slight casualties

```
SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2)) *100 /  
(SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2)) FROM road_accident)  
FROM road_accident  
WHERE accident_severity= 'Slight'
```

	PCT
1	84.0991377969431

CY Casualties by vehicle type

```
SELECT  
    CASE  
        WHEN vehicle_type IN ('Agricultural vehicle') THEN 'Agricultural'  
        WHEN vehicle_type IN ('Car', 'Taxi/Private hire car') THEN 'Cars'  
        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 ('Bus or coach (17 or more pass seats)',  
'Minibus (8-16 passenger seats)') THEN 'Bus'  
        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 and 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 ('Car', 'Taxi/Private hire car') THEN  
'Cars'  
        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 ('Bus or coach (17 or more pass seats)',  
'Minibus (8-16 passenger seats)') THEN 'Bus'  
        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 and under') THEN 'Van'  
        ELSE 'Other'  
    END
```

	Vehicle_group	CY_casualties
1	Bike	13286
2	Bus	6042
3	Cars	155804
4	Van	5570
5	Other	14636
6	Agricultural	399

CY & PY casualties monthly trend

```
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)
```

	Month_Name	CY_casualties
1	June	17230
2	October	18287
3	July	17201
4	November	18439
5	August	16796
6	May	16775
7	September	17500
8	February	14804
9	January	13163
10	April	15767
11	March	16575
12	December	13200

```
SELECT DATENAME(MONTH, accident_date) as Month_Name, SUM(number_of_casualties) as  
CY_Casualties  
FROM road_accident  
WHERE YEAR(accident_date) = '2021'  
GROUP BY DATENAME(MONTH, accident_date)
```

	Month_Name	CY_casualties
1	February	14648
2	January	18173
3	April	17335
4	June	18728
5	October	20109
6	July	19682
7	November	20975
8	August	18797
9	December	18576
10	March	17815
11	May	18852
12	September	18456

Casualties by road type

```
SELECT road_type, SUM(number_of_casualties) as CY_casualties FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY road_type
```

	road_type	CY_casualties
1	Roundabout	12683
2	Dual carriageway	31912
3	Slip road	2990
4	Single carriageway	144653
5	One way street	3499

Total & PCT of casualties in urban & rural area

```
SELECT urban_or_rural_area, SUM(number_of_casualties) AS Total_casualties,
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 PCT_casualties
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY urban_or_rural_area;
```

	urban_or_rural_area	Total_casualties	PCT_casualties
1	Rural	74486	38.0541236455039
2	Urban	121251	61.9458763544960

Casualties PCT by light condition

```
SELECT
CASE
    WHEN light_conditions IN ('Daylight') THEN 'Day'
    WHEN light_conditions IN ('Darkness - lighting unknown', 'Darkness -
lights lit', 'Darkness - lights unlit', 'Darkness - no lighting') THEN 'Night'
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_PCT
FROM road_accident
WHERE YEAR(accident_date) = '2022'
GROUP BY
CASE
    WHEN light_conditions IN ('Daylight') THEN 'Day'
    WHEN light_conditions IN ('Darkness - lighting unknown',
'Darkness - lights lit', 'Darkness - lights unlit', 'Darkness - no lighting') THEN
'Night'
END
```

	Light_Condition	CY_Casualties_PCT
1	Night	26.16
2	Day	73.84

Top 10 locations by No. of casualties

```
SELECT Top 10 local_authority, SUM(number_of_casualties) AS Total_casualties
FROM road_accident
GROUP BY local_authority
ORDER BY local_authority DESC
```

	local_authority	Total_casualties
1	York	1176
2	Wyre Forest	730
3	Wyre	812
4	Wycombe	1121
5	Wychavon	888
6	Wrexham	893
7	Worthing	570
8	Worcester	525
9	Wolverhampton	1566
10	Wokingham	810