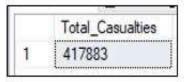
# **ROAD ACCIDENTS ANALYTICS - SQL QUERIES**

#### TOTAL CASUALTIES

SELECT SUM(number\_of\_casualties) AS Total\_Casualties

FROM road\_accidents

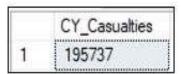


#### CY CASUALTIES

SELECT SUM(number\_of\_casualties) AS CY\_Casualties

FROM road accidents

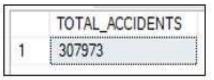
WHERE YEAR(accident\_date) = '2022'



# TOTAL ACCIDENTS

SELECT COUNT(DISTINCT accident\_index) AS TOTAL\_ACCIDENTS

FROM road\_accidents

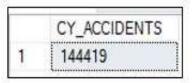


#### CY ACCIDENTS

SELECT COUNT(DISTINCT accident\_index) AS CY\_ACCIDENTS

FROM road\_accidents

WHERE YEAR(accident\_date) = '2022'

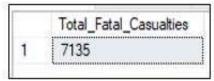


# TOTAL FATAL CASUALTIES

SELECT SUM( number\_of\_casualties) AS Total\_Fatal\_Casualties

FROM road\_accidents

WHERE accident\_severity = 'Fatal'



# TOTAL FATAL CASUALTIES IN PERCENTAGE

SELECT CAST(SUM(number\_of\_casualties) AS DECIMAL(10,2))\*100/

```
(SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2)) FROM
road_accidents)
AS Fatal_Casualties_Percentage FROM road_accidents
WHERE accident_severity = 'Fatal'
```

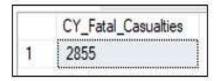
```
Fatal_Casualties_Percentage
1 1.7074157120533
```

## CY FATAL CASUALTIES

```
SELECT SUM( number_of_casualties) AS CY_Fatal_Casualties

FROM road_accidents

WHERE YEAR(accident_date) = '2022' AND accident_severity = 'Fatal'
```

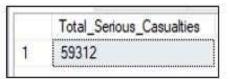


# TOTAL SERIOUS CASUALTIES

```
SELECT SUM( number_of_casualties) AS Total_Serious_Casualties

FROM road_accidents

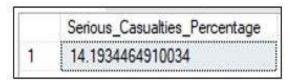
WHERE accident_severity = 'Serious'
```



# TOTAL SERIOUS CASUALTIES IN PERCENTAGE

```
SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2))*100/
(SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2)) FROM road_accidents)

AS Serious_Casualties_Percentage FROM road_accidents
WHERE accident_severity = 'Serious'
```



# CY SERIOUS CASUALTIES

```
SELECT SUM( number_of_casualties) AS CY_Serious_Casualties

FROM road_accidents

WHERE YEAR(accident_date) = '2022' AND accident_severity = 'Serious'
```

```
CY_Serious_Casualties
1 27045
```

# TOTAL SLIGHT CASUALTIES

```
SELECT SUM( number_of_casualties) AS Total_Slight_Casualties
FROM road_accidents
WHERE accident_severity = 'Slight'
```

	Total_Slight_Casualties
1	351436

#### TOTAL SLIGHT CASUALTIES IN PERCENTAGE

```
SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2))*100/
(SELECT CAST(SUM(number_of_casualties) AS DECIMAL(10,2)) FROM road_accidents)

AS Slight_Casualties_Percentage FROM road_accidents

WHERE accident_severity = 'Slight'
```

```
Slight_Casualties_Percentage
1 84.0991377969431
```

#### CY SLIGHT CASUALTIES

```
SELECT SUM( number_of_casualties) AS CY_Slight_Casualties

FROM road_accidents

WHERE YEAR(accident_date) = '2022' AND accident_severity = 
'Slight'

CY_Slight_Casualties
1 165837
```

#### TOTAL CASUALTIES BY VEHICLE TYPE

```
CASE

WHEN vehicle_type IN ('Agricultural vehicle') THEN 'Agricultural'

WHEN vehicle_type IN ('Taxi/Private hire car','Car') THEN

'Cars'

WHEN vehicle_type IN ('Motorcycle over 500cc','Motorcycle

125cc

and under','Motorcycle 50cc and under',
```

```
'Motorcycle over 125cc and up to
500cc')
                         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 ('Van / Goods 3.5 tonnes mgw or under',
                         'Goods over 3.5t. and under 7.5t',
                          'Goods 7.5 tonnes mgw and over') THEN
'Van'
   ELSE 'Others'
   END AS vehicle group,
   SUM(number of casualties) AS Total Casualties
   FROM road accidents
   GROUP BY
        CASE
   WHEN vehicle_type IN ('Agricultural vehicle') THEN 'Agricul-
tural'
   WHEN vehicle type IN ('Taxi/Private hire car', 'Car') THEN
'Cars'
```

```
WHEN vehicle type IN ('Motorcycle over 500cc', 'Motorcycle
125cc
                         and under', 'Motorcycle 50cc and under',
                          'Motorcycle over 125cc and up to
500cc')
                         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 ('Van / Goods 3.5 tonnes mgw or under',
                          'Goods over 3.5t. and under 7.5t',
                          'Goods 7.5 tonnes mgw and over') THEN
'Van'
   ELSE 'Others'
   END
```

	vehicle_group	Total_Casualties
1	Cars	333485
2	Van	33472
3	Agricultural	1032
4	Bus	12798
5	Others	3424
6	Bike	33672

#### CY CASUALTIES BY VEHICLE TYPE

```
SELECT
   CASE
   WHEN vehicle type IN ('Agricultural vehicle') THEN 'Agricul-
tural'
   WHEN vehicle type IN ('Taxi/Private hire car', 'Car') THEN
'Cars'
   WHEN vehicle type IN ('Motorcycle over 500cc', 'Motorcycle
125cc
                          and under', 'Motorcycle 50cc and un-
der',
                          'Motorcycle over 125cc and up to
500cc')
                     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 ('Van / Goods 3.5 tonnes mgw or under',
                         'Goods over 3.5t. and under 7.5t',
                         'Goods 7.5 tonnes mgw and over')
                    THEN 'Van'
   ELSE 'Others'
   END AS vehicle group,
   SUM (number_of_casualties) AS Total_Casualties
   FROM road accidents
   WHERE YEAR(accident_date) = '2022'
   GROUP BY
   WHEN vehicle type IN ('Agricultural vehicle') THEN 'Agricul-
tural'
   WHEN vehicle type IN ('Taxi/Private hire car', 'Car') THEN
'Cars'
   WHEN vehicle_type IN ('Motorcycle over 500cc', 'Motorcycle
125cc
```

```
and under', 'Motorcycle 50cc and un-
der',
                         'Motorcycle over 125cc and up to
500cc')
                     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 ('Van / Goods 3.5 tonnes mgw or under',
                         'Goods over 3.5t. and under 7.5t',
                         'Goods 7.5 tonnes mgw and over')
                     THEN 'Van'
   ELSE 'Others'
   END
```

	vehicle_group	Total_Casualties
1	Agricultural	399
2	Bike	15579
3	Bus	6573
4	Others	1477
5	Cars	155804
6	Van	15905

# MONTHLY TREND OF CY CASUALTIES (2022)

```
SELECT DATENAME(MONTH, accident_date) AS Month_Name, SUM(num-
ber_of_casualties) AS CY_CASUALTIES

FROM road_accidents

WHERE YEAR(accident_date) = '2022'

GROUP BY DATENAME(MONTH, accident_date)
```

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

# MONTHLY TREND OF LAST YEAR CASUALTIES (2021)

```
SELECT DATENAME(MONTH, accident_date) AS Month_Name, SUM(num-ber_of_casualties) AS LY_CASUALTIES

FROM road_accidents

WHERE YEAR(accident_date) = '2021'

GROUP BY DATENAME(MONTH, accident_date)
```

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

# TOTAL CASUALTIES BY ROAD TYPE

```
SELECT road_type, SUM(number_of_casualties) AS Total_Casualties

FROM road_accidents

GROUP BY road_type
```

	road_type	Total_Casualties
1	Dual camageway	67368
2	Roundabout	26828
3	One way street	7389
4	Slip road	6600
5	Single carriageway	309698

#### CY CASUALTIES BY ROAD TYPE

```
SELECT road_type, SUM(number_of_casualties) AS CY_Casualties

FROM road_accidents

WHERE YEAR(accident_date) = '2022'

GROUP BY road_type
```

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

# TOTAL CASUALTIES BY AREA(URBAN/RURAL)

```
SELECT urban_or_rural_area, SUM(number_of_casualties) AS
Total_Casualties
FROM road_accidents
GROUP BY urban_or_rural_area
```

	urban_or_rural_area	Total_Casualties
1	Rural	162019
2	Urban	255864

## TOTAL CASUALTIES BY AREA IN PERCENTAGE

```
SELECT urban_or_rural_area, CAST(SUM(number_of_casualties) AS

DECIMAL (10,2)) * 100/

(SELECT CAST(SUM(number_of_casualties) AS DECIMAL (10,2)) FROM road_accidents)

AS Total_Casualties_in_Percentage

FROM road_accidents

GROUP BY urban_or_rural_area
```

	urban_or_rural_area	Total_Casualties_in_Percentage
1	Rural	38.7713785916153
2	Urban	61.2286214083846

# CY CASUALTIES BY AREA(URBAN/RURAL)

```
SELECT urban_or_rural_area, SUM(number_of_casualties) AS

CY_Casualties

FROM road accidents
```

```
WHERE YEAR(accident_date) = '2022'
GROUP BY urban_or_rural_area
```

	urban_or_rural_area	CY_Casualties
1	Rural	74486
2	Urban	121251

# CY CASUALTIES BY AREA IN PERCENTAGE

```
SELECT urban_or_rural_area, CAST(SUM(number_of_casualties) AS

DECIMAL (10,2)) * 100/

(SELECT CAST(SUM(number_of_casualties) AS DECIMAL (10,2)) FROM

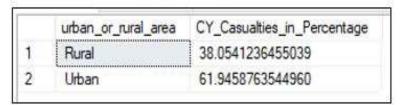
road_accidents

WHERE YEAR(accident_date) = '2022') AS CY_Casualties_in_Percent-
age

FROM road_accidents

WHERE YEAR(accident_date)='2022'

GROUP BY urban_or_rural_area
```



## TOTAL CASUALTIES BY LIGHT CONDITIONS

```
SELECT
CASE
WHEN light conditions IN ('Darkness - lights lit', 'Darkness -
                                  lighting unknown', 'Darkness -
                                  lights unlit', 'Darkness - no
                                  lighting')
THEN 'Dark'
ELSE 'Daylight'
END AS light_conditions_group,
SUM(number_of_casualties) AS Total Casualties
FROM road accidents
GROUP BY
CASE
WHEN light conditions IN ('Darkness - lights lit', 'Darkness -
                                  lighting unknown', 'Darkness -
                                  lights unlit', 'Darkness - no
                                  lighting')
```

```
THEN 'Dark'
ELSE 'Daylight'
END
```

	light_conditions	Total_Casualties
1	Daylight	304963
2	Dark	112920

#### CY CASUALTIES BY LIGHT CONDITIONS

```
SELECT
```

```
CASE
```

```
WHEN light_conditions IN ('Darkness - lights lit','Darkness - lighting unknown','Darkness - lights unlit','Darkness - no lighting')
```

```
THEN 'Dark'

ELSE 'Daylight'

END AS light_conditions_group,

SUM(number_of_casualties) AS CY_Casualties

FROM road_accidents

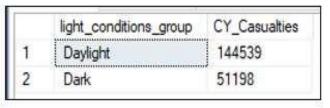
WHERE YEAR(accident_date) = '2022'
```

```
CASE
WHEN light_conditions IN ('Darkness - lights lit', 'Darkness -
lighting unknown', 'Darkness -
lights unlit', 'Darkness - no
lighting')

THEN 'Dark'

ELSE 'Daylight'

END
```



#### TOTAL CASUALTIES BY ROAD SURFACE

```
CASE
WHEN road_surface_conditions IN ('Dry') THEN 'Dry'
WHEN road_surface_conditions IN ('Frost or ice', 'Snow') THEN
'Frost/Snow'
```

```
WHEN road surface conditions IN ('Wet or damp', 'Flood over 3cm.
deep') THEN 'Wet'
ELSE '(Blank)'
END AS road surface conditions,
SUM(number of casualties) AS Total Casualties
FROM road accidents
GROUP BY
CASE
WHEN road surface conditions IN ('Dry') THEN 'Dry'
WHEN road surface conditions IN ('Frost or ice', 'Snow') THEN
'Frost/Snow'
WHEN road surface conditions IN ('Wet or damp', 'Flood over 3cm.
deep') THEN 'Wet'
ELSE '(Blank)'
END
```

# road\_surface\_conditions Total\_Casualties 1 Frost/Snow 22781 2 Dry 279445 3 Wet 115657

## CY CASUALTIES BY ROAD SURFACE

```
SELECT
CASE
WHEN road surface conditions IN ('Dry') THEN 'Dry'
WHEN road surface conditions IN ('Frost or ice', 'Snow') THEN
'Frost/Snow'
WHEN road_surface_conditions IN ('Wet or damp', 'Flood over 3cm.
deep') THEN 'Wet'
ELSE '(Blank)'
END AS road surface conditions,
SUM(number of casualties) AS Total Casualties
FROM road accidents
WHERE YEAR(accident date) = '2022'
GROUP BY
CASE
WHEN road surface conditions IN ('Dry') THEN 'Dry'
WHEN road surface conditions IN ('Frost or ice', 'Snow') THEN
'Frost/Snow'
```

```
WHEN road_surface_conditions IN ('Wet or damp','Flood over 3cm.

deep') THEN 'Wet'

ELSE '(Blank)'

END
```

	road_surface_conditions	Total_Casualties
1	Frost/Snow	13218
2	Dry	131976
3	Wet	50543

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