SQL Queries:

-- How Many Car Accidents Are There in NYC Every Year?

SELECT YEAR(collision_dt) AS Year, COUNT(collision_id) AS Car_Accidents

FROM fct_collision_crashes c

JOIN fct_Collisions_Vehicles fcv ON fcv.COLLISION_ID = c.collision_id

JOIN Dim_VEHICLE_TYPE vt ON vt.VEHICLE_TYPE_SK = fcv.VEHICLE_TYPE_SK

WHERE vt.VEHICLE_TYPE LIKE 'car%' OR vt.VEHICLE_TYPE LIKE 'sedan%'

GROUP BY YEAR(collision_dt)

ORDER BY 1 DESC;

--Which Boroughs in New York City Have the Most Accidents? SELECT borough, COUNT(collision_id) AS Accidents FROM fct_collision_crashes GROUP BY borough ORDER BY 2 DESC;

-- How Many NYC Car Accidents Result in an Injury?

SELECT COUNT(c.collision_id) AS Car_Accidents

FROM fct_collision_crashes c

INNER JOIN fct_collision_persons p ON p.COLLISION_ID = c.collision_id

INNER JOIN Dim_PERSON_INJURY dpi ON dpi.PERSON_INJURY_SK = p.PERSON_INJURY_SK

WHERE dpi.PERSON_INJURY = 'Injured';

--Which NYC Borough Has the Most Fatal Car Accidents?

SELECT c.borough, COUNT(c.collision_id) AS CarAccidents

FROM fct_collision_crashes c

INNER JOIN fct_collision_persons p ON p.COLLISION_ID = c.collision_id

INNER JOIN Dim_PERSON_INJURY dpi ON dpi.PERSON_INJURY_SK = p.PERSON_INJURY_SK

WHERE dpi.PERSON_INJURY = 'Killed'

GROUP BY c.borough;

--When Do Most New York City Car Accidents Happen?

SELECT CONCAT(c.collision_hour, ':00'), COUNT(c.collision_id) AS CarAccidents

FROM fct_collision_crashes c

GROUP BY c.collision_hour

ORDER BY 2 DESC

LIMIT 1;

--How Common Are Bicycle Accidents in NYC?

SELECT COUNT(c.collision_id) AS BicycleAccidents

FROM fct_collision_crashes c

INNER JOIN fct_collision_persons p ON p.COLLISION_ID = c.collision_id

INNER JOIN Dim_PersonType dpt ON dpt.PERSON_TYPE_SK = p.PERSON_TYPE_SK

WHERE dpt.PERSON_TYPE = 'Bicyclist';

- --How Often Are Pedestrians Involving New York Traffic Accidents?

 SELECT COUNT(c.collision_id) AS BicycleAccidents

 FROM fct_collision_crashes c

 INNER JOIN fct_collision_persons p ON p.COLLISION_ID = c.collision_id

 INNER JOIN Dim_PersonType dpt ON dpt.PERSON_TYPE_SK = p.PERSON_TYPE_SK

 WHERE dpt.PERSON TYPE = 'Pedestrian';
- --How Many Motorcyclists are Injured or Killed in NYC Accidents? SELECT SUM(c.number_of_motorist_killed) AS motorist_killed, SUM(c.number_of_motorist_injured) AS motorist_injured FROM fct collision crashes c;
- --Are Trucks Involved in Many New York Accidents?

 SELECT YEAR(c.collision_dt) AS Year, COUNT(c.collision_id) AS Truck_Accident
 FROM fct_collision_crashes c

 JOIN fct_Collisions_Vehicles v ON v.COLLISION_ID = c.collision_id

 JOIN Dim_VEHICLE_TYPE dvt ON dvt.VEHICLE_TYPE_SK = v.VEHICLE_TYPE_SK

 WHERE dvt.VEHICLE_TYPE LIKE '%truc%'

 GROUP BY YEAR(collision_dt)

 ORDER BY 2 DESC;