**SQL Assignment 2**

𝗕𝘂𝘀𝗶𝗻𝗲𝘀𝘀 𝗽𝗿𝗼𝗯𝗹𝗲𝗺 : The UK Department of Transport provides open data sets on road safety and casualties, and one can use these data sets to analyze how safe the roads in the UK are. This project will help you answer a few questions using their 2015 data set. The dataset has 3 tables i.e Accident, vehicle, Vehicle\_type

use "NK\_SNOWFLAKE\_SAMPLE\_DATA";

Table Creation accident

CREATE TABLE accident(

Accident\_Index varchar(15),

Location\_Easting\_OSGR int,

Location\_Northing\_OSGR int,

Longitude int,

Latitude int,

Police\_Force int,

Accident\_Severity int,

Number\_of\_Vehicles int,

Number\_of\_Casualties int,

Date varchar,

Day\_of\_Week int,

Time time,

Local\_Authority\_District varchar(13),

Local\_Authority\_Highway varchar(15),

first\_Road\_Class int,

first\_Road\_Number int,

Road\_Type int,

Speed\_limit int,

Junction\_Detail int,

Junction\_Control int,

second\_Road\_Class int,

second\_Road\_Number int,

Pedestrian\_Crossing\_Human\_Control int,

Pedestrian\_Crossing\_Physical\_Facilities int,

Light\_Conditions int,

Weather\_Conditions int,

Road\_Surface\_Conditions int,

Special\_Conditions\_at\_Site int,

Carriageway\_Hazards int,

Urban\_or\_Rural\_Area int,

Did\_Police\_Officer\_Attend\_Scene\_of\_Accident int,

LSOA\_of\_Accident\_Location varchar(13)

);

TABLE : - VEHICLE\_TYPE

create table vehicle\_type(code

int,label varchar(30));

TABLE : - VEHICLE

create table vehicle(

Accident\_Index varchar(15),

Vehicle\_Reference int,

Vehicle\_Type int,

Towing\_and\_Articulation int,

Vehicle\_Manoeuvre int,

Vehicle\_Location\_Restricted\_Lane int,

Junction\_Location int,

Skidding\_and\_Overturning int,

Hit\_Object\_in\_Carriageway int,

Vehicle\_Leaving\_Carriageway int,

Hit\_Object\_off\_Carriageway int,

first\_Point\_of\_Impact int,

Was\_Vehicle\_Left\_Hand\_Drive int,

Journey\_Purpose\_of\_Driver int,

Sex\_of\_Driver int,

Age\_of\_Driver int,

Age\_Band\_of\_Driver int,

Engine\_Capacity\_CC int,

Propulsion\_Code int,

Age\_of\_Vehicle int,

Driver\_IMD\_Decile int,

Driver\_Home\_Area\_Type int,

Vehicle\_IMD\_Decile int

);

Query 1 :Evaluate the median severity value of accidents caused by various Motorcycles

select a.Accident\_Severity as severity,t.label as vehicle\_type from accident a

inner join vehicle v

on a.Accident\_Index = v.Accident\_Index

join Vehicle\_Type t

on

v.Vehicle\_Type = t.code

where t.label like '%Motorcycle%'

order by a.Accident\_Severity;

Query 2 :-Evaluate Accident Severity and Total Accidents per Vehicle Type

select t.label,a.accident\_severity,count(t.label)

from accident a

inner join vehicle v

on

a.Accident\_Index = v.Accident\_Index

inner join Vehicle\_Type t

on v.Vehicle\_Type = t.code

group by 1,2;

;

Query 3:-Calculate the Average Severity by vehicle type

select t.label,avg(a.accident\_severity) as average\_severity,count(t.label) as accident\_count

from accident a

inner join vehicle v

on

a.Accident\_Index = v.Accident\_Index

inner join Vehicle\_Type t

on v.Vehicle\_Type = t.code

group by 1

order by 1;

Query 4:-Calculate the Average Severity and Total Accidents by Motorcycle

select vt.label,avg(a.accident\_severity),count(vt.label) as Total\_accidents

from accident a

inner join vehicle v

on

a.Accident\_Index = v.Accident\_Index

inner join Vehicle\_Type vt

on

v.Vehicle\_Type = vt.code

where vt.label like '%Motorcycle%'

group by 1;