Create database SQL\_PROJECT

use SQL\_PROJECT;

create or replace table accidents

(

Accident\_Index varchar(30),

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(30),

Day\_of\_Week int,

Time varchar(30),

Local\_Authority\_District int,

Local\_Authority\_Highway varchar(30),

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(30)

);

select \* from accidents;

create or replace table vehicle(

Accident\_Index varchar(30),

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

);

select \* from vehicle;

create or replace table vehicle\_types

(

code int,

label varchar(100)

);

select \* from vehicle\_types;

**Q1 : Evaluate the median severity value of accidents caused by various Motorcycles.**

Ans :

select Distinct T.label , percentile\_cont(0.50) within group (order by a.accident\_severity) over (partition by T.label) as median\_accidents\_severity

from accidents a

inner join vehicle v on v.accident\_index = a.accident\_index

inner join vehicle\_types t on t.code = v.vehicle\_type

where t.label like '%otorcycle%';

**Q2 : Evaluate Accident Severity and Total Accidents per Vehicle Type.**

Ans :

select T.label , count (a.Accident\_index) as total\_accident ,

avg(a.accident\_severity) as accident\_severity from accidents a

inner join vehicle v on v.accident\_index = a.accident\_index

inner join vehicle\_types t on t.code = v.vehicle\_type

group by t.label ;

**Q3 : Calculate the Average Severity by vehicle type.**

Ans :

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

from accidents a

inner join vehicle v on v.accident\_index = a.accident\_index

inner join vehicle\_types t on t.code = v.vehicle\_type

group by t.label ;

**Q4 : Calculate the Average Severity and Total Accidents by Motorcycle.**

Ans :

select t.label, count(a.accident\_index) as Total\_accidents, avg(a.accident\_Severity) as Accident\_Severity

from accidents a

inner join vehicle v on v.accident\_index = a.accident\_index

inner join vehicle\_types t on t.code = v.vehicle\_type

where t.label like '%otorcycle%'

group by t.label

;