

```

1  USE "INERUON_TASKS";
2
3  SELECT * FROM "INERUON_TASKS"."PUBLIC"."ACCIDENTS_2015";
4  SELECT * FROM "INERUON_TASKS"."PUBLIC"."VEHICLES_2015";
5  SELECT * FROM "INERUON_TASKS"."PUBLIC"."VEHICLE_TYPES";
6
7  -----1. Evaluate the median severity value of accidents caused by various
Motorcycles.----->-
8
9  -----SOLUTION
1 -----
10
11 with med as(
12 select a.ACCIDENT_SEVERITY,v.Vehicle_type,vt.label,ROW_NUMBER() OVER(PARTITION BY LABEL
ORDER BY ACCIDENT_SEVERITY) AS RN,
13 COUNT(1)OVER(PARTITION BY LABEL) AS CT
14 from "ACCIDENTS_2015" a
15 inner join "VEHICLES_2015" v on a.ACCIDENT_INDEX=v.ACCIDENT_INDEX
16 inner join "VEHICLE_TYPES" vt on v.Vehicle_type=vt.code
17 where label like '%otorcycle%')
18
19 select label,ROUND(AVG(ACCIDENT_SEVERITY),0) as median_value
20 FROM MED
21 WHERE RN = CEIL(CT/2) OR RN IN (CT/2,(CT/2)+1)
22 GROUP BY 1;
23
24 -----Solution
2 -----
25 select MEDIAN(T.Accident_Severity) as Median_Severity , t.LABEL from
26 (
27 select v.Accident_Index , act.Accident_Severity , vt.CODE , vt.LABEL
28 from vehicles_2015 as v
29 left join vehicle_types as vt on v.vehicle_type = vt.CODE
30 left join accidents_2015 as act on act.Accident_Index = v.Accident_Index)
31 as t where t.LABEL like '%Motorcycle%' group by LABEL ;
32
33
34 -----2. Evaluate Accident Severity and Total Accidents per Vehicle
Type.-----
35
36 SELECT COUNT(ACCIDENT_INDEX),ACCIDENT_SEVERITY,Vehicle_type,label FROM
37 (select a.ACCIDENT_INDEX,a.ACCIDENT_SEVERITY,v.Vehicle_type,vt.label
38 from "ACCIDENTS_2015" a
39 inner join "VEHICLES_2015" v on a.ACCIDENT_INDEX=v.ACCIDENT_INDEX
40 inner join "VEHICLE_TYPES" vt on v.Vehicle_type=vt.code)SQ
41 GROUP BY 2,3,4
42 ORDER BY 4;
43
44
45 -----3. Calculate the Average Severity by vehicle
type.-----
46
47 SELECT round(avg(ACCIDENT_SEVERITY),2) AVG_ACC_SEVERITY,Vehicle_type FROM
48 (select a.ACCIDENT_INDEX,a.ACCIDENT_SEVERITY,v.Vehicle_type,vt.label
49 from "ACCIDENTS_2015" a
50 inner join "VEHICLES_2015" v on a.ACCIDENT_INDEX=v.ACCIDENT_INDEX
51 inner join "VEHICLE_TYPES" vt on v.Vehicle_type=vt.code)SQ
52 GROUP BY 2
53 ORDER BY 2 DESC, 1;
54
55 -----4. Calculate the Average Severity and Total Accidents by
Motorcycle.-----
56
57 select round(avg(a.ACCIDENT_SEVERITY),2) AVG_ACC_SEVERITY, count(a.ACCIDENT_INDEX) as
TOTAL_ACCIDENTS
58 from "ACCIDENTS_2015" a
59 inner join "VEHICLES_2015" v on a.ACCIDENT_INDEX=v.ACCIDENT_INDEX
60 inner join "VEHICLE_TYPES" vt on v.Vehicle_type=vt.code

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61  where LABEL like '%otorcycle%'
62  ORDER BY 2 desc;
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