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1. A picture containing screenshot

Description automatically generated

2)

Two-Table Methodology

For a Model point of view

|  |  |
| --- | --- |
| Model | No of Accidents |
| Audi A8 | 22 |

For a Location Point of view

|  |  |
| --- | --- |
| location | No of Accidents |
| Caulfield | 134 |

For a Branch Dim point of View

The no of accidents registered at every branch

|  |  |
| --- | --- |
| Branch | No of Accidents |
| Police Station Caulfield East | 111 |

For Time Dim Point of View

|  |  |
| --- | --- |
| Time | No of Accidents |
| 5:50am Daytime | 12 |

The data is fictious

3. --create table timedim

--drop table timedim cascade constraints purge;

create table timedim(

time\_id number not null,

time\_desc VARCHAR2(50));

insert into timedim values(1,'daytime: 6AM - 5:59PM');

insert into timedim values(2,'nighttime 6PM - 5:59AM');

commit;

select \* from timedim;

--create table locationdim1

--drop table locationdim1 cascade constraints purge;

create table locationdim1

as select distinct accident\_suburb from accident.accident ;

--create branchdim tble

--drop table branchdim cascade constraints purge;

create table branchdim as

select distinct officer\_branch as branch\_name

from ACCIDENT.police\_officer;

--create modeldim tble

--drop table modeldim cascade constraints purge;

create table modeldim as

select distinct vehicle\_model

from ACCIDENT.vehicle;

-- create tempfact\_accident table for accident

create table tempfact\_accident as

select a.accident\_suburb, a.accident\_date\_time, v.vehicle\_model,v.vehicle\_no, ar.accident\_no,p.officer\_branch from

ACCIDENT.vehicle v, ACCIDENT.accident\_record ar , ACCIDENT.accident a, ACCIDENT.police\_officer p

where v.vehicle\_no = ar.vehicle\_no and ar.accident\_no=a.accident\_no and a.officer\_id = p.officer\_id;

alter table tempfact\_accident

ADD (time\_id NUMBER);

--update tempfact\_accident set time\_id =1

--WHERE to\_char(accident\_date\_time, 'HH24:MI') >= '06:00'

--AND to\_char(accident\_date\_time, 'HH24:MI') < '18:00';

-- NOT WROKING AS EXPECTED

update tempfact\_accident set time\_id = 1

WHERE to\_char(accident\_date\_time, 'HH24') = '06'

OR to\_char(accident\_date\_time, 'HH24') = '07'

OR to\_char(accident\_date\_time, 'HH24') = '08'

OR to\_char(accident\_date\_time, 'HH24') = '09'

OR to\_char(accident\_date\_time, 'HH24') = '10'

OR to\_char(accident\_date\_time, 'HH24') = '11'

OR to\_char(accident\_date\_time, 'HH24') = '12'

OR to\_char(accident\_date\_time, 'HH24') = '13'

OR to\_char(accident\_date\_time, 'HH24') = '14'

OR to\_char(accident\_date\_time, 'HH24') = '15'

OR to\_char(accident\_date\_time, 'HH24') = '16'

OR to\_char(accident\_date\_time, 'HH24') = '17'

OR to\_char(accident\_date\_time, 'HH24') < '18';

update tempfact\_accident set time\_id = 2

WHERE to\_char(accident\_date\_time, 'HH24') = '18'

OR to\_char(accident\_date\_time, 'HH24') = '19'

OR to\_char(accident\_date\_time, 'HH24') = '20'

OR to\_char(accident\_date\_time, 'HH24') = '21'

OR to\_char(accident\_date\_time, 'HH24') = '22'

OR to\_char(accident\_date\_time, 'HH24') = '23'

OR to\_char(accident\_date\_time, 'HH24') = '00'

OR to\_char(accident\_date\_time, 'HH24') = '01'

OR to\_char(accident\_date\_time, 'HH24') = '02'

OR to\_char(accident\_date\_time, 'HH24') = '03'

OR to\_char(accident\_date\_time, 'HH24') = '04'

OR to\_char(accident\_date\_time, 'HH24') = '05'

OR to\_char(accident\_date\_time, 'HH24') < '06';

--create fact\_accident

CREATE TABLE fact\_accident AS

SELECT T.time\_id, t.officer\_branch, t.accident\_suburb,t.vehicle\_model,

count(t.accident\_no) AS total\_no\_of\_accident

FROM tempfact\_accident T

GROUP BY t.accident\_suburb,t.vehicle\_model,T.time\_id, t.officer\_branch ;

4) --Show the total number of accidents happening by different locations and by differentlighting periods (daytime: 6AM - 5:59PM and nighttime 6PM - 5:59AM).

select f.accident\_suburb,t.time\_desc, count(f.total\_no\_of\_accident) as total\_accident

from fact\_accident f, timedim t where f.time\_id = t.time\_id

group by f.accident\_suburb,t.time\_desc ;

-- Show the total number of accidents by each vehicle model.

select f.vehicle\_model, count(\*) as total\_accident from fact\_accident f , modeldim m

where f.vehicle\_model =m.vehicle\_model

group by f.vehicle\_model;

--select \* from ACCIDENT.vehicle where vehicle\_model ='Volusia';

--select \* from ACCIDENT.accident\_record where vehicle\_no = 'VM009';

-- Show the number of vehicles involved in every accident event on different locations.

select accident\_no, count(\*) vehicles from ACCIDENT.accident\_record

group by accident\_no;

-- Show the number of accidents taken care of by different police officer branches.

select f.officer\_branch, count(f.officer\_branch) as total\_accident from fact\_accident f,

branchdim b where f.officer\_branch = b.branch\_name

group by f.officer\_branch;