# **Reports**

The following view is created to use it with a pivot table

**VIEW:**

CREATE VIEW crime\_report\_view AS

SELECT CRIME\_ID, CRIME\_NAME, REPORTED\_DATE, CLOSED\_DATE, CRIME\_STATUS, CRIME\_TYPE, OFFICER\_NOTE,

HOUSE\_NO, STREET\_NAME, POST\_CODE, CITY\_NAME, REGION\_NAME,

FIRST\_NAME, MIDDLE\_NAME, LAST\_NAME, DOB, GENDER, DEPARTMENT,RANK

FROM CRIME\_REGISTER, LOCATION, REGION, OFFICER

where CRIME\_REGISTER.LOCATION\_ID = LOCATION.LOCATION\_ID and

CRIME\_REGISTER.POLICE\_ID = OFFICER.OFFICER\_ID and

LOCATION.REGION\_ID = REGION.REGION\_ID;

**Report1:**

* **Total number of open and closed crimes per city using a pivot, a count function, order by**

SELECT \* from (

SELECT CITY\_NAME, CRIME\_STATUS

FROM

crime\_report\_view

)

pivot

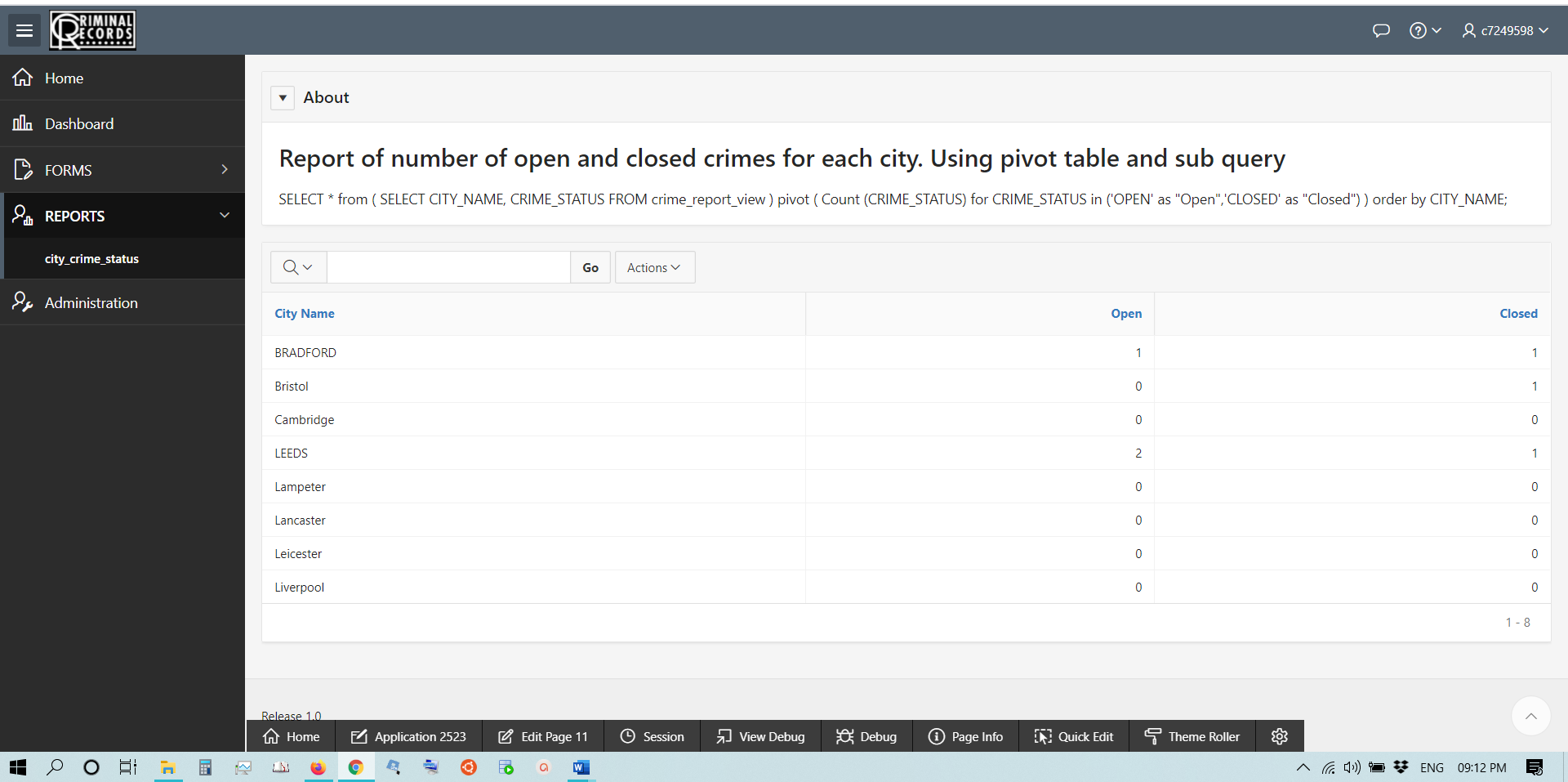
(

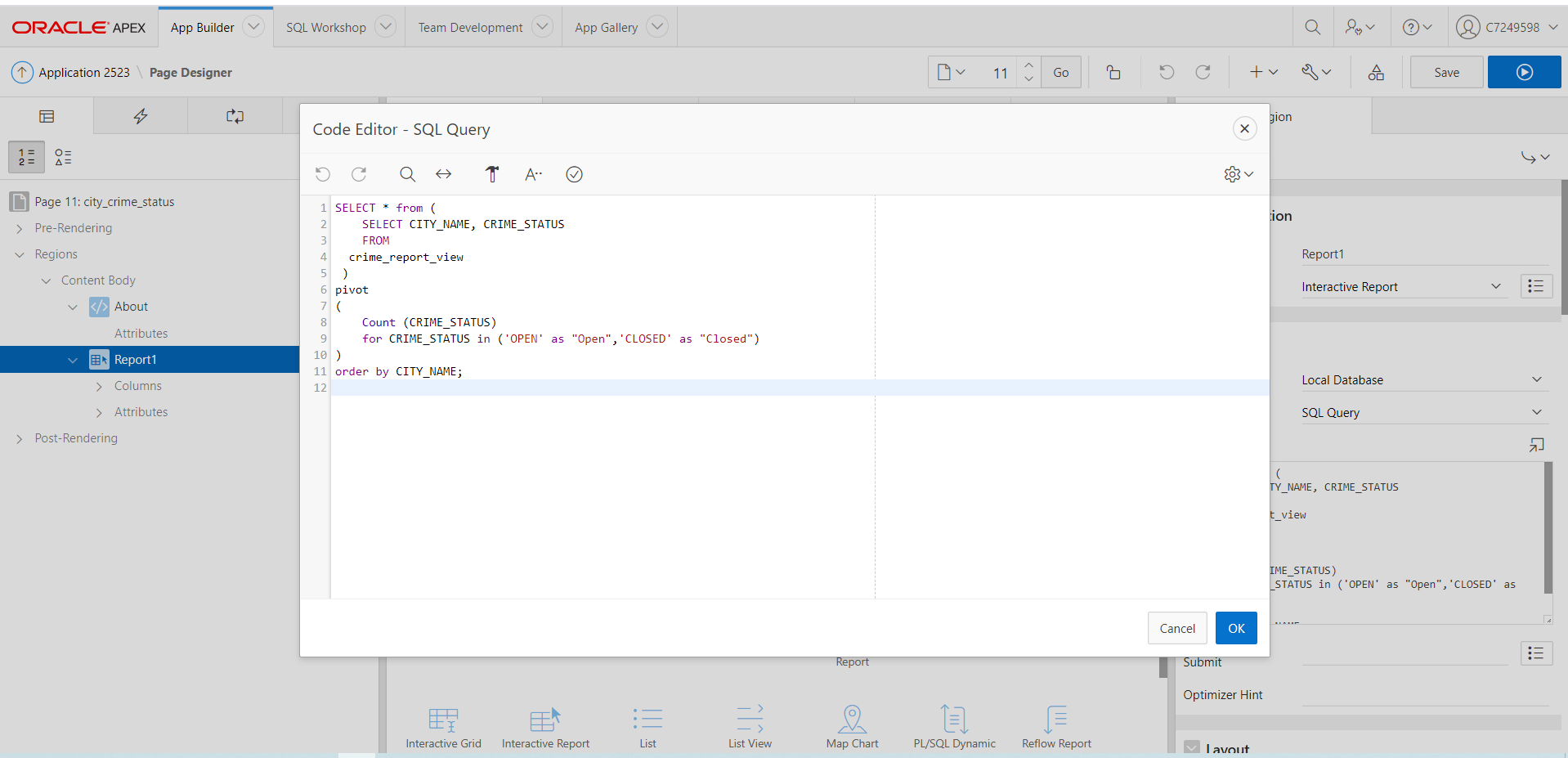
Count (CRIME\_STATUS)

for CRIME\_STATUS in ('OPEN' as "Open",'CLOSED' as "Closed")

)

order by CITY\_NAME;

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**Report2:**

* **Number of crimes per financial year between the years 2001 to 2021 using sub query, Extract function, Between, group by and order by.**

SELECT YEAR AS FINANCIAL\_YEAR, COUNT(\*) AS NUMBER\_OF\_CRIMES

FROM

(

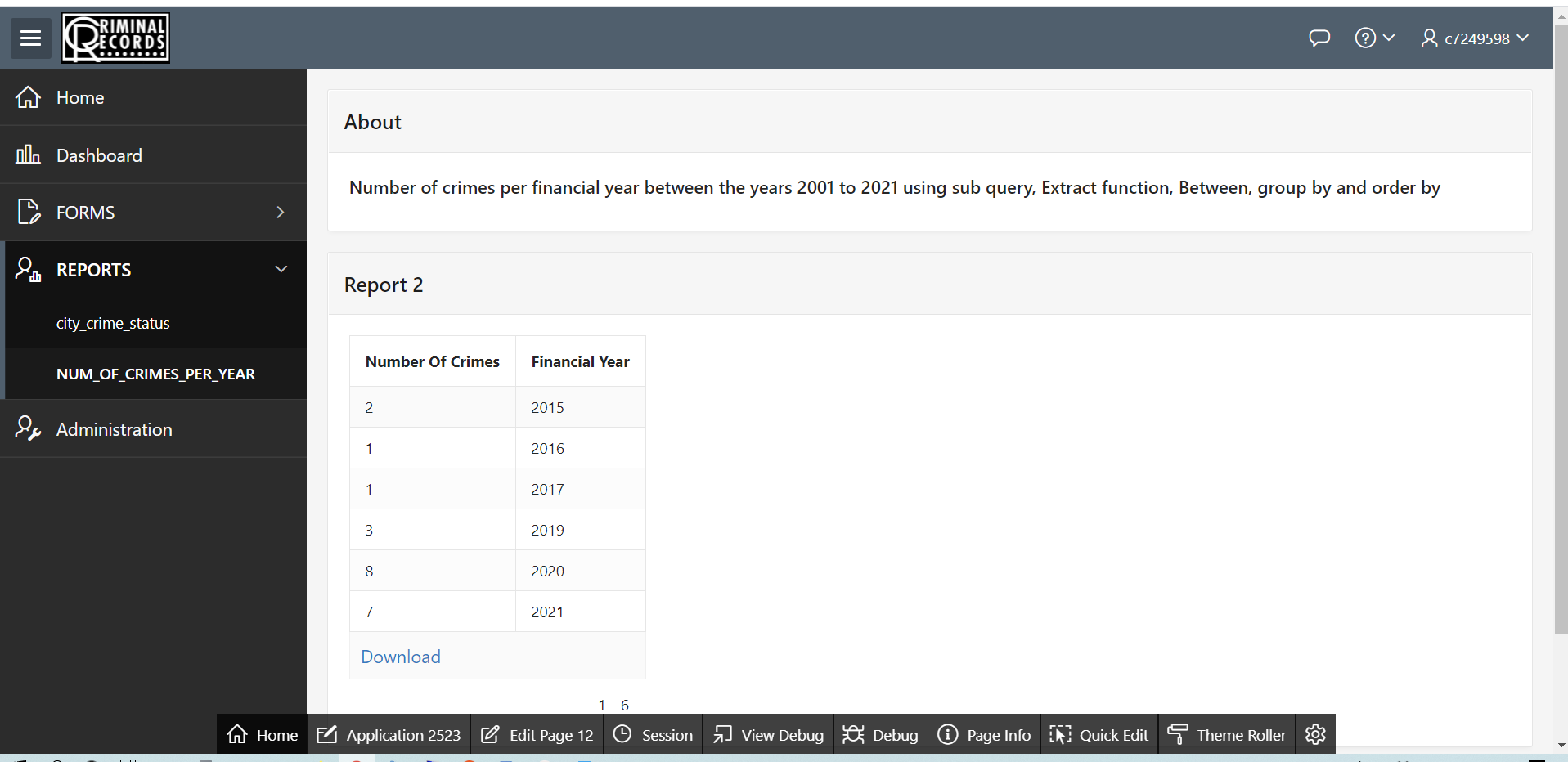
select EXTRACT(YEAR FROM reported\_date) YEAR, CRIME\_ID ,LOCATION\_ID, POLICE\_ID, REPORTED\_DATE, CRIME\_STATUS

FROM

crime\_register

)

WHERE YEAR BETWEEN 2001 AND 2021 GROUP BY YEAR ORDER BY YEAR ASC;



**Report3:**

### **Number of crimes per region using subqueries, table joins, count, group by order by**

SELECT region\_name, crime\_numbers\_per\_region

FROM

(

SELECT COUNT(\*) as crime\_numbers\_per\_region, region\_name

From

(

SELECT cr.crime\_id, l.location\_id,r.region\_id, region\_name

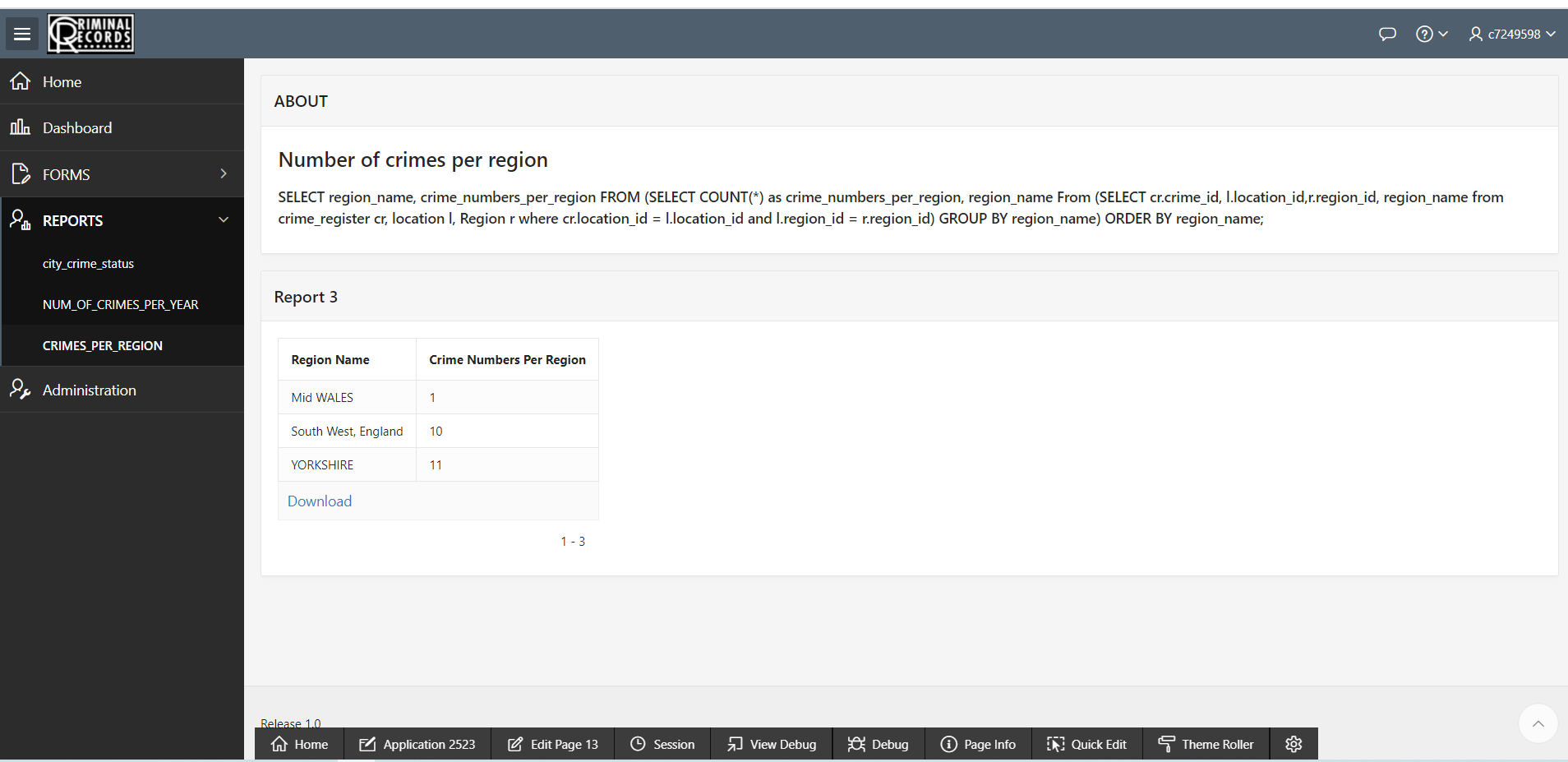
FROM

crime\_register cr, location l, Region r where cr.location\_id = l.location\_id and l.region\_id = r.region\_id

)

GROUP BY region\_name

) ORDER BY region\_name;

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**Report4:**

**Region where number of crime is maximum using MAX, count, table joins and subqueries**

SELECT region\_name as region\_with\_max\_crimes, CRIME\_NUMBERS\_PER\_REGION as number\_of\_crimes FROM (SELECT region\_name, crime\_numbers\_per\_region FROM

(SELECT count(\*) as crime\_numbers\_per\_region, region\_name

From

(SELECT cr.crime\_id, l.location\_id,r.region\_id, region\_name from crime\_register cr, location l, Region r where cr.location\_id = l.location\_id and l.region\_id = r.region\_id)

GROUP BY region\_name) order by region\_name)

WHERE

CRIME\_NUMBERS\_PER\_REGION =(SELECT Max(CRIME\_NUMBERS\_PER\_REGION)

FROM

(select region\_name, crime\_numbers\_per\_region FROM

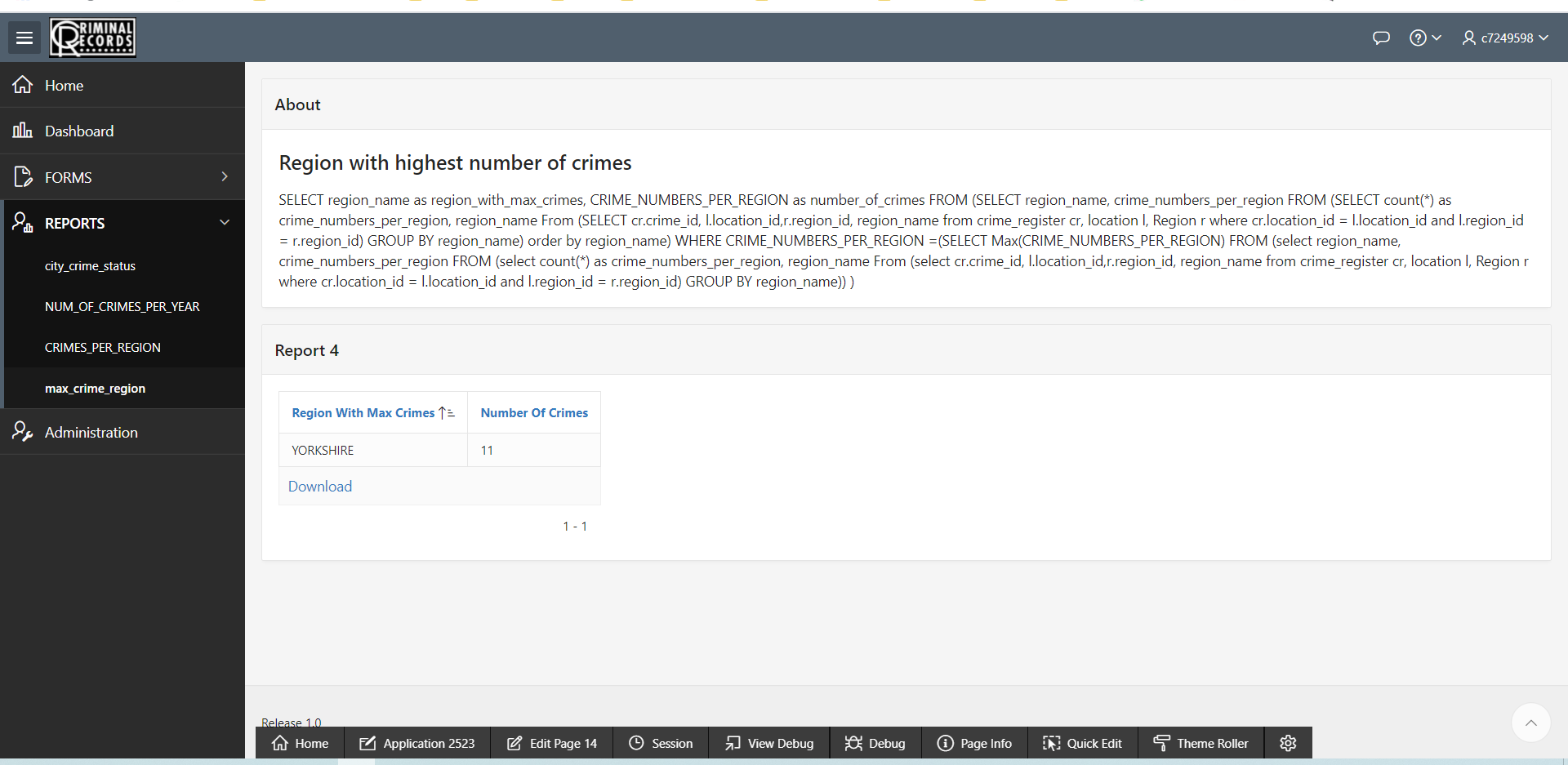
(select count(\*) as crime\_numbers\_per\_region, region\_name

From

(select cr.crime\_id, l.location\_id,r.region\_id, region\_name from crime\_register cr, location l, Region r where cr.location\_id = l.location\_id and l.region\_id = r.region\_id)

GROUP BY region\_name))

)



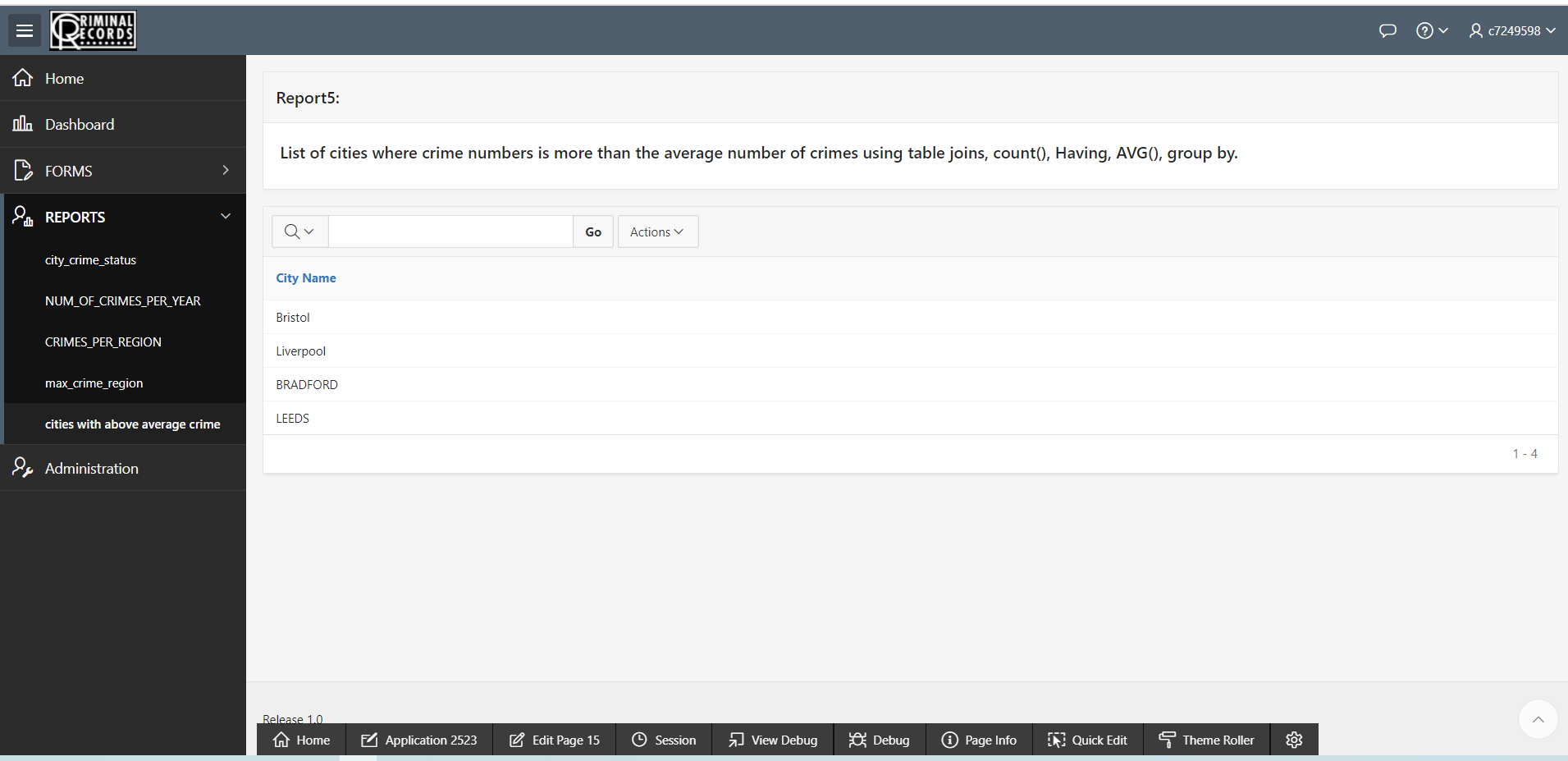
**Report5:**

**List of cities where crime numbers is more than the average number of crimes using table joins, count(), Having, AVG(), group by.**

SELECT l.city\_name FROM crime\_register c, location l WHERE c.location\_id = l.location\_id

GROUP BY l.city\_name

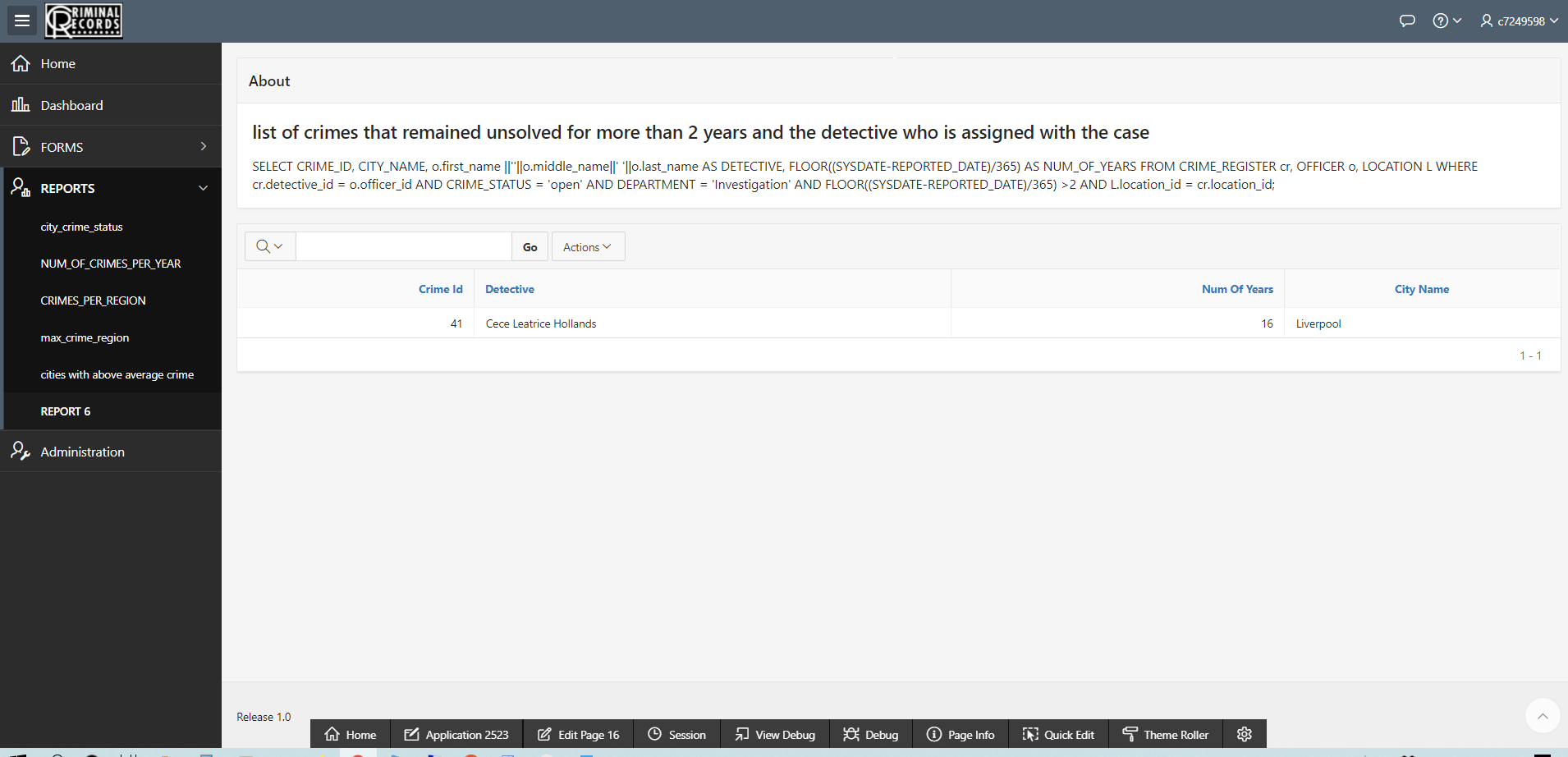
HAVING COUNT(\*) > (SELECT AVG(COUNT(\*)) FROM crime\_register GROUP BY location\_id)

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**Report6:**

### **list of crimes that remained unsolved for more than 2 years and the detective who is assigned with the case**

SELECT CRIME\_ID, CITY\_NAME, o.first\_name ||''||o.middle\_name||' '||o.last\_name AS DETECTIVE, FLOOR((SYSDATE-REPORTED\_DATE)/365) AS NUM\_OF\_YEARS FROM CRIME\_REGISTER cr, OFFICER o, LOCATION L WHERE cr.detective\_id = o.officer\_id AND CRIME\_STATUS = 'open' AND DEPARTMENT = 'Investigation' AND FLOOR((SYSDATE-REPORTED\_DATE)/365) >2 AND L.location\_id = cr.location\_id;

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