

QUERIES PERFORMED IN AWS REDSHIFT

- Top 5 blocks where more crimes were committed

```
SELECT "crime"."fact"."location_id", "crime"."location"."block", "crime".  
"location"."location_description", "crime".  
"location"."latitude", "crime"."location"."longitude", "crime"."location"."city",  
count("crime"."fact"."crime_id") as crime_count  
  
FROM "crime"."fact", "crime"."location"  
  
WHERE "crime"."fact"."location_id" ="crime"."location"."location_id"  
  
GROUP BY "crime"."fact"."location_id", "crime"."location"."block",  
"crime"."location"."city", "crime"."location"."location_description", "crime".  
"location"."latitude", "crime"."location"."longitude"  
  
ORDER BY crime_count desc limit 5;
```

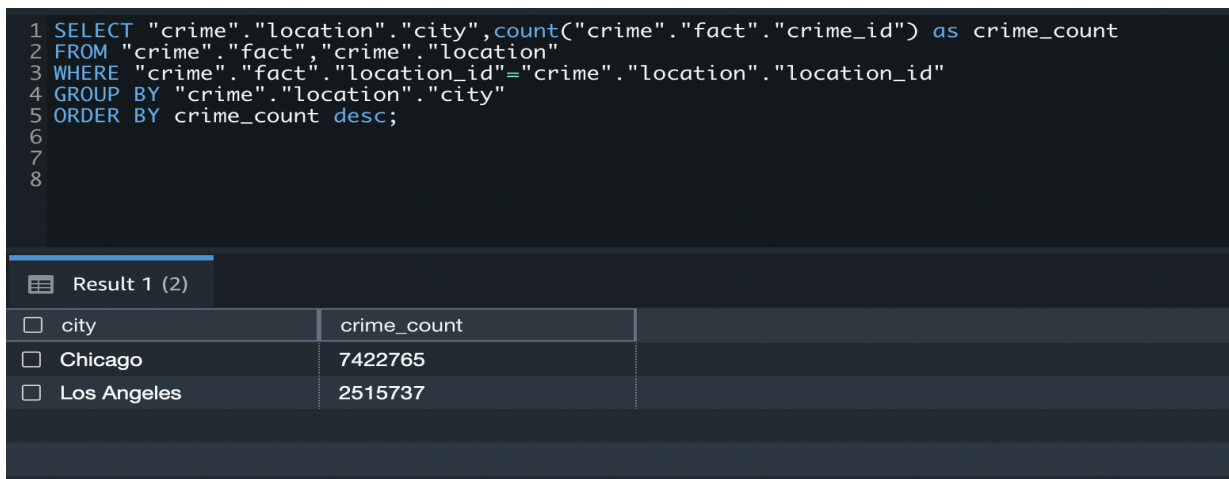
```
3 -- Choose the top 5 blocks which has more crimes committed
4 SELECT "crime"."fact"."location_id",
  "crime"."location"."block", "crime"."location"."location_description", "crime"."location"."latitude", "crime"."location"."longitude",
  "crime"."location"."city", count("crime"."fact"."crime_id") as crime_count
5 FROM "crime"."fact", "crime"."location"
6 WHERE "crime"."fact"."location_id"="crime"."location"."location_id"
7 GROUP BY "crime"."fact"."location_id", "crime"."location"."block", "crime"."location"."city",
  "crime"."location"."location_description", "crime"."location"."latitude", "crime"."location"."longitude"
8 ORDER BY crime_count desc
9 limit 5;
10
11
```

Result 1 (5)							Chart x
<input type="checkbox"/> location_id	<input type="checkbox"/> block	<input type="checkbox"/> location_description	<input type="checkbox"/> latitude	<input type="checkbox"/> longitude	<input type="checkbox"/> city	<input type="checkbox"/> crime_count	
<input type="checkbox"/> 817035	W OHARE ST	AIRPORT/AIRCRAFT	41	-87	Chicago	10593	
<input type="checkbox"/> 706389	N STATE ST	DEPARTMENT STORE	41	-87	Chicago	7045	
<input type="checkbox"/> 708005	S CICERO AVE	DEPARTMENT STORE	41	-87	Chicago	5136	
<input type="checkbox"/> 706393	N MICHIGAN AVE	DEPARTMENT STORE	41	-87	Chicago	3228	
<input type="checkbox"/> 705763	W NORTH AVE	DEPARTMENT STORE	41	-87	Chicago	2512	

QUERIES PERFORMED IN AWS REDSHIFT

- Total number of crimes in LA and chicago

```
SELECT "crime"."location"."city", count("crime"."fact"."crime_id") as crime_count
FROM "crime"."fact", "crime"."location"
WHERE "crime"."fact"."location_id"="crime"."location"."location_id"
GROUP BY "crime"."location"."city"
ORDER BY crime_count desc;
```



The screenshot shows a SQL query in the AWS Redshift console. The query is as follows:

```
1 SELECT "crime"."location"."city", count("crime"."fact"."crime_id") as crime_count
2 FROM "crime"."fact", "crime"."location"
3 WHERE "crime"."fact"."location_id"="crime"."location"."location_id"
4 GROUP BY "crime"."location"."city"
5 ORDER BY crime_count desc;
6
7
8
```

Below the query, the results are displayed in a table titled "Result 1 (2)". The table has two columns: "city" and "crime_count". The results are as follows:

city	crime_count
Chicago	7422765
Los Angeles	2515737

- Most committed and least committed crime

```
(SELECT "crime"."crime"."crime_description", count("crime"."fact"."crime_id") as
crime_count, 'Most committed crime' as
crime_count_type
FROM "crime"."fact", "crime"."crime"
WHERE "crime"."fact"."crime_id"="crime"."crime"."crime_id"
GROUP BY "crime"."crime"."crime_description"
order by crime_count desc limit 1)
```

QUERIES PERFORMED IN AWS REDSHIFT

UNION

(SELECT "crime"."crime"."crime_description", count("crime"."fact"."crime_id") as
crime_count, 'Least committed crime'

FROM "crime"."fact","crime"."crime"

WHERE "crime"."fact"."crime_id"="crime"."crime"."crime_id"

GROUP BY "crime"."crime"."crime_description"

order by crime_count limit 1);

```
1 (SELECT "crime"."crime"."crime_description",count("crime"."fact"."crime_id") as crime_count,'Most committed crime' as  
  crime_count_type  
2 FROM "crime"."fact","crime"."crime"  
3 WHERE "crime"."fact"."crime_id"="crime"."crime"."crime_id"  
4 GROUP BY "crime"."crime"."crime_description"  
5 order by crime_count desc  
6 limit 1)  
7 UNION  
8 (SELECT "crime"."crime"."crime_description",count("crime"."fact"."crime_id") as crime_count,'Less committed crime'  
  FROM "crime"."fact","crime"."crime"  
9 WHERE "crime"."fact"."crime_id"="crime"."crime"."crime_id"  
10 GROUP BY "crime"."crime"."crime_description"  
11 order by crime_count  
12 limit 1);
```

Result 1 (2)				Chart
<input type="checkbox"/> crime_description	crime_count	crime_count_type		
<input type="checkbox"/> THEFT - \$500 AND UNDER	604621	Most committed crime		
<input type="checkbox"/> CRIMINAL SEXUAL ASSAULT - AGGRAVATED: KNIFE / CUTTING INSTRUMENT	1	Less committed crime		

– **Analyzing crime patterns based on the hours of the day**

SELECT count("crime"."fact"."crime_id") as

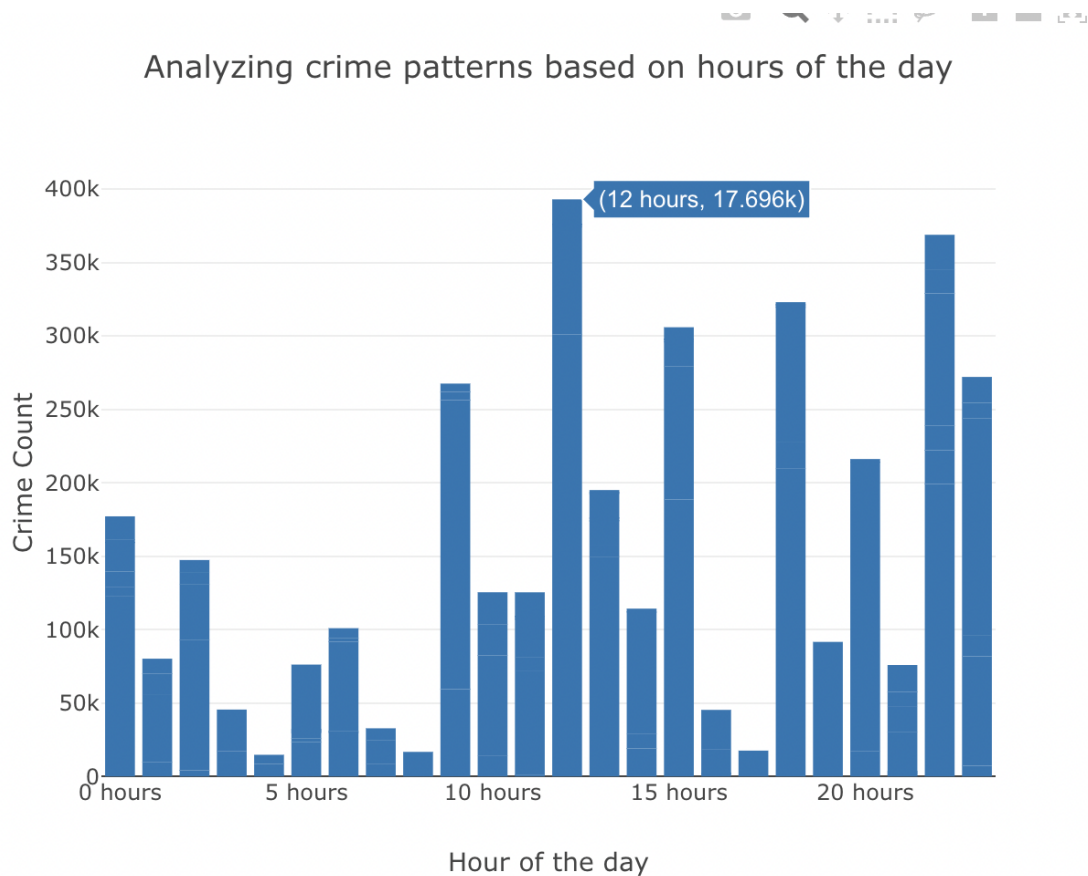
crime_count,substring("crime"."date_of_incident".time,1,2)

FROM "crime"."fact", "crime"."date_of_incident"

WHERE "crime"."fact"."date_id" ="crime"."date_of_incident"."date_id"

group by "crime"."date_of_incident".time;

QUERIES PERFORMED IN AWS REDSHIFT



--Total number of crimes during each month (for all years)

```
SELECT count("crime"."date_of_incident".year) as  
crime_total,"crime"."date_of_incident".year, "crime"."date_of_incident".month from  
"crime"."date_of_incident"  
group by "crime"."date_of_incident".year,"crime"."date_of_incident".month  
order by "crime"."date_of_incident".year;
```

QUERIES PERFORMED IN AWS REDSHIFT

```
8 --Total number of crimes during each month (for all years)
9 SELECT count("crime"."date_of_incident".year) as crime_total,"crime"."date_of_incident".year,
   "crime"."date_of_incident".month from "crime"."date_of_incident"
10 group by "crime"."date_of_incident".year,"crime"."date_of_incident".month
11 order by "crime"."date_of_incident".year;
12
```

Result 1 (100)

crime_total	year	month
15567	2001	1
15663	2001	12
17078	2001	6
17744	2001	8
16199	2001	4
16384	2001	11
18110	2001	10
16987	2001	9
16634	2001	3
14105	2001	2
17091	2001	5
18293	2001	7
16525	2002	9

- Total count of offense types

```
1 --types of offenses
2 select count(crime_description) from "crime"."crime";
```

Result 1 (1)

count
723

- Types of offenses

```
1 --types of offenses
2 select distinct crime_description from "crime"."crime";
```

Result 1 (723)

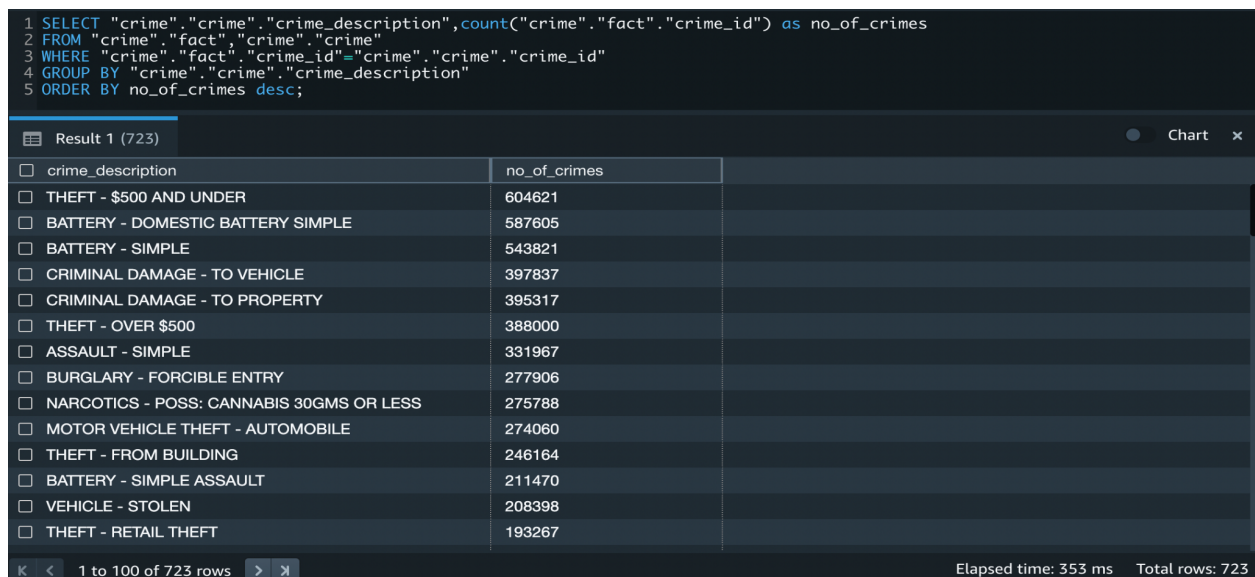
crime_description
NARCOTICS - POSS: CRACK
OTHER OFFENSE - VIOLATE ORDER OF PROTECTION
OTHER OFFENSE - OTHER WEAPONS VIOLATION
BATTERY - AGG PRO EMP HANDS SERIOUS INJ
OTHER OFFENSE - OTHER ARSON/EXPLOSIVE INCIDENT
SEX OFFENSE - INDECENT SOLICITATION/ADULT
OFFENSE INVOLVING CHILDREN - CONTRIBUTE CRIM DELINQUENCY JUVENILE
PROSTITUTION - SOLICIT OFF PUBLIC WAY
OTHER OFFENSE - FALSE / STOLEN / ALTERED TRP
PUBLIC INDECENCY - LICENSED PREMISE
NARCOTICS - MANUFACTURE / DELIVER - HEROIN (WHITE)
STALKING - VIOLATION OF STALKING NO CONTACT ORDER
NARCOTICS - POSSESS - CANNABIS MORE THAN 30 GRAMS
PROSTITUTION - OTHER PROSTITUTION OFFENSE
THEFT-GRAND (\$950.01 & OVER)EXCPT,GUNS,FOWL,LIVESTK,PROD
OTHER MISCELLANEOUS CRIME

Elapsed time: 167 ms Total rows: 723

QUERIES PERFORMED IN AWS REDSHIFT

- Count of each offense type

```
SELECT "crime"."crime"."crime_description", count("crime"."fact"."crime_id") as  
crime_count  
FROM "crime"."fact", "crime"."crime"  
WHERE "crime"."fact"."crime_id" ="crime"."crime"."crime_id"  
group by "crime"."crime"."crime_description"  
order by crime_count desc;
```



The screenshot shows a SQL query executed in AWS Redshift. The query counts the number of crimes for each crime description, ordered by the count in descending order. The results are displayed in a table with two columns: 'crime_description' and 'no_of_crimes'.

```
1 SELECT "crime"."crime"."crime_description",count("crime"."fact"."crime_id") as no_of_crimes  
2 FROM "crime"."fact", "crime"."crime"  
3 WHERE "crime"."fact"."crime_id"="crime"."crime"."crime_id"  
4 GROUP BY "crime"."crime"."crime_description"  
5 ORDER BY no_of_crimes desc;
```

crime_description	no_of_crimes
THEFT - \$500 AND UNDER	604621
BATTERY - DOMESTIC BATTERY SIMPLE	587605
BATTERY - SIMPLE	543821
CRIMINAL DAMAGE - TO VEHICLE	397837
CRIMINAL DAMAGE - TO PROPERTY	395317
THEFT - OVER \$500	388000
ASSAULT - SIMPLE	331967
BURGLARY - FORCIBLE ENTRY	277906
NARCOTICS - POSS: CANNABIS 30GMS OR LESS	275788
MOTOR VEHICLE THEFT - AUTOMOBILE	274060
THEFT - FROM BUILDING	246164
BATTERY - SIMPLE ASSAULT	211470
VEHICLE - STOLEN	208398
THEFT - RETAIL THEFT	193267

Result 1 (723) | Chart x

Elapsed time: 353 ms | Total rows: 723

- Least crimes committed in locations (least 10)

```
SELECT "crime"."fact"."location_id", "crime"."location"."block", "crime".  
"location"."location_description", "crime".  
"location"."latitude", "crime"."location"."longitude", "crime"."location"."city",  
count("crime"."fact"."crime_id") as crime_count  
FROM "crime"."fact", "crime"."location"  
WHERE "crime"."fact"."location_id" ="crime"."location"."location_id"
```

QUERIES PERFORMED IN AWS REDSHIFT

GROUP BY "crime". "fact". "location_id", "crime". "location". "block",
"crime". "location". "city", "crime". "location". "location_description", "crime".
"location". "latitude", "crime". "location". "longitude"
ORDER BY crime_count
limit 10;

```
1 SELECT "crime"."fact"."location_id",  
  "crime"."location"."block", "crime"."location"."location_description", "crime"."location"."latitude", "crime"."location"."  
  longitude", "crime"."location"."city", count("crime"."fact"."crime_id") as crime_count  
2 FROM "crime"."fact", "crime"."location"  
3 WHERE "crime"."fact"."location_id"="crime"."location"."location_id"  
4 GROUP BY "crime"."fact"."location_id", "crime"."location"."block", "crime"."location"."city",  
  "crime"."location"."location_description", "crime"."location"."latitude", "crime"."location"."longitude"  
5 ORDER BY crime_count  
6 limit 10;  
7  
8
```

location_id	block	location_description	latitude	longitude	city	crime_count
223319	700 W 103RD ST	SIDEWALK	33	-118	Los Angeles	1
223775	MAIN	PARKING UNDERGROUND/BUILDING	34	-118	Los Angeles	1
223469	1000 BROXTON AV	PARKING LOT	34	-118	Los Angeles	1
223494	S BUDLONG AV	SINGLE FAMILY DWELLING	34	-118	Los Angeles	1
223292	CHANDLER AV	PARKING LOT	34	-118	Los Angeles	1
223644	700 N BEVERLY GLEN BL	SINGLE FAMILY DWELLING	34	-118	Los Angeles	1
222895	1400 S GRAND AV	PARKING UNDERGROUND/BUILDING	34	-118	Los Angeles	1
223727	13900 OXNARD ST	BANK	34	-118	Los Angeles	1
222940	CESAR E CHAVEZ	PARKING LOT	34	-118	Los Angeles	1
223135	7700 WHITSETT AV	SINGLE FAMILY DWELLING	34	-118	Los Angeles	1

- Crime rates over the years

```
1 SELECT count("crime"."date_of_incident".month) as crime_total, "crime"."date_of_incident".year from  
  "crime"."date_of_incident"  
2 group by "crime"."date_of_incident".year  
3 order by crime_total;
```

crime_total	year
39801	2022
130334	2014
131281	2015
132063	2013
135137	2012
135652	2016
137192	2011
139367	2020
140203	2021
140617	2017
141524	2010
142237	2009
148117	2018
154380	2019
173113	2008
181452	2004

Elapsed time: 231 ms Total rows: 22