

Problem 1: Find the total number of crimes recorded in the CRIME table.

The screenshot shows a SQL query editor with the following query:

```
1 select count(*) from CHICAGOCRIMEDATA;
```

The result pane on the right shows the execution of the query. The query title is "select count(*) from CHICAGOCRIME...". The run time is 0.005 s. The result set is titled "Result set 1" and contains a single value, 533.

Problem 2: List community areas with per capita income less than 11000.

The screenshot shows a SQL query editor with the following query:

```
1 select DISTINCT(COMMUNITY_AREA_NAME) from CHICAGOCENSUSDATA
2 WHERE PER_CAPITA_INCOME < 11000;
```

The result pane on the right shows the execution of the query. The query title is "select DISTINCT(COMMUNITY_AREA_NAME) fro...". The run time is 0.008 s. The result set is titled "Result set 1" and contains a list of community area names: Fuller Park, Riverdale, South Lawndale, and West Garfield Park.

Problem 3: List all case numbers for crimes involving minors?

There is no longer a field for age/minor status so instead I did a similar example that lists case numbers for crimes with the Primary Type "Assault"

The screenshot shows a SQL query editor with the following query:

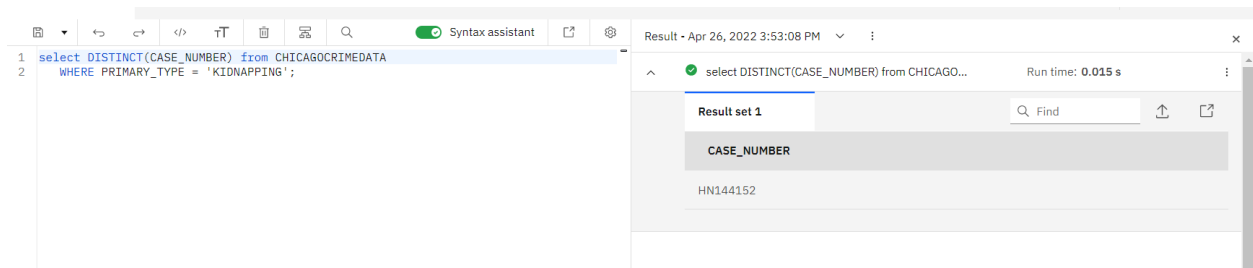
```
1 select DISTINCT(CASE_NUMBER) from CHICAGOCRIMEDATA
2 WHERE PRIMARY_TYPE = 'ASSAULT';
```

The result pane on the right shows the execution of the query. The query title is "select DISTINCT(CASE_NUMBER) from CHICAGO...". The run time is 0.007 s. The result set is titled "Result set 1" and contains a list of case numbers: HH106347, HH154448, HH343366, HH829588, and HJ222529. A note at the bottom states: "Result set is truncated, only the first 32 rows have been loaded. Select 'View all loaded data' on the right top of the result to view all loaded rows."

Continued below

Problem 4: List all kidnapping crimes involving a child?(children are not considered minors for the purposes of crime analysis)

There is again no field for age/minor status so instead I did a similar example that lists case numbers for crimes with the Primary Type "Kidnapping"



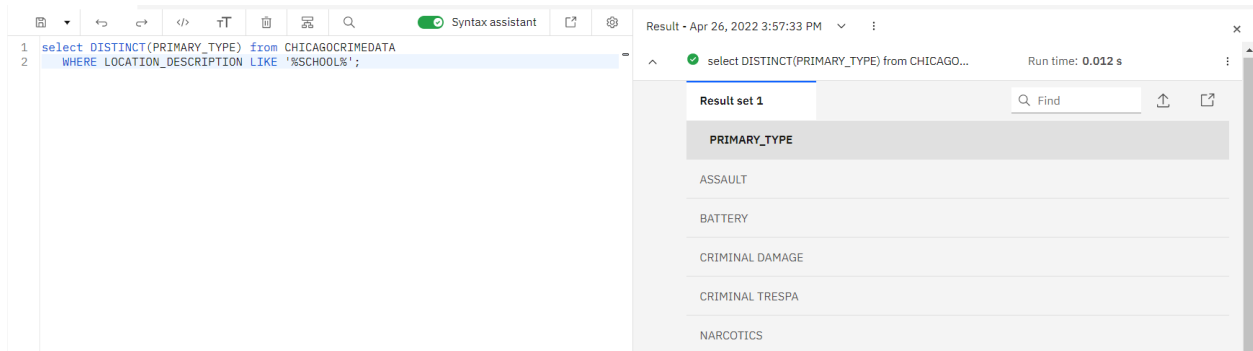
```
1 select DISTINCT(CASE_NUMBER) from CHICAGOCRIMEDATA
2 WHERE PRIMARY_TYPE = 'KIDNAPPING';
```

Result - Apr 26, 2022 3:53:08 PM

select DISTINCT(CASE_NUMBER) from CHICAGOCRIMEDATA WHERE PRIMARY_TYPE = 'KIDNAPPING'; Run time: 0.015 s

CASE_NUMBER
HN144152

Problem 5: What kind of crimes were recorded at schools?



```
1 select DISTINCT(PRIMARY_TYPE) from CHICAGOCRIMEDATA
2 WHERE LOCATION_DESCRIPTION LIKE '%SCHOOL%';
```

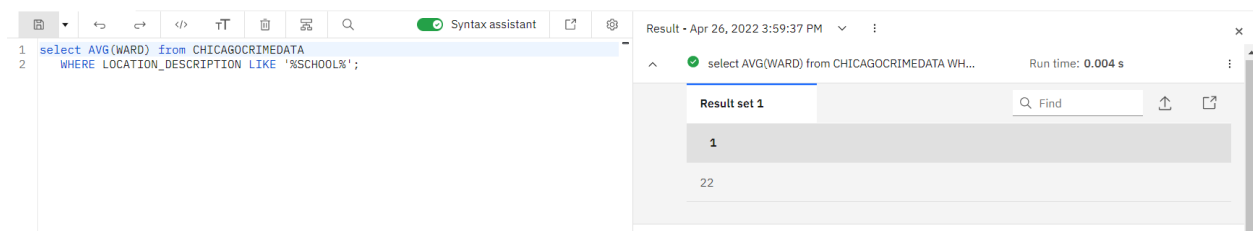
Result - Apr 26, 2022 3:57:33 PM

select DISTINCT(PRIMARY_TYPE) from CHICAGOCRIMEDATA WHERE LOCATION_DESCRIPTION LIKE '%SCHOOL%'; Run time: 0.012 s

PRIMARY_TYPE
ASSAULT
BATTERY
CRIMINAL DAMAGE
CRIMINAL TRESPASS
NARCOTICS

Problem 6: List the average safety score for all types of schools.

There is again no current field for safety score so instead I the same prompt but used "Ward" instead of safety score



```
1 select AVG(WARD) from CHICAGOCRIMEDATA
2 WHERE LOCATION_DESCRIPTION LIKE '%SCHOOL%';
```

Result - Apr 26, 2022 3:59:37 PM

select AVG(WARD) from CHICAGOCRIMEDATA WHERE LOCATION_DESCRIPTION LIKE '%SCHOOL%'; Run time: 0.004 s

1
22

Problem 7: List 5 community areas with highest % of households below poverty line.

```
select COMMUNITY_AREA_NAME,PERCENT_HOUSEHOLDS_BELOW_POVERTY from CHICAGOCENSUSDATA
order by PERCENT_HOUSEHOLDS_BELOW_POVERTY desc LIMIT 5;
```

Result - Apr 26, 2022 4:22:02 PM

Run time: 0.008 s

Result set 1

COMMUNITY_AREA_NAME	PERCENT_HOUSEHOLDS_BELOW_POVERTY
Riverdale	56.5
Fuller Park	51.2
Englewood	46.6
North Lawndale	43.1
East Garfield Park	42.4

Problem 8: Which community area(number) is most crime prone?

```
1 select COMMUNITY_AREA_NUMBER, COUNT(CASE_NUMBER) AS NBR_CASES from CHICAGOCRIMEDATA
2 group by COMMUNITY_AREA_NUMBER order by NBR_CASES LIMIT 1;
```

Result - Apr 26, 2022 4:22:02 PM

Run time: 0.016 s

Result set 1

COMMUNITY_AREA_NUMBER	NBR_CASES
12	1

Problem 9: Use a sub-query to find the name of the community area with highest hardship index.

```
1 select community_area_name from CHICAGOCENSUSDATA
2 where hardship_index=(select max(hardship_index) from CHICAGOCENSUSDATA)
```

Result - Apr 26, 2022 4:23:39 PM

Run time: 0.007 s

Result set 1

COMMUNITY_AREA_NAME
Riverdale

Problem 10: Use a sub-query to determine the Community Area Name with most number of crimes?

```
1 select community_area_name from CHICAGOCENSUSDATA where
2 community_area_number = (select community_area_number from
3 (select * from (select community_area_number, count(community_area_number)
4 as crimes_in_community from CHICAGOCRIMEDATA group by community_area_number)
5 where
6 crimes_in_community =(select max(crimes_in_community) from
7 (select community_area_number, count(community_area_number) as
8 crimes_in_community from CHICAGOCRIMEDATA group by community_area_number)));
```

Result - Apr 26, 2022 4:26:17 PM

Run time: 0.008 s

Result set 1

COMMUNITY_AREA_NAME
Austin