Problem 1

Find the total number of crimes recorded in the CRIME table.

```
[7]: %sql select distinct(count(*)) from CHICAGO_CRIME_DATA
```

 * ibm_db_sa://wyb03994:***@b0aebb68-94fa-46ec-a1fc-1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud:31249/BLUDB
Done.

[7]:

1
533

Problem 2

List community areas with per capita income less than 11000.

```
[8]: %sql select COMMUNITY_AREA_NAME,PER_CAPITA_INCOME from CENSUS_DATA where PER_CAPITA_INCOME < 11000
```

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Done.

[8]:

community_area_name	per_capita_income
West Garfield Park	10934
South Lawndale	10402
Fuller Park	10432
Riverdale	8201

Problem 3

List all case numbers for crimes involving minors?(children are not considered minors for the purposes of crime analysis)

```
[19]: %sql select CASE_NUMBER from CHICAGO_CRIME_DATA where PRIMARY_TYPE = 'OFFENSE INVOLVING CHILDREN';
```

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Done.

t[61]:

case_number
HN567387
HR391350
HM768251
HT394616

Problem 4

List all kidnapping crimes involving a child?

```
[15]: %sql select * from CHICAGO_CRIME_DATA where PRIMARY_TYPE = 'KIDNAPPING' and description like '%CHILD%';
```

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Done.

[15]:

id	case_number	DATE	block	iucr	primary_type	description	location_description	arrest	domestic	beat	district	ward	community_area
5276766	HN144152	2007-01-26	050XX W VAN BUREN ST	1792	KIDNAPPING	CHILD ABDUCTION/STRANGER	STREET	FALSE	FALSE	1533	15	29	

Problem 5 ¶

What kinds of crimes were recorded at schools?

```sql
[17]: %sql select distinct(PRIMARY_TYPE) from CHICAGO_CRIME_DATA where LOCATION_DESCRIPTION like '%SCHOOL%';
```

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Done.

[17]:
primary_type
ASSAULT
BATTERY
CRIMINAL DAMAGE
CRIMINAL TRESPA
NARCOTICS
PUBLIC PEACE VI

Problem 6

List the average safety score for all types of schools.

```sql
[28]: %sql select "Elementary, Middle, or High School", avg(safety_score) as average_safety_score from schools group by "Elementary, Middle, or
```

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Done.

[28]:
Elementary, Middle, or High School	average_safety_score
ES	49
HS	49
MS	48

Problem 7

List 5 community areas with highest % of households below poverty line

```sql
[30]: %sql select community_area_name, percent_households_below_poverty from CENSUS_DATA\
order by percent_households_below_poverty desc nulls last limit 5;
```

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Done.

[30]:
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 is most crime prone?

```sql
[32]: %sql select community_area_number, count(*) as Number_of_Crime from chicago_crime_data group by community_area_number\
order by number_of_crime desc limit 1;
```

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Done.

[32]:
community_area_number	number_of_crime
25	43

Problem 9

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

```
[34]: %sql select community_area_name from census_data\
      where hardship_index = (select max(hardship_index) from census_data)
```

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Done.

[34]: **community_area_name**

            Riverdale

Problem 10

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

```
[36]: %%sql
SELECT community_area_name
FROM CENSUS_DATA
WHERE COMMUNITY_AREA_NUMBER = (
    SELECT CCD.COMMUNITY_AREA_NUMBER
    FROM CHICAGO_CRIME_DATA AS CCD
    GROUP BY CCD.COMMUNITY_AREA_NUMBER
    ORDER BY COUNT(CCD.COMMUNITY_AREA_NUMBER) DESC
    LIMIT 1)

LIMIT 1;
```

 * ibm_db_sa://wyb03994:***@b0aebb68-94fa-46ec-a1fc-1c999edb6187.c3n41cmd0nqnrk39u98g.databases.appdomain.cloud:31249/BLUDB
Done.

[36]: **community_area_name**

            Austin