

Problem 1

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

```
[15]: %sql select count(*) as number_of_crimes from chicago_crime_data;
```

```
* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.
```

```
[15]: number_of_crimes
```

533

Problem 2

List community areas with per capita income less than 11000.

```
[37]: %sql select community_area_name, per_capita_income from census_data where per_capita_income < 11000;  
* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB  
Done.
```

```
[37]: 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 description like '%MINOR%';

* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.
```

```
[19]: case_number
```

HL266884

HK238408

▼ Problem 4

List all kidnapping crimes involving a child?

```
[38]: %%sql
select case_number, primary_type, description
from chicago_crime_data
where primary_type = 'KIDNAPPING' and description like '%CHILD%';

* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.
```

case_number	primary_type	description
HN144152	KIDNAPPING	CHILD ABDUCTION/STRANGER

Problem 5

What kinds of crimes were recorded at schools?

```
[25]: %%sql  
select distinct(primary_type)  
from chicago_crime_data  
where location_description like '%SCHOOL%';  
  
* ibm_db_sa://tgc76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB  
Done.
```

```
[25]: primary_type
```

ASSAULT

BATTERY

CRIMINAL DAMAGE

CRIMINAL TRESPA

NARCOTICS

PUBLIC PEACE VI

Problem 6

List the average safety score for each type of school.

```
[14]: %%sql
select "Elementary, Middle, or High School", avg(safety_score) as Avg_Safety_Score
from CHICAGO_PUBLIC_SCHOOLS
group by "Elementary, Middle, or High School";
```

* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.

```
[14]: Elementary, Middle, or High School  avg_safety_score
```

ES	49
HS	49
MS	48

Problem 7

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

```
[13]: %%sql  
select community_area_name, PERCENT_HOUSEHOLDS_BELOW_POVERTY  
from census_data  
order by PERCENT_HOUSEHOLDS_BELOW_POVERTY desc  
limit 5;
```

```
* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB  
Done.
```

```
[13]: 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?

```
[12]: %%sql
select community_area_number, count(community_area_number) as frequency
from chicago_crime_data
group by community_area_number
order by count(community_area_number) desc
limit 1;

* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.
```

```
[12]: community_area_number    frequency
          25                  43
```

Problem 9

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

```
[29]: %%sql
select community_area_name, hardship_index
from census_data
where hardship_index = (select max(hardship_index) from census_data);
```

```
* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.
```

```
[29]: community_area_name  hardship_index
```

community_area_name	hardship_index
Riverdale	98

Problem 10

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

```
[35]: %%sql
select community_area_name
from census_data
where community_area_number = (
    select community_area_number
    from chicago_crime_data
    group by community_area_number
    order by count(community_area_number) desc
    limit 1)
limit 1;
```

* ibm_db_sa://tgf76739:***@54a2f15b-5c0f-46df-8954-7e38e612c2bd.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud:32733/BLUDB
Done.

```
[35]: community_area_name
      Austin
```