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1  --Problem 1: Find the total number of crimes recorded in the CRIME table.
2  SELECT COUNT(DISTINCT(CASE_NUMBER)) AS Total_crimes
3  FROM Chicago_Crime_Data;
4
5
```

	Total_crimes
1	533

2.

```
6  --Problem 2: List community areas with per capita income less than 11000.
7  SELECT COMMUNITY_AREA_NAME
8  FROM Census_Data
9  WHERE PER_CAPITA_INCOME<11000;
10
```

	COMMUNITY_AREA_NAME
1	West Garfield Park
2	South Lawndale
3	Fuller Park
4	Riverdale

3.

```
11 --Problem 3: List all case numbers for crimes involving minors?
12 SELECT CASE_NUMBER
13 FROM Chicago_Crime_Data
14 WHERE DESCRIPTION LIKE "%Child%";
15
```

	COMMUNITY_AREA_NAME
1	West Garfield Park
2	South Lawndale
3	Fuller Park
4	Riverdale

4.

```
17 --Problem 4: List all kidnapping crimes involving a child?(children are not considered minors for the purposes of crime analysis)
18 SELECT CASE_NUMBER
19 FROM Chicago_Crime_Data
20 WHERE DESCRIPTION LIKE "%Child%" and UPPER(PRIMARY_TYPE) = "KIDNAPPING";
21
```

	CASE_NUMBER
1	HN144152

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24  --Problem 5: What kind of crimes were recorded at schools?
25  SELECT DISTINCT PRIMARY_TYPE
26  FROM Chicago_Crime_Data
27  WHERE LOCATION_DESCRIPTION LIKE "%school%";
28

```

	PRIMARY_TYPE
1	BATTERY
2	CRIMINAL DAMAGE
3	NARCOTICS
4	ASSAULT
5	CRIMINAL TRESPASS
6	PUBLIC PEACE VIOLATION

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29
30  --Problem 6: List the average safety score for all types of schools.
31  select avg(SAFETY_SCORE)
32  FROM Chicago_Public_Schools;
33

```

	PRIMARY_TYPE
1	BATTERY
2	CRIMINAL DAMAGE
3	NARCOTICS
4	ASSAULT
5	CRIMINAL TRESPASS
6	PUBLIC PEACE VIOLATION

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35  --Problem 7: List 5 community areas with highest % of households below poverty line.
36  SELECT COMMUNITY_AREA_NAME, PERCENTHOUSEHOLDSBELOWPOVERTY
37  FROM Census_Data
38  ORDER BY PERCENTHOUSEHOLDSBELOWPOVERTY DESC LIMIT 5;
39

```

	COMMUNITY_AREA_NAME	PERCENTHOUSEHOLDSBELOWPOVERTY
1	Riverdale	56.5
2	Fuller Park	51.2
3	Englewood	46.6
4	North Lawndale	43.1
5	East Garfield Park	42.4

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41 --Problem 8: Which community area(number) is most crime prone?
42 SELECT COMMUNITY_AREA_NUMBER, COUNT(CASE_NUMBER)AS CRIMECOUNT
43 FROM Chicago_Crime_Data
44 GROUP BY COMMUNITY_AREA_NUMBER
45 ORDER BY CRIMECOUNT DESC LIMIT 1;

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	COMMUNITY_AREA_NUMBER	CRIMECOUNT
1	25	43

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47 --Problem 9: Use a sub-query to find the name of the community area with highest hardship index.
48 SELECT COMMUNITY_AREA_NAME
49 FROM Census_Data
50 WHERE HARDSHIP_INDEX = (SELECT MAX(HARDSHIP_INDEX)
51 FROM Census_Data);

```

	COMMUNITY_AREA_NAME
1	Riverdale

10.

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54 --Problem 10: Use a sub-query to determine the Community Area Name with most number of crimes?
55 WITH community AS(
56 SELECT COMMUNITY_AREA_NUMBER, COUNT(CASE_NUMBER)AS CRIMECOUNT
57 FROM Chicago_Crime_Data
58 GROUP BY COMMUNITY_AREA_NUMBER
59 ORDER BY CRIMECOUNT DESC LIMIT 1
60 )
61
62 SELECT A.COMMUNITY_AREA_NAME, A.COMMUNITY_AREA_NUMBER
63 FROM Census_Data A
64 JOIN community ON A.COMMUNITY_AREA_NUMBER = community.COMMUNITY_AREA_NUMBER;
65

```

	COMMUNITY_AREA_NAME	COMMUNITY_AREA_NUMBER
1	Austin	25

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70 --Problem 11: How many Elementary Schools are in the dataset?
71 SELECT COUNT(DISTINCT(NAME_OF_SCHOOL))
72 FROM Chicago_Public_Schools
73 WHERE ElementaryMiddleorHighSchool ="ES";
74

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	COUNT(DISTINCT(NAME_OF_SCHOOL))
1	462

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75 --Problem 12: Display total number of elementary, middle and high school from Chicago_public_Schools
76 SELECT ElementaryMiddleorHighSchool, COUNT(*) as Schools_Count
77 FROM Chicago_Public_Schools
78 GROUP BY ElementaryMiddleorHighSchool;
79
80

```

	ElementaryMiddleorHighSchool	Schools_Count
1	ES	462
2	HS	93
3	MS	11

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81  --Problem 13: What is the highest Safety Score? #Which schools have highest Safety Score?
82  SELECT NAME_OF_SCHOOL, SAFETY_SCORE
83  FROM Chicago_Public_Schools
84  WHERE SAFETY_SCORE = (SELECT MAX(SAFETY_SCORE)
85                        FROM Chicago_Public_Schools);
86

```

	NAME_OF_SCHOOL	SAFETY_SCORE
1	Abraham Lincoln Elementary School	99
2	Alexander Graham Bell Elementary ...	99
3	Annie Keller Elementary Gifted Magn...	99
4	Augustus H Burley Elementary School	99
5	Edgar Allan Poe Elementary Classical...	99
6	Edgebrook Elementary School	99
7	Ellen Mitchell Elementary School	99
8	James E McDade Elementary Classic...	99
9	James G Blaine Elementary School	99
10	LaSalle Elementary Language Academy	99
11	Mary E Courtenay Elementary ...	99
12	Northside College Preparatory High ...	99
13	Northside Learning Center High School	99

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87  --Problem 14: Remove the '%' sign for Average Student Attendance column.
88  SELECT TRIM(AVERAGE_STUDENT_ATTENDANCE,"%") AS Avg_Student_Attendance
89  FROM Chicago_Public_Schools;
90
91

```

	Avg_Student_Attendance
1	96.00
2	95.60
3	95.70
4	95.50
5	93.30
6	97.00
7	96.30
8	94.70
9	92.70
10	96.40
11	96.30
12	92.50
13	95.30

15.

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93 --Problem 15: Which Schools have Average Student Attendance lower than 70%?
94 SELECT NAME_OF_SCHOOL
95 FROM Chicago_Public_Schools
96 WHERE AVERAGE_STUDENT_ATTENDANCE < "70%" ;
97

```

	NAME_OF_SCHOOL
1	Barbara Vick Early Childhood & Famil...
2	Chicago Vocational Career Academy ...
3	Dyett High School
4	Manley Career Academy High School
5	Orr Academy High School
6	Richard T Crane Technical Preparator...
7	Roberto Clemente Community ...
8	Wendell Phillips Academy High School

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99
100 --Problem 16: Get the total College Enrollment for each Community Area.
101 SELECT COMMUNITY_AREA_NAME, SUM(COLLEGE_ENROLLMENT)
102 FROM Chicago_Public_Schools
103 GROUP BY COMMUNITY_AREA_NAME;
104

```

	COMMUNITY_AREA_NAME	SUM(COLLEGE_ENROLLMENT)
1	ALBANY PARK	6864
2	ARCHER HEIGHTS	4823
3	ARMOUR SQUARE	1458
4	ASHBURN	6483
5	AUBURN GRESHAM	4175
6	AUSTIN	10933
7	AVALON PARK	1522
8	AVONDALE	3640
9	BELMONT CRAGIN	14386
10	BEVERLY	1636
11	BRIDGEPORT	3167
12	BRIGHTON PARK	9647
13	BURNSIDE	549

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106 --Problem 17: Get the 5 Community Areas with the least College Enrollment sorted in ascending order
107 SELECT COMMUNITY_AREA_NAME
108 FROM Chicago_Public_Schools
109 WHERE COLLEGE_ENROLLMENT
110 GROUP BY COMMUNITY_AREA_NAME
111 ORDER BY COLLEGE_ENROLLMENT ASC LIMIT 5;
112

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	COMMUNITY_AREA_NAME
1	CLEARING
2	WEST PULLMAN
3	OAKLAND
4	NORWOOD PARK
5	NORTH LAWNSDALE

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118 --Problem 18: Display ZIPCodes from Chicago_Schools which are having more than 5 schools.
119 SELECT ZIPCode, COUNT(*) AS TOTAL
120 FROM Chicago_Public_Schools
121 GROUP BY ZIPCODE
122 HAVING TOTAL >5
123 ORDER BY TOTAL DESC;
124

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	ZIPCode	TOTAL
1	60623	35
2	60628	24
3	60609	23
4	60617	22
5	60612	20
6	60624	18
7	60622	18
8	60621	18
9	60620	18
10	60608	18
11	60637	17
12	60629	17
13	60619	17

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--Problem 19: Get the hardship index for the community area which has the school with the highest enrollment
SELECT A.community_area_name, HARDSHIP_INDEX
FROM CENSUS_DATA A ,CHICAGO_PUBLIC_SCHOOLS B
WHERE A.community_area_number = B.community_area_number and
B.COLLEGE_ENROLLMENT = (SELECT MAX(COLLEGE_ENROLLMENT) from Chicago_Public_Schools);

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134 --Problem 20: Display the type of crimes with less than 10 reported crimes for each category.
135 SELECT PRIMARY_TYPE, COUNT(CASE_NUMBER)AS TOT
136 FROM Chicago_Crime_Data
137 GROUP BY PRIMARY_TYPE
138 HAVING TOT<10;
139
140

```

	PRIMARY_TYPE	TOT
1	ARSON	2
2	CONCEALED CARRY LICENSE ...	1
3	CRIM SEXUAL ASSAULT	3
4	DOMESTIC VIOLENCE	1
5	GAMBLING	2
6	HOMICIDE	2
7	HUMAN TRAFFICKING	1
8	INTERFERENCE WITH PUBLIC ...	2
9	INTIMIDATION	1
10	KIDNAPPING	1
11	LIQUOR LAW VIOLATION	2
12	NON - CRIMINAL	1

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141
142 --Problem 21 : Display the top 20 least reported types of crime. (Primary_type column)
143 SELECT PRIMARY_TYPE, COUNT(CASE_NUMBER) AS TOT
144 FROM Chicago_Crime_Data
145 GROUP BY PRIMARY_TYPE
146 ORDER BY TOT ASC LIMIT 20;
147

```

	PRIMARY_TYPE	TOT
1	CONCEALED CARRY LICENSE ...	1
2	DOMESTIC VIOLENCE	1
3	HUMAN TRAFFICKING	1
4	INTIMIDATION	1
5	KIDNAPPING	1
6	NON - CRIMINAL	1
7	NON-CRIMINAL	1
8	NON-CRIMINAL (SUBJECT SPECIFIED)	1
9	OBSCENITY	1
10	OTHER NARCOTIC VIOLATION	1
11	PUBLIC INDECENCY	1
12	RITUALISM	1
13	STALKING	1