

GROUP 9 TEAM BUILD

Team Members:

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Part-1

Problem Statement:

This project aims to investigate and comprehend the dynamics of immigrant and noncitizen contacts in the United States in a period distinguished by shifting immigration trends and regulations. Using a dataset with properties like "Year," "Immigrants Achieving Lawful Permanent Resident Status," "Refugee Arrivals," "Noncitizen Apprehensions," "Noncitizen Removals," and "Noncitizen Returns," our goal is to investigate trends, patterns, and probable connections in these data points. The project's goal is to pinpoint significant insights regarding immigration and noncitizen activities through time, illuminating the variables affecting legal permanent residence, refugee arrivals, and the detention, deportation, and repatriation of noncitizens. The results of this analysis can ultimately educate decision-makers, immigration authorities, and scholars on the changing immigration picture in the United States, thereby leading to more knowledgeable policy decisions.

3 Ideas For The Problem Statement:

1. **Understanding Immigration Trends:** Analyze historical data on immigration and refugees to uncover trends and policy influences.
2. **Enhancing Border Security:** Improve border security using data-driven insights on apprehensions and removals.
3. **Predicting Future Immigration:** Develop predictive models for future immigration patterns to aid policymaking.

Part-2

Company That Would Hire:

U.S. Citizenship and Immigration Services (USCIS): USCIS is responsible for processing immigration-related applications, including visas, green cards, and naturalization. This is responsible for various aspects of immigration and border security within the United States.

Reason To Hire:

Our team's competence in data analysis, particularly when it comes to immigration patterns and policy consequences, makes USCIS (U.S. Citizenship and Immigration Services) think about employing us. Our research displays our capability to efficiently evaluate immigration data, enabling USCIS to make deft judgments, speed up the application process, and pinpoint areas where the immigration system needs improvement. With the use of our data-driven insights, we can support USCIS's objective to administer immigration services fairly and effectively while preserving national security and adhering to the fundamentals of the American immigration system. We as a group contribute a wide range of knowledge and viewpoints to help USCIS carry out its crucial task in immigration management.

How The Information Will Be Used By The Company:

USCIS (U.S. Citizenship and Immigration Services) uses the data provided by our group to help develop immigration policies, allocate resources wisely, enhance immigration procedures, identify fraud, assess performance, strengthen national security initiatives, anticipate resource requirements, and enhance customer service. In order to effectively administer immigration services, preserve national security, and respect the ideals of the U.S. immigration system, USCIS must analyze data and study results.

Value:

By making educated judgments for policy formulation, process improvement, resource allocation, fraud detection, performance evaluation, national security enhancement, and customer service, USCIS would benefit from data analysis and research. This data primarily supports the objective of effectively managing immigration services and maintaining national security, with a focus on improving policies and procedures rather than marketing.

Part-3

Queries On Our Dataset

1. `SELECT * FROM `adta5240sr.teambuild.ipl_database` LIMIT 1000;`

- ✓ This query is like a request to a database to give us information. It's asking for all the details from a specific table called "ipl_database" located in a certain place in the database. However, it doesn't want all of the information at once; it only wants the first 1000 pieces of information to keep things manageable and not overload the system. Essentially, it's a way to get a glimpse of what's in the database without getting too much data all at once.

console.cloud.google.com/bigquery?project=adta5240sr&ws=11m511m414m311sadt5240sr12steambuild3sipl_database1m0

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ipl_database QUERY SHARE REFRESH

Schema DETAILS PREVIEW LINEAGE DATA PROFILE

Row	Year	Immigrants_Obtaining_Lawful_Permanent_Resident_Status	Refugee_Arrivals	Noncitizen_Apprehensions	Noncitizen_Returns
1	1980	524295	207116	910361	18013
2	1981	595014	159252	975780	17379
3	1982	533624	98096	970246	15216
4	1983	550052	61218	1251357	19211
5	1984	541811	70393	1246981	18696
6	1985	568149	67704	1348749	23105
7	1986	600027	62146	1767400	24592
8	1987	599889	64528	1190488	24336
9	1988	641346	76483	1008145	25829
10	1989	1090172	107070	954243	34427
11	1990	1535872	122066	1169939	30039
12	1991	1826595	113389	1197875	33189
13	1992	973445	115548	1258481	43671
14	1993	903916	114181	1327261	42542
15	1994	803993	111680	1094719	45674
16	1995	720177	98973	1394554	50924

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Untitled 2 RUN SAVE SHARE SCHEDULE MORE

```
1 SELECT * FROM `adta5240sr.teambuild.ipl_database` LIMIT 1000;
```

Query results SAVE RESULTS EXPLORE DATA

Row	Year	Immigrants_Obtaining_Lawful_Permanent_Resident_Status	Refugee_Arrivals	Noncitizen_Apprehensions	Noncitizen_Returns
1	1980	524295	207116	910361	18013
2	1981	595014	159252	975780	17379
3	1982	533624	98096	970246	15216
4	1983	550052	61218	1251357	19211
5	1984	541811	70393	1246981	18696

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2. SELECT * FROM `adta5240sr.teambuild.ipl_database` WHERE Year = 1991;

- ✓ This query is like a request to a database to find and show us all the information from a specific table called "ipl_database" where the year matches 1991. It's asking the database to retrieve all the rows of data from that table where the "Year" is 1991, giving us a subset of information related to that specific year. Essentially, it helps us filter the data and focus only on the records from the year 1991 within the dataset.

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ipl_database REFRESH

Schema DETAILS PREVIEW LINEAGE

Row	Year	Immigrants_Obtaining_Lawful_Permanent_Resident_Status	Refugee_Arrivals	Noncitizen_Apprehensions	Noncitizen_Returns
1	1980	524295	207116	910361	18013
2	1981	595014	159252	975780	17379
3	1982	533624	98096	970246	15216
4	1983	550052	61218	1251357	19211
5	1984	541811	70393	1246981	18696
6	1985	568149	67704	1348749	23105
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9	1988	641346	76483	1008145	25829
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11	1990	1535872	122066	1169939	30039
12	1991	1826595	113389	1197875	33189
13	1992	973445	115548	1258481	43671
14	1993	903916	114181	1327261	42542
15	1994	803993	111680	1094719	45674

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Untitled 2 RUN SAVE SHARE SCHEDULE MORE

```
1 SELECT * FROM `adta5240sr.teambuild.ipl_database` WHERE Year = 1991;
```

Query results SAVE RESULTS EXPLORE DATA

Row	Year	Immigrants_Obtaining_Lawful_Permanent_Resident_Status	Refugee_Arrivals	Noncitizen_Apprehensions	Noncitizen_Returns
1	1991	1826595	113389	1197875	33189

3. SELECT * FROM `adta5240sr.teambuild.ipl_database` WHERE `Immigrants_Obtaining_Lawful_Permanent_Resident_Status` > 10000;

- ✓ This query is similar to asking a database to find and display all the information from a particular table named "ipl_database" where the number of immigrants who have obtained lawful permanent resident status is greater than 10,000. It's a way to filter the

data and retrieve only those records that meet this specific condition, giving us a subset of data that focuses on immigrants who have obtained lawful permanent resident status in large numbers, helping us analyze or understand trends related to immigration.

The screenshot shows the Google Cloud BigQuery interface. On the left, the 'ipl_database' table is selected, and its schema is visible with columns: Arrivals, Noncitizen_Appr, Noncitizen_Rem, and Noncitizen_Rety. The main area displays a query in 'Untitled 2' with the following SQL code:

```
1 SELECT * FROM `adta5240sr.teambuild.ipl_database` WHERE `Immigrants_Obtaining_Lawful_Permanent_Resident_Status` > 10000;
```

The query results are shown in a table with the following columns: Row, Year, Immigrants_Obtaining, Refugee_Arrivals, Noncitizen_Appreh, Noncitizen_Removal, and Noncitizen_Returns. The results are as follows:

Row	Year	Immigrants_Obtaining	Refugee_Arrivals	Noncitizen_Appreh	Noncitizen_Removal	Noncitizen_Returns
1	1980	524295	207116	910361	18013	719211
2	1981	595014	159252	975780	17379	823875
3	1982	533624	98096	970246	15216	812572
4	1983	550052	61218	1251357	19211	931600
5	1984	541811	70393	1246981	18696	909833

4. `SELECT Year, `Refugee_Arrivals` FROM `adta5240sr.teambuild.ipl_database` WHERE `Refugee_Arrivals` > 5000;`

- ✓ This query is like a request to a database to provide us with information from a table called "ipl_database." It asks for two specific details: the "Year" and the number of "Refugee Arrivals" in those years, but only for the years where the count of refugee arrivals is greater than 5,000. Essentially, it helps us focus on and retrieve data related to the years when a significant number of refugees arrived, allowing us to gain insights into specific years with notable refugee movements.

The screenshot shows the Google Cloud BigQuery interface. On the left, the 'ipl_database' table is selected, and its schema is visible with columns: Arrivals, Noncitizen_Appr, Noncitizen_Rem, and Noncitizen_Rety. The main area displays a query in 'Untitled 2' with the following SQL code:

```
1 SELECT Year, `Refugee_Arrivals` FROM `adta5240sr.teambuild.ipl_database` WHERE `Refugee_Arrivals` > 5000;
```

The query results are shown in a table with the following columns: Row, Year, and Refugee_Arrivals. The results are as follows:

Row	Year	Refugee_Arrivals
1	1980	207116
2	1981	159252
3	1982	98096
4	1983	61218
5	1984	70393

5. SELECT Year,

```
SUM(Immigrants_Obtaining_Lawful_Permanent_Resident_Status) AS  
Total_Permanent_Residents,  
SUM(Refugee_Arrivals) AS Total_Refugee_Arrivals,  
SUM(Noncitizen_Apprehensions) AS Total_Apprehensions,  
SUM(Noncitizen_Removals) AS Total_Removals,  
SUM(Noncitizen>Returns) AS Total>Returns  
FROM `adta5240sr.teambuild.ipl_database`  
GROUP BY Year  
HAVING Total_Permanent_Residents > 50000  
ORDER BY Year DESC  
LIMIT 10;
```

- ✓ This query is like a comprehensive request to the database for specific insights from a table called "ipl_database." It calculates and presents the sum of several different attributes for each year, such as the total number of immigrants obtaining lawful permanent resident status, total refugee arrivals, total noncitizen apprehensions, total noncitizen removals, and total noncitizen returns. It groups this data by year, so you get a yearly summary. Then, it filters the results to include only years where the total number of immigrants obtaining lawful permanent resident status exceeds 50,000. Lastly, it arranges the results in descending order of the year, showing the most recent years first, and limits the output to the top 10 rows, providing a concise summary of the most recent years with high immigration activity.

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ipl_database REFRESH

Untitled 2 RUN SAVE SHARE SCHEDULE MORE

```
1 SELECT Year,  
2 SUM(Immigrants_Obtaining_Lawful_Permanent_Resident_Status) AS Total_Permanent_Residents,  
3 SUM(Refugee_Arrivals) AS Total_Refugee_Arrivals,  
4 SUM(Noncitizen_Apprehensions) AS Total_Apprehensions,  
5 SUM(Noncitizen_Removals) AS Total_Removals,  
6 SUM(Noncitizen>Returns) AS Total>Returns  
7 FROM `adta5240sr.teambuild.ipl_database`  
8 GROUP BY Year  
9 HAVING Total_Permanent_Residents > 50000  
10 ORDER BY Year DESC  
11 LIMIT 10;  
12
```

Query results SAVE RESULTS EXPLORE DATA

Row	Year	Total_Permanent_Residents	Total_Refugee_Arrivals	Total_Apprehensions	Total_Removals	Total>Returns
1	2021	740002	11454	1865379	89191	178227
2	2020	707362	11840	609265	237861	167453
3	2019	1031765	29916	1175841	347183	171125
4	2018	1096611	22405	739486	327554	159960
5	2017	1127167	53691	607677	284298	100454
6	2016	1183505	84989	683782	332263	106479
7	2015	1051031	69920	596560	324303	129636

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