

SQL COMMANDS I USED FOR MY PROJECT ON CENSUS BUREAU INTERNATIONAL. WORLD POPULATION ESTIMATES 2020 THROUGH.

PART 1: SQL statements to return the total fertility rate greater than 2.0

The screenshot shows the Google Cloud BigQuery interface. The top navigation bar includes the Google Cloud logo, the project name 'My Project 91147', and a search bar. Below the navigation bar, there's a 'SANDBOX' banner with a message about setting up billing. The main interface is divided into three sections: Explorer, Query Editor, and Query Results. The Explorer section on the left shows a list of datasets, with '2022-10-26 08:19:25-cen...' selected. The Query Editor section in the center displays a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 total_fertility_rate
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 total_fertility_rate > 2.0 AND year BETWEEN 2020 AND 2021
10 ORDER BY year ASC, country_name;
```

 The Query Results section at the bottom is currently empty, labeled 'Query results'.

PART 2: SQL statements to return the total fertility rate less than 2.0

The screenshot shows the Google Cloud BigQuery interface. The top navigation bar includes the Google Cloud logo, the project name 'My Project 91147', and a search bar. Below the navigation bar, there's a 'SANDBOX' banner with a message about setting up billing. The main interface is divided into three sections: Explorer, Query Editor, and Query Results. The Explorer section on the left shows a list of datasets, with '2022-10-26 08:43:50-cen...' selected. The Query Editor section in the center displays a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 total_fertility_rate
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 total_fertility_rate < 2.1 AND year BETWEEN 2020 AND 2021
10 ORDER BY year ASC
```

 The Query Results section at the bottom is currently empty, labeled 'Query results'.

PART 3: SQL statements to return sex ratio at birth greater or equal to 1.00

The screenshot shows the Google Cloud BigQuery interface. The top navigation bar includes the Google Cloud logo, the project name 'My Project 91147', and a search bar. Below the navigation bar, there is a 'SANDBOX' tab with a message to 'Set up billing to upgrade to the full BigQuery experience. [Learn more](#)'. The main interface is divided into three sections: Explorer, Editor, and Query results. The Explorer section on the left shows a list of resources, including several datasets and queries. The Editor section in the center displays a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 sex_ratio_at_birth
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 sex_ratio_at_birth >= 1.000 AND year BETWEEN 2020 AND 2021
10 ORDER BY year ASC, year;
11
```

The Query results section at the bottom is currently empty, showing only the text 'Query results'.

PART 4: SQL statements to return sex ratio at birth less than 1.000

The screenshot shows the Google Cloud BigQuery interface. The top navigation bar includes the Google Cloud logo, the project name 'My Project 91147', and a search bar. Below the navigation bar, there is a 'SANDBOX' tab with a message to 'Set up billing to upgrade to the full BigQuery experience. [Learn more](#)'. The main interface is divided into three sections: Explorer, Editor, and Query results. The Explorer section on the left shows a list of resources, including several datasets and queries. The Editor section in the center displays a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 sex_ratio_at_birth
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 sex_ratio_at_birth < 1.000 AND year BETWEEN 2020 AND 2021
10 ORDER BY year ASC, year
```

The Query results section at the bottom is currently empty, showing only the text 'Query results'.

PART 5: SQL statements to return gross reproduction rate greater or equal to 1.000

The screenshot shows the Google Cloud BigQuery interface. The top bar includes the Google Cloud logo, 'My Project 91147', and a search bar. Below the top bar, there's a 'SANDBOX' notification and a 'Set up billing to upgrade to the full BigQuery experience. [Learn more](#)' link. The main interface is divided into three sections: Explorer, Editor, and Query results. The Explorer section on the left shows a list of resources with timestamps. The Editor section in the center contains a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 gross_reproduction_rate
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 gross_reproduction_rate >= 1.000 AND year BETWEEN 2020 AND 2021
10 ORDER BY year ASC, year;
```

 The Query results section at the bottom is currently empty.

PART 6: SQL command to return gross reproduction rate less than 1.000

The screenshot shows the Google Cloud BigQuery interface. The top bar includes the Google Cloud logo, 'My Project 91147', and a search bar. Below the top bar, there's a 'SANDBOX' notification and a 'Set up billing to upgrade to the full BigQuery experience. [Learn more](#)' link. The main interface is divided into three sections: Explorer, Editor, and Query results. The Explorer section on the left shows a list of resources with timestamps. The Editor section in the center contains a SQL query:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 gross_reproduction_rate
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 gross_reproduction_rate < 1.000 AND year BETWEEN 2006 AND 2050
10 ORDER BY year ASC
```

 The Query results section at the bottom is currently empty.

STEP 7: After analyzing my data with a spreadsheet, I used SQL statements to find out countries that had some exact values I was looking for in my analysis.

NOTE: The values have already been calculated using a spreadsheet, so I have to use SQL statements to help find the exact country with that highest or lowest value. The rates of exact value I was looking for was;

- The country with the highest total fertility rate for both 2020 and 2021.
- The country with the lowest total fertility rate for both 2020 and 2021.
- The country with the highest sex ratio at birth for both 2020 and 2021.
- The country with the lowest sex ratio at birth for both 2020 and 2021.
- The country with the highest gross reproduction rate for both 2020 and 2021.
- The country with the lowest gross reproduction rate for both 2020 and 2021.

This SQL statement explains my first bullet point, after I had carried out the calculations on spreadsheet, this statement is just to help find the exact values I'm looking for.

The screenshot shows the Google Cloud BigQuery interface. At the top is a blue header with the Google Cloud logo, 'My Project 91147', and a search bar. Below the header is a 'SANDBOX' banner with a link to 'Set up billing to upgrade to the full BigQuery experience. [Learn more](#)'. The main interface is divided into three sections: Explorer, Editor, and Query results.

The Explorer sidebar on the left shows a search bar and a list of resources. The resources listed are:

- 2022-09-14 11:08:22citibi...
- 2022-09-16 17:21:03sale...
- 2022-09-16 20:05:50trip...
- 2022-10-26 08:19:25-cen...
- 2022-10-26 08:43:50-cen...
- 2022-10-26 09:04:36-cen...
- 2022-10-26 09:05:05-cen...
- 2022-10-26 09:14:14-cen...
- 2022-10-26 09:20:41-cen...
- 2022-10-26 09:37:11-cen...

The Editor section on the right shows a SQL query in the Editor tab. The query is:

```
1 SELECT
2 DISTINCT
3 country_name,
4 year,
5 total_fertility_rate
6 FROM
7 bigquery-public-data.census_bureau_international.age_specific_fertility_rates
8 WHERE
9 total_fertility_rate = 6.08 AND year = 2020
10 ORDER BY year ASC, country_name;
```

Below the query editor is the 'Query results' section, which is currently empty.

NOTE: I ran the same statements for each of the remaining bullet points. The only changes I made was to change the column for the 'total_fertility_rate' and input the exact column I want to search from. The columns that I will search the value from are imputed under the WHERE clause using the columns to filter out the values and also using the AND clause to filter out the year I'm looking for.