

BigQuery Data Exploration Part 1

Step 1 - While exploring the dataset, look at the Schema tab and read through the descriptions provided for each column, to get a sense of what data is in this table. This will help you answer the questions below.

Step 2 - Answer the following questions

1. There are several acronyms used in this dataset. For each acronym below, write out what it stands for:
 - a. CoC = **Continuum of care**
 - b. Sheltered_ES = **Sheltered Emergency Shelter**
 - c. Sheltered_TH = **Sheltered Transition House**
 - d. Sheltered_SH = **Sheltered Safe Haven**

2. What are the only 3 columns that are NOT an Integer type?

CoC_Number

CoC_Name

CoC_Category

3. Is there any way to determine which state each row of data is located in?

You are able to determine the rows by looking in the preview tab

4. How many total rows of data are there?

2,768 rows

5. What might be some reasons that someone would use this dataset (no wrong answers here, just trying to think about how this data could be used)?

This data could be collected to get a guestimate of how many people in the United States are homeless, in a shelter, transition home, or safe haven.

Step 3 - While you have the dataset selected, click on the Query button, and choose “In New Tab”. In the new query window, you can delete all of the SQL code there, and copy and paste the following code, then run it to create a new table:

```
CREATE TABLE Exploration_Project.homelessness AS
SELECT CoC_Number, LEFT(CoC_Number, 2) AS State, CoC_Name, Overall_Homeless,
Sheltered_ES_Homeless, Sheltered_TH_Homeless, Sheltered_SH_Homeless, Sheltered_Total_Homeless,
Unsheltered_Homeless, Homeless_Individuals, Homeless_People_in_Families, Chronically_Homeless,
Homeless_Veterans, Homeless_Unaccompanied_Youth_Under_18, Count_Year
FROM `bigquery-public-data.sdoch_hud_pit_homelessness.hud_pit_by_coc`
```

6. Do a quick Google search to figure out what the SQL function LEFT() does. In the query we just ran, what does the line of code, LEFT(CoC_Number, 2) AS State, do?

The SQL function LEFT() extracts a specified number of characters from the left side of a string.

Step 4 - Open the new table you just created and use the Preview tab to look at the data and make sure all of the columns are appearing properly.