Congratulations! We'd like to invite you to roll up your sleeves and take the following Giga Innovation Challenge.

The government wants to analyze the impact of their social distancing and mobility reduction policy that they had put in place during the COVID. You are going to work with aggregated mobility data for a city (see attached .zip file) for the last 7 days in periods of 8 hours (3 files per day named dayX_0000.csv, dayX_0800.csv and dayX_1600.csv for the mobility, respectively collected between 00:00 to 8:00, 8:00 to 16:00 and 16:00 to 00:00 of the next day).

The data files in the folder shared along with this file have the following columns:

- Baseline: the amount of people that used to move along this route (in this time-window on this type of day) before the crisis.
- Crisis: the amount of people that have been observed to move now (during the crisis)
- x0: The Longitude centroid of the area of origin (coordinates; have been transformed and obfuscated to lie in the ocean)
- y0: The Latitude centroid of the area of origin
- x1: The Longitude centroid of the area of destination
- y1: The Latitude centroid of the area of destination
- index_0: an internal ID
- index_1: an internal ID

Using this data, we need you to find solution to following two problem statements.

1: Perform a general analysis of the data. How have things changed over time? What is the current map of travel reduction? Are there any characteristics in the time series?

2: Perform a comparison of the different areas in the data. Are there notable differences between points/areas? Can we cluster areas into groups of similar behavior for a clearer view? Are there any vulnerable areas that are not able to reduce mobility? Outline how you would analyze the data further.

Minimum submission expected-

1. Explanation of the analysis and solution through a writeup, dashboard or any other storytelling method of your choice.
2. Code in a Github repository.

Be creative, your only constraint is time. Please limit your development time to 6 hours.

Good luck!