Approach:

Steps 1: Uploaded the CSV.

Step 2: From CSV I extracted the following column values (date , shift, volunteer id, Volunteer name) and constructed an named "matrix" .

Step 3: Sorted the array according to shift and after that sorted the array according to date.

Step 4: From the matrix filtered out the rows that had the same dates.

Step 5 : Within the filtered array found out the volunteers name who worked in the same shift and stored them and another array named "mainarray".

Step 6 : Export the main array as output.csv.

Bonus Part:

Step1: Covert the main array data to string by joining them;

Step2: Match the string them count them to find overlapping shift and save them to bonusArray.

Step 3: Export the bonusArray as bonusout.csv file

Limitations:

1)

This is not an optimal solution because I did not use any graph algorithms.

2)

May be give wrong value for the last index of the array For counting shift.

How to run:

Double click the index.html and the CSV file.