Assigment 2 (Spring 2024) DA 215: DataBase Lab

Instructor: Dr Chiranjib Sur Email: chiranjib@iitg.ac.in Deadline: March 19, 2024

Total Marks: 5x20 = 100 marks

1. Consider the following JavaScript library: Hexbin map - Walmart plot on USA by age.

Link for Hexbin map

New Coronavirus (Covid-19) Data of United States (USA) Dataset Link

- (a) The existing set has a dataset with geo-location and date of Establishment of that Walmart location. The task that is done is to plot the locations with bubbles, whose size is proportional to its age. Repeat the task on your local machine and note down the locations of the functions that do the task. Write a report on this.
- (b) Can you repeat the above work, but now you are aggregating the summation/average age within a certain diameter and plotting the circles. Write a report on this.
- (c) Can you repeat the above work, but now you are aggregating the influenced age within a certain diameter and plotting the circles. Write a report on this. The "influenced age" means that more number of older Walmart around, more is its weight-age as these are catered for the benefit of the rising population.
- (d) Now consider the dataset "Coronavirus (Covid-19) Data of United States (USA)". Your task is to identify the locations which are constantly under threat (rising number of cases and greater than national average) for a time window. Plot this on the JavaScript library. Write a report on this.
- (e) Now consider the dataset "Coronavirus (Covid-19) Data of United States (USA)". Your task is to identify the regions where the plots are proportional to the percentage of death compared to affected people for a time window. Plot this on the JavaScript library. Write a report on this.