Spatic asssignment

Assignment for Python Developer

You are given a dataset which consists of entries with latitude, longitude, and name (link to the dataset file is given below along with some helpful materials). Your task is to write a Python program that will identify entries which are within 200 meters of each other and have similar names i.e. strings that are similar, but not necessarily same

For example:
Bangalore and Bangaloore
new delhi and NewDelhi

Similarity Criteria:
1) Similar points should be within 200 meters distance from each other
2) Maximum number of single-character edits (insertions, deletions or substitutions) required to change one word into the other should be less than 5

Here are the requirements for the solution:
1) The program should be written in Python and use appropriate data structures to store the dataset.
2) Output should be a csv file with all the entries which satisfy given criteria of similarity marked as True / 1 in a separate column named is_similar
3) Submission files both python program and output csv file should be uploaded to a public github repository

Submission Link

https://docs.google.com/forms/d/e/1FAIpQLSepDwePgz0f00tIOampXREQ4cnUpCOlYHiIwOp3FI2UgZuY5Q/viewform

Here's a sample of the input dataset:

name	latitude	longitude
lqKiDFBZBTWUez	12.983261295304194	77.67860107706478
lqKiDFBZBTWXUez	12.98372612827221	77.67840867602989
eNmJDTcGphYUOiL	12.901054045694739	77.72835216668719
sjislLxiXZmXLXrA	12.873688787580443	77.50616775642054
sjislLxiXZmXLXr	12.874079493237167	77.50552922468972
PMiOQVrAkdXaIku	12.999143465806814	77.6242709621707

And here's a sample of the expected output:

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lqKiDFBZBTWXUez	12.98372612827221	77.67840867602989	1
eNmJDTcGphYUOiL	12.901054045694739	77.72835216668719	0
sjislLxiXZmXLXrA	12.873688787580443	77.50616775642054	1
sjislLxiXZmXLXr	12.874079493237167	77.50552922468972	1
PMiOQVrAkdXaIku	12.999143465806814	77.6242709621707	0

- Please submit your solution as a .py file, along with any relevant comments or explanations. The code should be well-documented and easy to understand. Good luck!
- Please submit your solutions within 5 days of receiving the assignment.

Link to Dataset

https://drive.google.com/file/d/1fcfmdshOYn0A_X6D7hW49ioSL8VhYQby/view?usp=sharing

Additional Helpful Material

Levenshtein_distance

geopy library