Light Guard Coding Challenge Logic overview

Preparation
(1) Read Json and csv file using theri respective pacakges
(2) Convert receiver timestamp to a list & Convert it to receiver dataframe fo further appliations
(3) Create Vehicle Dataframe &Create Datetime column in Vehicle Dataframe for comparision
(4) Create Strength column in Vechicle Dataframe to fill it afterwards

Cleaning
(5) Remove rows where 'Status_POS_Heading_deg' in not 1
(6) Set all timestamps value to similar datatype

Loops
(7) Iterarte over timestamp from receiver and check if logtime is less than 100ms and store in a list
(8) Using that list iterate over timestamp from Vehicle data and get only those data when they are same and store them to a list

Distance
(9) Using given cordinates iterate over extracted vehicle data and calculate using particular formula
(10) Create a Distance column in extracted vehicle dataframe

Plot
(1) Plot a graph using strength and distance column from exctracted vehicle datafame
(2) Save it with desired parameter