Q1. Write python code that would do the following:

1. Create a data frame from the input *(File: Delhi-Electricity-SubStation.csv)*.
2. In *Telephone Numbers* there are multiple numbers. Create separate columns for these *Telephone1*, *Telephone2* etc.
3. Determine the accuracy of the *Coordinates* with *Address*. Add another column *GeoAccuracy*. Find the coordinates using the address. If the coordinates match exactly with address, then accuracy is 100%, otherwise for every 10 meters off consider a drop in accuracy of 1 %. For example, if the coordinate of the address is 30 meters away from the given coordinates, the accuracy would be 70%.

Q2. The file *MH-Veh-Reg.csv* contains data of vehicles registered in Maharashtra for the period 2000-2018. Write python code to do the following:

1. Merge the data of each year (2000-2001, 2001-2002,….) to a single period (2000-2018) by the region and sub region.
2. Write a function that would take year as parameter and plot a graph. Classify the vehicles into 3 categories *Private*, *Commercial* and *Others*. Commercial vehicles will have 2 subcategories Light Motor Vehicles (LMV) and Heavy Motor Vehicles (HMV). Use different colors for each type of vehicle and also show the legend. The graph should show both the values and percentages.

**Note:**

1. Consider Motorcycles, Scooters, Moped, Cars, Jeeps, Stn. Wagons and Private Service Vehicles as Private and rest as Commercial.
2. Bus, Truck, Trailer, Tractor, Tanker, Stage/Contract carriage are all HMV and rest LMV.