<u>GPS – TRACK THE ROUTE 04</u>

So now we know how to pass the csv file or using our csv library plot this on Google map for this we need a different library name as gm plot so let me just import this gm plot here to see that whether it is present on this anaconda cloud or not so i will put from gm plot import gm plot let's see, you can see that it's written that error module not found error no module named gmplot means that this module is not present in the anaconda cloud it might happen that you looking for some new module which is not on anaconda most of the time all the modules and libraries are present in the anaconda that's why we recommended anaconda but there some library some new libraries which are still pending and which are not present on anaconda cloud but you can download it. One thing is that you can list all the libraries which are present on the anaconda, to do that you can just type on your terminal conda list will list all the libraries which are downloaded by the conda which are present on the conda cloud so you can see all these libraries which are present in your conda cloud ok, you can see that gmplot is not there so i am going to download it, in order to download anything from conda you can search each search it through conda the command is conda search gmplot, now it will search this gmplot named conda cloud in its cloud whether it is present in any of its channel if it is present then it will download, it might happen that may the library which we are looking for may not be present you can see that package not found error thrown from conda this library is not present in any of these channels in that case you have you can download the package through pip, so i will download pip install gmplot, now pip will install this gmplot and it will it will be automatically taken by the anaconda. Ok it says that successfully installed gmplot one point two point 0 so i will see this, let me try this command again you can see that it has been imported so it means that i can use this library now ok great let me delete this ok so i will import my csv library import csv next i will import this gmplot from gmplot import gmplot ok before i go any further you can read more about gmplot on you can Google it you can read more about gmplot on get there is a get on library on gmplot on the radio material is diploitation is provided how to place the map? How to create polygon? How to create the marker and how to draw it, how to see it, all these things are present depend in this look. Ok so let's see this. So i will import the csv file, csv library and gmplot library next what i will do i will place mine map on a particular location for that there is a function so let me create a variable gmap is equal to, you can see here also that how to place your map to particular coordinate to a location if you want to place the map to a particular location you need to write the latitude longitude value of that location and you can use the Google map plotter functional gmplot see you have to put the latitude longitude and the zoom resolution here the exactly same thing i am going to do here gmplot dot Google map plotter ok and you can see when i show the argument center latitude, center longitude and zoom here i will put my location as twenty eight dot six eight nine one six nine this is one random location i put or you can change it accordingly whatever you want to put there three two triple four eight and let the zoom resolution will be seventeen so i will the gamp contains the map location where i want to plot the, second thing is i want to create the icon, the icon which i am going to use to plot my routes so i can just you just copy this line here ok you do not have to carry much, you can create your own icon here but i am going to use this Google icon you can just copy this line and you will get the icon ok i have the icon i have the map now i will read the i will pass my csv file so that i can plot i know how to pass it with open i will open my route dot csv file dot csv ok as f i will create my reader iterator using the csv dot reader function i will pass my file. Let me create a variable name k using this k how will i use this? So let me pass this reader iterator, iterate through it for row in reader ok so row will give me list of all the values which are present in this csv file so i need to there are two values latitude and longitude ok and store it in latitude and longitude, so lat is equal to row zero since this is a string value i need to have the float value i will convert it into float same thing which we did in the last video the same i will store the longitude value is float of row awesome! Have the latitude and longitude values float values now i am going to use the k as a dummy variable how, if k is equal is equal to zero it means the first time this is the first coordinator i left then what i will do gmap dot i will use the marker, marker function i put the marker function put the marker to a particular latitude to particular coordinate that latitude longitude, put the marker at this lat and long value which this is the first lat and long value with colour, so let me put the colours yellow ok and i will make a k is equal to one which means that this was the first and after this whatever is coming you can do something else if you want so else if it is not the first coordinate which means the k is also k value is not zero means first value is already k and you already put yellow mark at there so whatever is coming after the first is you can you create the i am creating the marker as particular latitude and long with colour blue ok this is done since the last latitude longitude value the lat and long at the last after this iteration will contain the last latitude longitude value again i would like to place a read marker there what i will do put a gmap dot marker lat long of colour red that's it, at the last location i will put red colour marker so we are done i just have to draw this map gmap dot draw with html file that's in my may dot html do it, i am going to run this ok so i created a my map dot html so let me see go to my folder it say let me open this with my chrome and you can see so this is since it is yellow it is starting from which means this is the first location ok this is the first location only that delivery guy started and then went till this particular streets when some where some where these are the blue coordinates given by the gps device and he going somewhere and you can see these are the locations he went these are the blue locations there there these are the red location this is the last location. So this is how you can easily plot the coordinate if you have the coordinated you can plot it on Google map using the python it's very easy though i didn't use any hard core programming there many libraries through which you can do simple things that's why python is so popular you can do a lot of things with few lines of code because there are lots of library and the community is very strong. So thank you very much