SOURCE CODE DESCRIPTION :

Variable 'x' & 'y' are assigned for marking the boundary points of the area which we are going to asses. Then we plot the lines on Google Earth using the below code lines. After we complete that, we load the data which we obtain from field survey into MatLab. Variable 'data' contains the data sent of ph, temperature, latitude & longitude corresponding to that water parameter data. The data set stored in the variable 'data' is split into 4 different columns and stored in the corresponding variables 'ph', 'tem', 'lat', 'lon'. The maximum and minimum latitude and longitude points are obtained and stored in 'lat\_max', 'lon\_max', 'lon\_max', 'lon\_min'. This is in order to know the amount area we have analyzed.

Now coming to the data analysis part :

First we arrange the latitude and longitude data points in ascending with the help of 'lat\_ascending', 'lon\_ascending', & 'temp' variables. This is does because, usually we get raw data which is un organized and in random positions. Next after arranging a combination of while and for loop is run to pick out the water parameter values corresponding to that latitude and longitude data points and store it (match it) for the arranged latitude and longitude points. The variables used are 'ph\_new' & 'tem\_new'. Then these values are stored in a 2-D matrix which is analogous to the grid plot in the Google earth. The matrix corresponds to the ph & temperature values for the latitude and longitude of each grid in Google Earth. This data is then plotted in Google Earth with the help of the following lines of codes towards the end.