# Advanced Programing

## Lab 2: Analysis of Matrix Multiplication Algorithms

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In this lab I have used python to solve the given problem. The problem was to store the given csv file into an internal data structure (internal memory) and then find a city to list its neighboring cities. I have used a condition of 250km to shortlist the neighbors. The data structure used is basically a dictionary with the key value as the city name and latitude, longitude (list) as the value against the city name.

I have used the function to calculate the Great Circle Distance Formula (haversine function) from stack overflow forum link: http://stackoverflow.com/questions/15736995/how-can-i-quickly-estimate-the-distance-between-two-latitude-longitude-points