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**Lab 10**

**Github Link:** https://github.com/aminrashid/Software-Construction

**Introduction:** In this lab the task was to create an application that is able to search cities near any point, distances between two cities using the “The Great Circle Distance Formula”. This formula is used to find out the nearby lat/long. The data is saved/loaded onto a DB using Couch DB. So in this lab we were supposed to use NOSql to perform our task.

**Approach:** Searched for the cities using a function as well as the distance between 2 cities and cities that are near to each other. The Great Circle Distance Formula is used for doing this.

**Design:** Created the database and used the database to find the cities and the distances between them using “The Great First Circle Formula”. As well as to find out which cities are close to one another.

**How to Run and Analysis:** It is very easy to run as you just have to input the city or point of longitudes and latitudes for which cities are searched that nearest to it.