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Compiling Instructions:

> ➢ The code is present in Assignment2.java
> ➢ Open eclipse, create a project from the given framework project for Assignment2.
> ➢ Replace Assignment2.java present in src folder with my Assignment2.java file.
> ➢ Issue Run Command in Eclipse which will start the application.

Normalized version of ER Schema/Model:

I had asked the TA regarding submitting this. The TA replied that the schema should be fine.
The schema is present in createdb.sql file when run will create the required tables and schema.

INDEX CREATION:

Index is created for "COORDINATES" column in the address table.

The reason to create this index is that the co-ordinates are used in Spatial queries which requires an index already created to use the query. Also, this will speed up the query.

ASSUMPTIONS FOR NORMALIZATION:

In ADDRESS table , there is a transitive dependency in the following:

ADDRESS_ID -> ZIP CODE,   ZIP CODE-> CITY, STATE, COUNTRY.

which means, ADDRESS-> CITY, STATE, COUNTRY.

Hence, the normalization is done as to create a new table "ZIPCODE_REF"

> ➢ ZIPCODE_REF(ZIPCODE{primarykey}, CITY, STATE, COUNTRY).

ZIPCODE is a foreign key in ADDRESS table and CITY,STATE,COUNTRY removed from ADDRESS Table.