**SPATIAL DATABASES (CS – 615)  
LAST HOMEWORK**

**Name – Dhaval Harish Sharma  
Red ID – 824654344  
Oracle ID – st162**

**Question:  
You were each assigned a state (or picked one in a few cases). For this assignment you are to make a SDO table row for your state, which should include the following items. You should create a table with 7 fields as follows:  
varchar(15) 1. Capital city.  
varchar(18) 2. Long and lat of capital city.  
blob 3. Picture of the state flag.  
clob 4. 100-200 of your own words stating what YOU found interesting about the state. Be a bit creative. Do not plagiarize. Avoid first person pronouns.  
sdo\_geom 5. Usual 'shape' column.  
varchar(50) 6. A famous novel about your state (title and author). Title should not include your state name!!! e.g. Last of the Mohicans by James Fennimore Cooper, for New York state.  
varchar(100)7. Well known tourist site plus brief description thereof.**

**Your report can consist of an SQL INSERT INTO line with the above info for your state. We might then make up a 50-row table by doing a union of your homework answers.**

**Solution:  
I had been assigned to the state of Louisiana. I have decided to write the following details into my assignment:**  
**Capital City -** Baton Rouge

**Latitude and Longitude -** 30.9843N,91.9623W

**Interesting Facts -** The state of Louisiana has parishes instead of counties. A large population of Cajuns resides in this state. There is a bridge named Lake Pontchartrain Causeway in Louisiana which is the world's longest bridge over a body of water. Louisiana is also known as the birthplace of Jazz. Louisiana's state capitol building is the tallest in the United States at about 450 feet. It is also one of America's greatest salt producers. There is a world-famous event being held in New Orleans called Mardi Gras. Mausoleums are often used instead of traditional underground graves because most of the New Orleans sits below sea level. The first opera performed in the U.S. took place in the French Quarter of New Orleans in the year 1796. Louisiana is home to both the "Crawfish Capital of the World" and the "Frog Capital of the World". Saint Charles streetcar located in New Orleans is one of the only two mobile national monuments in the country.

**Famous Novel -** The Awakening by Kate Chopin

**Famous Tourist Attraction -** The National WWII Museum emphasizing the American experience in World War II.

**The SQL Script for the assignment is as follows:**CREATE OR REPLACE DIRECTORY LOUISIANA AS 'D:\Spatial Dhaval';

DROP TABLE States;

CREATE TABLE States(Capital varchar(15),Coordinates varchar(21), Flag BLOB, Report CLOB,Famous\_Novel varchar(50),Famous\_Tourist\_Site varchar(100), SHAPE MDSYS.SDO\_GEOMETRY);

DELETE FROM USER\_SDO\_GEOM\_METADATA WHERE TABLE\_NAME = 'STATES' AND COLUMN\_NAME='SHAPE';

INSERT INTO USER\_SDO\_GEOM\_METADATA (TABLE\_NAME, COLUMN\_NAME, DIMINFO, SRID) VALUES ('STATES', 'SHAPE', MDSYS.SDO\_DIM\_ARRAY (MDSYS.SDO\_DIM\_ELEMENT('X', -180.000000000, 180.000000000, 0.500000000), MDSYS.SDO\_DIM\_ELEMENT('Y', -90.000000000, 90.000000000, 0.500000000)), 8307);

CREATE INDEX states\_spatial\_idx on States(SHAPE) INDEXTYPE IS MDSYS.SPATIAL\_INDEX;

INSERT INTO States(Capital, Coordinates, Flag, Report, Famous\_Novel, Famous\_Tourist\_Site, Shape) VALUES ('Baton Rouge', '30.9843,-91.9623', EMPTY\_BLOB(),'The state of Louisiana has parishes instead of counties. A large population of Cajuns resides in this state. There is a bridge named Lake Pontchartrain Causeway in Louisiana which is the worlds longest bridge over a body of water. Louisiana is also known as the birthplace of Jazz. Louisiana state capitol building is the tallest in the United States at about 450 feet. It is also one of Americas greatest salt producers. There is a world-famous event being held in New Orleans called Mardi Gras. Mausoleums are often used instead of traditional underground graves because most of the New Orleans sits below sea level. The first opera performed in the U.S. took place in the French Quarter of New Orleans in the year 1796. Louisiana is home to both the Crawfish Capital of the World and the Frog Capital of the World. Saint Charles streetcar located in New Orleans is one of the only two mobile national monuments in the country.','The Awakening by Kate Chopin','The National WWII Museum emphasizing the American experience in World War II.',SDO\_GEOMETRY(7, 8307, NULL, SDO\_ELEM\_INFO\_ARRAY(1, 3, 1), SDO\_ORDINATE\_ARRAY(-93.707359, 30.239372, -93.699211, 30.297388, -93.729774, 30.304916, -93.759178, 30.340872, -93.759338, 30.354145, -93.747833,30.367411, -93.754944, 30.381788, -93.742561, 30.408823, -93.721535, 30.43298, -93.696571, 30.442633, -93.703423, 30.462513, -93.697975, 30.470047, -93.714851,30.488628, -93.707275, 30.496241, -93.714638, 30.505114, -93.70546, 30.522858, -93.735306, 30.545517, -93.71788, 30.568153, -93.717812, 30.587379, -93.69342, 30.598835, -93.671585, 30.597832, -93.692696, 30.615795, -93.684586, 30.623425, -93.692879, 30.640041, -93.677971, 30.639692, -93.659988, 30.672859, -93.617607, 30.686802, -93.612411, 30.710329, -93.61779, 30.732548, -93.607651, 30.73201, -93.618454, 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-89.61953, 29.279352, -89.610657, 29.331537, -89.794876, 29.322317, -89.753639, 29.374067, -89.821678, 29.420692, -90.934479, 29.258873)));

CREATE OR REPLACE PROCEDURE load\_flag IS

src\_bfile BFILE := BFILENAME('LOUISIANA', 'Louisiana-Flag.jpg');

dest\_blob BLOB;

BEGIN

SELECT flag into dest\_blob FROM States WHERE Capital = 'Baton Rouge' FOR UPDATE;

DBMS\_LOB.fileopen(src\_bfile, DBMS\_LOB.LOB\_READONLY);

DBMS\_LOB.LoadFromFile( dest\_blob,src\_bfile,DBMS\_LOB.GETLENGTH(src\_bfile) );

DBMS\_LOB.fileclose(src\_bfile);

COMMIT;

END;

/

EXECUTE load\_flag;

select \* from states;

**The SQL script and its various attributes looks as follows in my local oracle and SQL database:**  






