Q5. Queries

**Table Creation:**

CREATE TABLE location\_names (

name VARCHAR(50),

geog geometry

);

Displaying Table:

select \* from location\_names;

**Inserting Table Values:**

INSERT INTO location\_names

VALUES ('TommyTrojan', 'POINT(-118.1703 34.0109)');

INSERT INTO location\_names

VALUES ('ORL', 'POINT(-118.1659 34.0120)');

INSERT INTO location\_names

VALUES ('MBS', 'POINT(-118.1702 34.0103)');

INSERT INTO location\_names

VALUES ('ShoahFoundation', 'POINT(-118.1654 34.0114)');

INSERT INTO location\_names

VALUES ('SchoolOfCinematicArts', 'POINT(-118.1707 34.0121)');

INSERT INTO location\_names

VALUES ('CARlab', 'POINT(-118.1715 34.0113)');

INSERT INTO location\_names

VALUES ('MarksHall', 'POINT(-118.1652 34.0106)');

INSERT INTO location\_names

VALUES ('ViterbiSchoolofEnginnering', 'POINT(-118.1717 34.0109)');

INSERT INTO location\_names

VALUES ('McCarthyQuad', 'POINT(-118.1654 34.0111)');

INSERT INTO location\_names

VALUES ('RoskiSchool', 'POINT(-118.1708 34.0106)');

INSERT INTO location\_names

VALUES ('CromwellT&F', 'POINT(-118.1710 34.0115)');

INSERT INTO location\_names

VALUES ('AdmissionCenter', 'POINT(-118.1705 34.0108)');

**Points for Conex Hull:**

SELECT ST\_AsText(ST\_ConvexHull(ST\_Collect(geog))) FROM location\_names;

**Centroid:**

SELECT ST\_AsText(ST\_Centroid('MULTIPOINT (-118.1702 34.0103,-118.1717 34.0109,-118.1715 34.0113,-118.1707 34.0121,-118.1659 34.012,-118.1654 34.0114,-118.1652 34.0106,-118.1702 34.0103)'));

**Distance between Centroid and Tommy Trojan:**

SELECT ST\_Distance(

'SRID=4326;POINT(-118.16885 34.011112499999996)'::geography,

'SRID=4326;POINT(-118.1703 34.0109)'::geography

);

Answer: 135.99887828 m