

## USIT 6P4 Principles of Geographic Information Systems Practical #7

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Class	TY BSC IT	Division	C
Subject/Course	USIT 6P4 Principles of Geographic Information Systems		
Topic	Managing Data Tables and Spatial data Sets: Table joins, spatial joins, points in polygon analysis, performing spatial queries		

### Explain about Data Tables and Spatial data Sets.

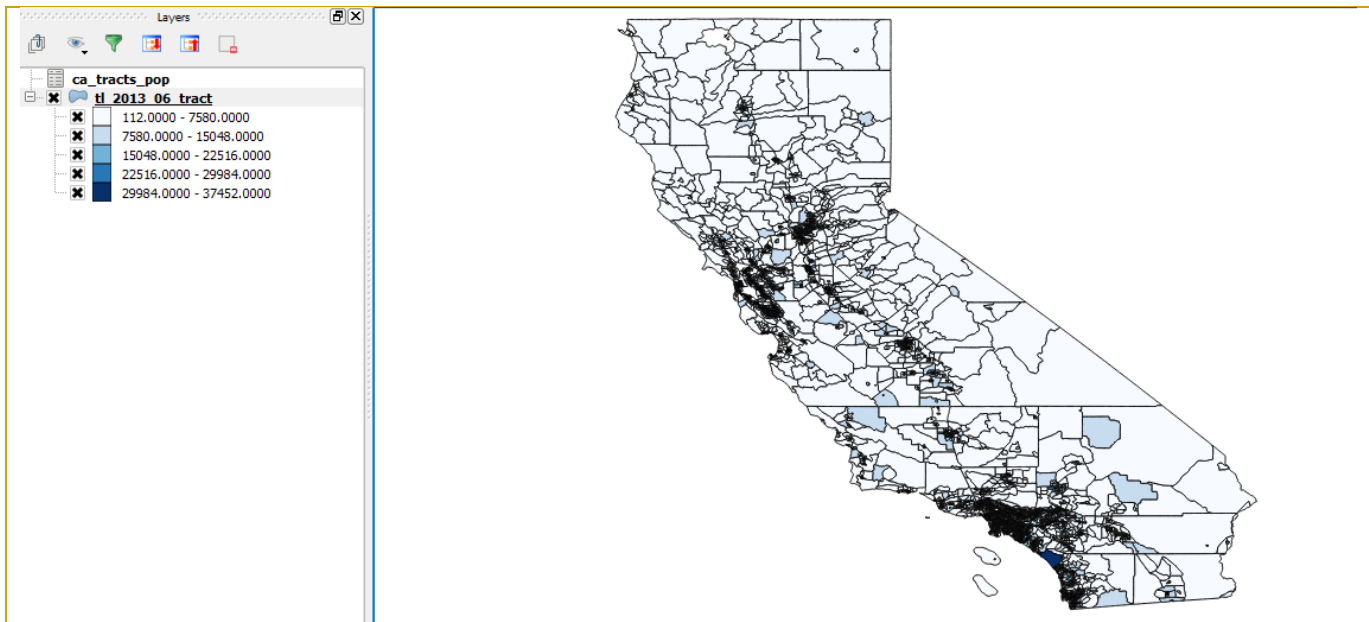
Data Tables -

A data table is a document comprising columns, rows and cells that contain specific values. They store information that people can retrieve later and update as needed. The data table title, column headers and row headers can help a user understand the information in the table more clearly.

Spatial data Sets -

Spatial data, also known as geospatial data, refers to information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the Earth.

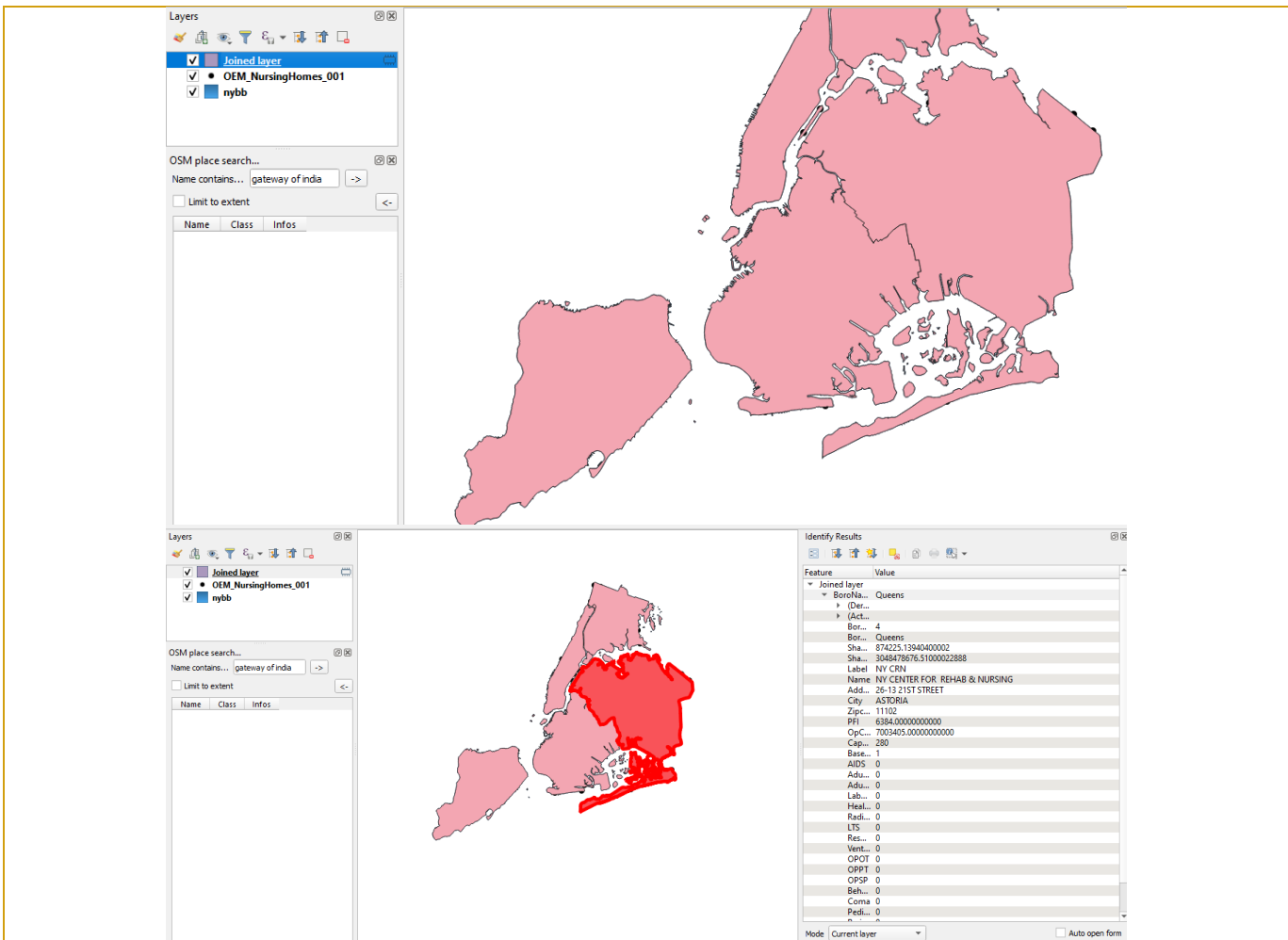
### Managing Data Tables and Spatial data Sets [Write steps and insert Screenshot]



## Perform Spatial joins [Write steps and insert Screenshot]

	BoroCode	BoroName	Shape_Leng	Shape_Area	Label	Name	Address	City	Zipcode
1	2	Bronx	464475.0676990...	1186823812.599...	BRONX CENTER	BRONX CENTE...	1010 UNDERHIL...	BRONX	10472
2	5	Staten Island	330454.8066070...	1623846991.529...	CARMEL RICH...	CARMEL RICH...	88 OLD TOWN ...	STATEN ISLAND	10304
3	1	Manhattan	357176.1325809...	636397842.6720...	ROBERT MAPPL...	ROBERT MAPPL...	327 EAST 17TH ...	NEW YORK	10003
4	4	Queens	874225.1394040...	3048478676.510...	NY CRN	NY CENTER FO...	26-13 21ST STR...	ASTORIA	11102
5	3	Brooklyn	742297.8304019...	1937844335.480...	BISHOP MUGA...	BISHOP FRANC...	155 DEAN STREET	BROOKLYN	11217



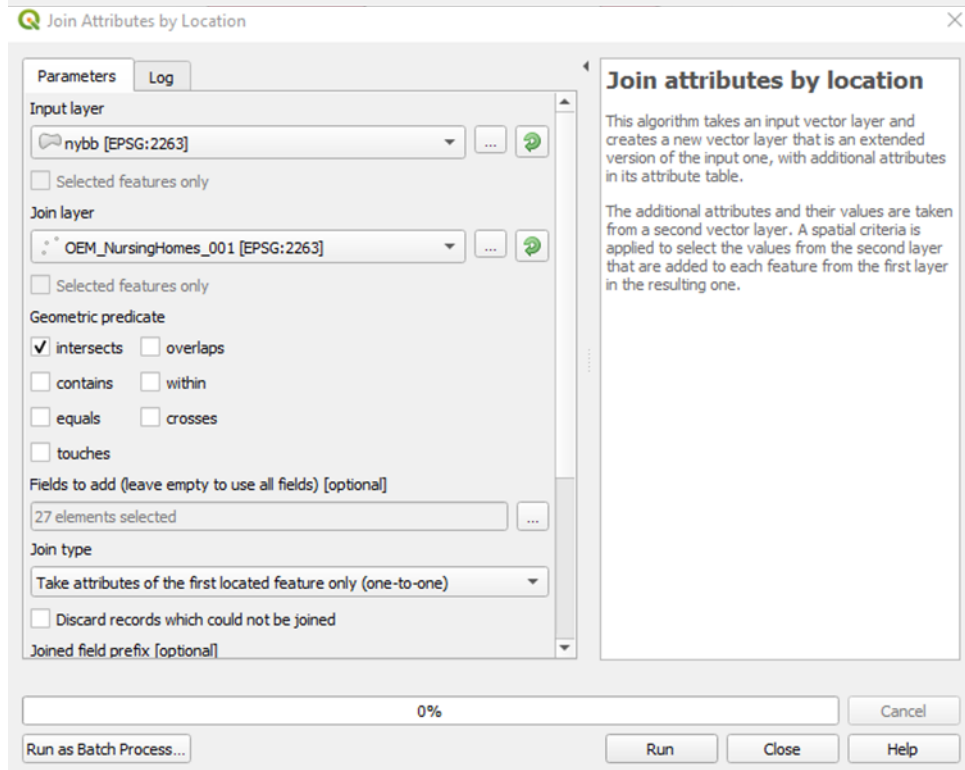
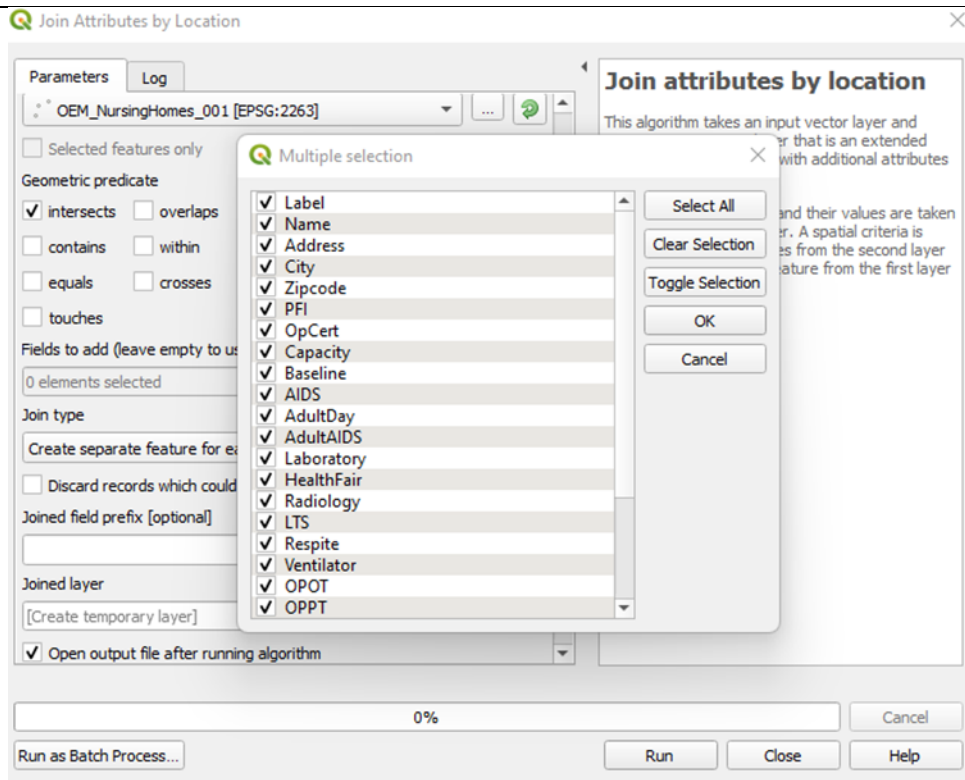


## Points in polygon analysis [Write steps and insert Screenshot]

Layer -> Add -> Vector Layer -> GIS Pract Dataset\Practical\_07 3.4\B\nybb\_13c\_av\nybb.shp

Layer -> Add -> Vector Layer -> OEM\_NursingHomes\_001.shp

Vector -> Database Management Tools -> Join attribute by location

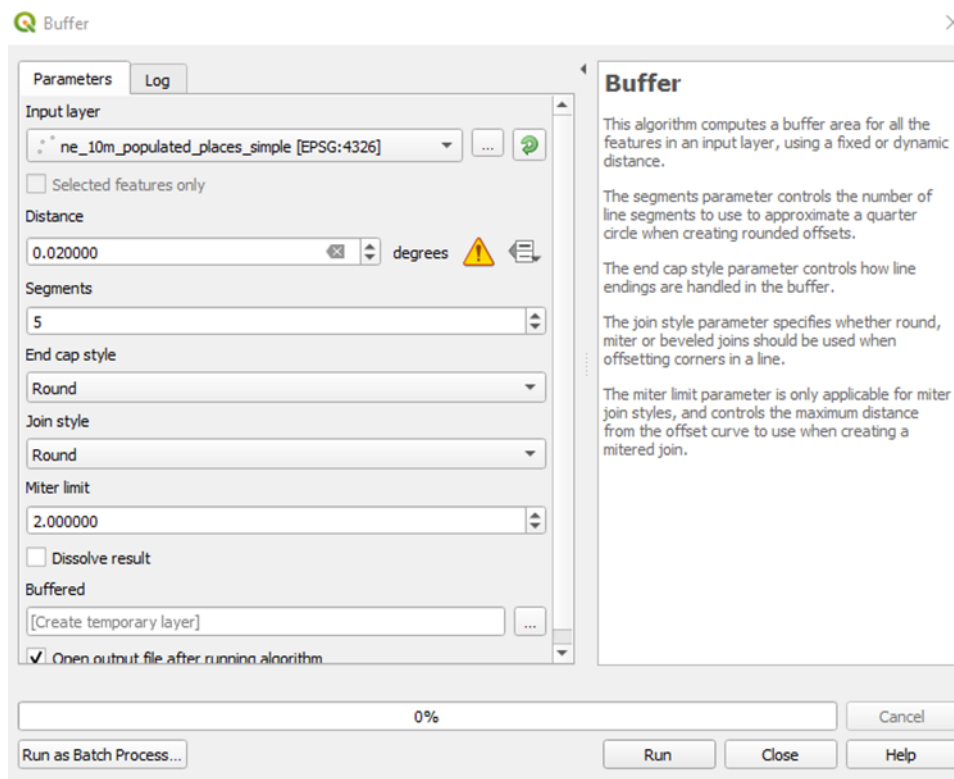
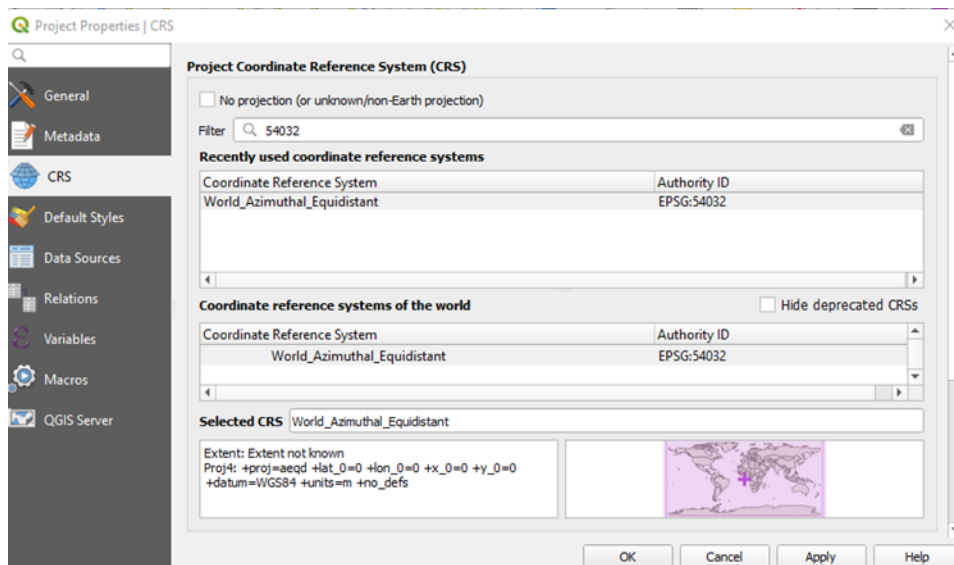


Identifier tool (symbol)

## Performing spatial queries [Write steps and insert Screenshot]

Layer -> Add -> Vector Layer -> ne\_10m\_populated\_places\_simple zip -> ne\_10m\_populated\_places\_simple.shp

Project -> Properties



Vector -> Research Tool -> Select By Location

