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| **Sr. no.** | **Process** | **Date** |
| 1 | [Downloaded the KMZ file from the New York State GIS data inventory for bulk storage facilities](https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1253) | 11/19/2021 |
| 2 | [Download New York County Shapefile from data catalog](https://catalog.data.gov/dataset/tiger-line-shapefile-2016-state-new-york-current-county-subdivision-state-based) | 11/23/2021 |
| 3 | [Download the Cancer Data for New York State by county](https://www.satscan.org/datasets/nyscancer/) | 11/23/2021 |
| 4 | [Download Poverty data by counties from the ACS website](https://data.census.gov/cedsci/table?q=income%20in%20US%20State%20with%20geoid) | 12/3/2021 |
| 5 | Open ARCGIS pro, create a project, name it FinalProjectSanjana | 11/23/2021 |
| 6 | Add County Data shape file to the map, using Add data, navigate to the folder and click okay | 11/25/2021 |
| 7 | Add bulk storage facility data. Go to analysis tab, click tools, and search for KML to Layer tool. | 11/25/2021 |
| 8 | Navigate to the KMZ file for bulk storage facilities in your project folder for Input KML File | 11/25/2021 |
| 9 | Navigate to the project folder as output location | 11/25/2021 |
| 10 | Name the layer BulkStorageFacilities | 11/25/2021 |
| 11 | Open the Attribute table for bulk storage facilites, to understand what do the three symbols stand for | 11/25/2021 |
| 12 | Click Select by attribute, and add new expression where SymbolID is equal to 0 | 11/25/2021 |
| 13 | Open the Attribute table for bulk storage facilites, and check under the FolderPath column for what is common in all selected rows | 11/29/2021 |
| 14 | We observe that 0 = Petroleum Bulk Storage Facility 1= Chemical Bulk Storage Facility and  2= Major Oil Storage Facility | 11/29/2021 |
| 15 | Seperate the three into 3 different features, using select by attribute using SymbolID = 0,1,2, for each facility type at a time and export each as a feature named respectively using right click > Data > Export Feature | 11/29/2021 |
| 16 | Change the symbols for each type of facility using the map design rules | 11/29/2021 |
| 17 | Go to folders and right clict to creat connect with the data folder in the my project folder | 12/3/2021 |
| 18 | Convert tl\_2016\_36\_cousub.dbf into csv online, and rename the file as CountySubdivision and download it | 12/3/2021 |
| 19 | Open the CountySubdivision data in Excel, and extract the first 5 digits from the GEOID column, and save it in a new column called new\_geoid and save the file | 12/3/2021 |
| 20 | Add the CountySubdivision csv file in the ArcGIS, using Table to Table tool, and Name the output table County, and open the table to chek the data type of GEOID\_C\_10, which is double. | 12/3/2021 |
| 21 | add a new field to the table and name it GeoID\_txt, and save the table | 12/3/2021 |
| 22 | opent the table and calculate field to equate GeoID\_txt to GEOID\_C\_10, which will convert GEOID\_C\_10 into text format. | 12/3/2021 |
| 23 | Add join for the following details   Input Table CountySubdivision Input Join Field GEOID Join Table County Join Table Field GeoID\_txt Keep All Target Features KEEP\_ALL Updated Input Layer or Table View CountySubdivision | 12/3/2021 |
| 24 | Use Dissolve Tool to merge all the county subdivisions based on new\_geoid, using the following parameters  Parameters  Input Features CountySubdivision Output Feature Class D:\GIS\TRY\MyProject\MyProject.gdb\CountySubdivision\_Dissolve Dissolve Field(s) County.new\_geoid Statistics Field(s) CountySubdivision.ALAND SUM Create multipart features MULTI\_PART Unsplit lines DISSOLVE\_LINES | 12/3/2021 |
| 25 | Right click CountySubdivision\_Dissolve and go to data and export feature, name it County | 12/3/2021 |
| 26 | Open the povertyline data in Excel, and extract the first 5 digits from the GEOID column, and save it in a new column called GeoID\_new  and save the file | 12/3/2021 |
| 27 | Use the Table to Table tool with the following parameters to add it to the map   Input Rows D:\GIS\TRY\MyProject\Data\povertyline\_new.csv Output Location D:\GIS\TRY\MyProject\MyProject.gdb Output Name PopulationUnderPoverty | 12/3/2021 |
| 28 | use Calculate Field with to convert GeoID\_new to text format Input Table PopulationUnderPoverty Field Name (Existing or New) GeoID\_txt Expression !GeoID\_new! | 12/3/2021 |
| 29 | Add join, to connect PopulationUnderPoverty with the County layer, nad export this feature as PopUnderPoverty | 12/3/2021 |
| 30 | Open the attribute table and add a field called TotaPopUnderPoverty with data type float | 12/3/2021 |
| 31 | Calculate the TotaPopUnderPoverty field to be the sum of Male\_underPoverty and Female\_underPoverty | 12/3/2021 |
| 32 | Right click PopUnderPoverty and go to symbology and shift Single Symbol to Graduated symbol. | 12/3/2021 |
| 33 | Enter TotaPopUnderPoverty in the Field option, with 5 Classes and and Geometric Interval Method | 12/3/2021 |
| 34 | Convert NYSCancer\_region.dbf into csv online, and rename the file as NYSCancer\_region and download it | 12/3/2021 |
| 35 | Open the NYSCancer\_region data in Excel, and extract the first 5 digits from the DOHREGION,C,12  column, and save it in a new column called Geoid and save the file | 12/3/2021 |
| 36 | Use the Table to Table tool with the following parameters to add it to the map  Input Rows D:\GIS\TRY\MyProject\Data\NYSCancer\_region.csv  Output Location D:\GIS\TRY\MyProject\MyProject.gdb  Output Name CancerIncidence | 12/3/2021 |
| 37 | Go to Add Data under the Map tab, navigate to the NYS\_Cancer folder in the Project folder and add the NYSCancer\_region shape file to the map | 12/3/2021 |
| 38 | Convert !DOHREGION\_C\_12! to txt format using calculate field  Input Table CancerIncidence  Field Name (Existing or New) DOH\_txt  Expression !DOHREGION\_C\_12! | 12/3/2021 |
| 39 | Add join, to connect   Input Table NYSCancer\_region Input Join Field DOHREGION Join Table CancerIncidence Join Table Field DOHREGION\_C\_12 Updated Input Layer or Table View NYSCancer\_region | 12/3/2021 |
| 40 | Add Join to connect the Cancer Incidence table to the NYSCancer\_region Layer  Input Table NYSCancer\_region Input Join Field DOHREGION Join Table CancerIncidence Join Table Field DOHREGION\_C\_12 Keep All Target Features KEEP\_ALL | 12/3/2021 |
| 41 | Dissolve the cancer incidence counts based on the OTOTAL column using the following parameters   Input Features NYSCancer\_region Output Feature Class D:\GIS\TRY\MyProject\MyProject.gdb\NYSCancer\_region\_Dissolve Dissolve Field(s) CancerIncidenceTable.Geoid Statistics Field(s) CancerIncidenceTable.OTOTAL\_N\_6\_0 SUM | 12/3/2021 |
| 42 | Right click NYSCancer\_region\_Dissolve Layer and go to data and export feature, name it CancerIncidenceCount | 12/3/2021 |
| 43 | Explore the attribute table of the CancerIncidenceCount feature layer. We find the OTOTAL column which sums the different types of cancer incidence rates by counties | 11/29/2021 |
| 44 | Go to symbology and shift Single Symbol to Graduated symbol. | 11/29/2021 |
| 45 | Enter OTOTAL in the Field option, with 5 Classes and and Geometric Interval Method | 11/30/2021 |
| 46 | Save As this project as FinalProjectSanjana | 12/4/2021 |
| 47 | Share the project with ArcGis Online using the Web Map option under the share Tab, add a name Bulk Storage Facilities and their association with Cancer Incidence, and add a summary and tags, share with Everyone, and under the FinalProjectSanjana folder in my content | 12/4/2021 |
| 48 | Open the Dashboard App on ArcGis online and add the map Bulk Storage Facilities and their association with Cancer Incidence to it | 12/4/2021 |
| 49 | click on the + icon on the upper right corner, and click on lists to get a list of Population under Poverty Line by Counties | 12/4/2021 |
| 50 | Select Layer PopUnderPoverty, maximum features displayed =25, sort by TotaPopUnderPoverty, descending | 12/4/2021 |
| 51 | Define Line item template as  {NAME} {TotaPopUnderPoverty} | 12/4/2021 |
| 52 | Add title Population Under Poverty by Counties | 12/4/2021 |
| 53 | Select Seriel Chart from + menu, And select the CancerIncidenceCount as the Layer, Select Features as GeoID, add series as SUM\_CancerIncidenceTable.OTOTAL\_N\_6\_0 | 12/4/2021 |
| 54 | Sort by SUM\_CancerIncidenceTable.OTOTAL\_N\_6\_0, sort by descending, maximum categories =10 | 12/4/2021 |
| 55 | Also, name the axis appopriately | 12/4/2021 |
| 56 | Select Seriel Chart from + menu, And select the PopUnderPoverty as the Layer, Select Features as new\_GeoID, add series as TotaPopUnderPoverty | 12/4/2021 |
| 57 | Sort by TotaPopUnderPoverty, sort by descending, maximum categories =10 | 12/4/2021 |
| 58 | Place the charts appropriately on the dashboard | 12/4/2021 |
| 59 | Save the Dashboard. | 12/4/2021 |