In [8]:
```
import requests
import os
#The provided code sends an HTTP GET request
dataurl = r'https://resources.gisdata.mn.gov/pub/data/elevation/lidar/examples/lidar_s
dnr_Get = requests.post(dataurl, verify=False, stream=True) #get request function with


##print(os.getcwd())
folderlocation = r'C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2'
if not os.path.exists(folderlocation):
    os.mkdir(folderlocation)
#saving the downloaded data to the local file system.
with open(folderlocation+'\\dnr.las', 'wb') as file:
    file.write(dnr_Get.content)
```

```
C:\Users\Track\AppData\Local\ESRI\conda\envs\arcgispro-py3-clone\lib\site-packages\ur
llib3\connectionpool.py:1056: InsecureRequestWarning: Unverified HTTPS request is bei
ng made to host 'resources.gisdata.mn.gov'. Adding certificate verification is strong
ly advised. See: https://urllib3.readthedocs.io/en/1.26.x/advanced-usage.html#ssl-war
nings
  warnings.warn(
```

In [9]:
```
arcpy.management.CreateLasDataset(
    input=r"C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2\dnr.las",
    out_las_dataset=r"C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2\dnr.las
    folder_recursion="NO_RECURSION",
    in_surface_constraints=None,
    spatial_reference='PROJCS["datum_D_North_American_1983_HARN_UTM_Zone_15N",GEOGCS["
    compute_stats="COMPUTE_STATS",
    relative_paths="ABSOLUTE_PATHS",
    create_las_prj="NO_FILES",
    extent="DEFAULT",
    boundary=None,
    add_only_contained_files="INTERSECTED_FILES"
)
```

Out[9]:

Messages

In [10]:
```
import arcpy

# Set the workspace to the location of your LAS dataset
arcpy.env.workspace = r'C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2'

# Define the input LAS dataset
input_las_dataset = 'dnr.lasd'

# Define the name for the output TIN dataset within the workspace
output_tin_name = 'dnr_tin'

# Convert LAS dataset to TIN
arcpy.ddd.LasDatasetToTin(input_las_dataset, output_tin_name, 'WINDOW_SIZE', 'MIN',
```

Out[10]:

Messages

In [11]:
```
import arcpy

# Set the workspace to the location of your LAS dataset
arcpy.env.workspace = r'C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2'

# Define the input LAS dataset
input_las_dataset = 'dnr.lasd'

# Define the name for the output DEM raster dataset within the workspace
output_dem_name = 'dnr_dem'

# Convert LAS dataset to DEM
arcpy.conversion.LasDatasetToRaster(input_las_dataset, output_dem_name, 'ELEVATION'
```

Out[11]:

Messages

In [12]:
```
proj_path = r"C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2\Lab2_2.aprx
work_dirr = r"C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2\TIN.pdf"

# TIN
aprx = arcpy.mp.ArcGISProject(proj_path)
tin_lyt = aprx.listLayouts()[1]
tin_lyt.exportToPDF(work_dirr)
```

Out[12]: 'C:\\Users\\Track\\OneDrive\\Documents\\ArcGIS\\Projects\\Lab2_2\\TIN.pdf'

In [13]:
```
# DEM
work_dir = r"C:\Users\Track\OneDrive\Documents\ArcGIS\Projects\Lab2_2\DEM.pdf"
aprx = arcpy.mp.ArcGISProject(proj_path)
dem_lyt = aprx.listLayouts()[0]
dem_lyt.exportToPDF(work_dir)
```

Out[13]: 'C:\\Users\\Track\\OneDrive\\Documents\\ArcGIS\\Projects\\Lab2_2\\DEM.pdf'

In [ ]:

In [ ]: