In [2]:
```
import arcpy
import requests
import io
import os
import zipfile
```

In [4]:
```
#arcpy.env.workspace = r'G:\My Drive\GIS 5571\Lab2.2\Lab2.2\Lab2.gdb'
#working_dir = r'G:\My Drive\GIS 5571\Lab2.2\Lab2.2\Lab2.gdb'
```

Bring in Data

In [ ]:
```
#PRISM_request_URL = r'https:prism.oregonstate.edu/fetchData.php'
```

In [ ]:
```
#PRISM_Params=r'type=all_bil&kind=normals&spatial=4km&elem=ppt&temporal=annua
l'
```

In [ ]:
```
#final_PRISM_path=PRISM_request_URL+'?'PRISM_params
```

In [ ]:
```
#PRISM_post_request= requests.post(final_PRISM_path)
```

In [ ]:
```
#PRISMzipfile = zipfile.ZipFile(io.BytesIO(PRISM_post_request.content))
```

In [ ]:
```
#PRISMzipfile.extractall(working_dir)
```

Conversions

In [ ]:
```
#Create Mosaic
#arcpy.management.CreateMosaicDataset(r"G:\My Drive\GIS 5571\Lab2.2\lab2.2\lab
2.gdb", "PRISM_Mosaic", 'GEOGCS["GCS_North_American_1983",DATUM["D_North_Ameri
can_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.
0],UNIT["Degree",0.0174532925199433]]', None, '', "NONE", None)
```

In [ ]:
```
#Add Raster to Mosaic Dataset
#arcpy.management.AddRastersToMosaicDataset("PRISM_Mosi", "Raster Dataset",
 r"G:\My Drive\GIS 5571\Lab2.2\Lab2.2\lab2.gdb\PRISM", "UPDATE_CELL_SIZES", "U
PDATE_BOUNDARY", "NO_OVERVIEWS", None, 0, 1500, None, '', "SUBFOLDERS", "ALLOW
_DUPLICATES", "NO_PYRAMIDS", "NO_STATISTICS", "NO_THUMBNAILS", '', "NO_FORCE_S
PATIAL_REFERENCE", "NO_STATISTICS", None, "NO_PIXEL_CACHE", r"G:\My Drive\GIS
 5571\Lab2.2\Lab2.2\lab2.gdb\PRISM_Mosi")
```

In [ ]:
```
#Build Miltidimensional Info
#arcpy.md.BuildMultidimensionalInfo("PRISM_Mosi", "Name", None, None, "NO_DELE
TE_MULTIDIMENSIONAL_INFO")
```

In [ ]:
```
#Make Multidimensional Raster Layer

#in_multidimensional_raster = r"G:\My Drive\GIS 5571\Lab2.2\lab2.2\lab2\PRISM_
Mosi.crf"
#out_multidimensional_raster_layer = r"G:\My Drive\GIS 5571\Lab2.2\lab2.2\lab2
\PRISM_Multi.crf"
#variables = "Value"
#dimension_def = "BY_ITERATION"
#dimension = "StdTime"
#start_of_first_iteration = "PRISM_ppt_30yr_normal_4kmM3_01_bil"
#end_of_first_iteration = "PRISM_ppt_30yr_normal_4kmM3_annual_bil"
#iteration_step = "1"
#iteration_unit = "YEARS"
#template = "120.084279939743 0.914964278021376 139.524470909773 21.1231086159
414"

#arcpy.md.MakeMultidimensionalRasterLayer(
#       in_multidimensional_raster, out_multidimensional_raster_layer,
#       variables, dimension_def, dimension, start_of_first_iteration,
#       end_of_first_iteration, iteration_step, iteration_unit, template)
```

In [ ]:
```
#Convert to Space Time Cube
#arcpy.CreateSpaceTimeCubeMDRasterLayer_stpm(r"PRISM_multi",
                #  r"PRISM_SpaceTtimeCube.nc", "PRISM_Space_Time")
```

Export

In [ ]:
```
#No code used to export to disk, just moved to layout, clicked export and sele
cted C:\downloads
```

In [ ]:
```
#Export as GIF
#lyt = aprx.listLayouts("PRISM_Space_Time*")[0]
#lyt.exportToGIF(r"G:\My Drive\GIS 5571\Lab2.2\Output\PRISM_Space_Time.gif")
```