



## IS 296

### Linking Google Drive and Colab

*Note: These instructions walk through how to access csv files (your data) through the colab system by linking it to your google drive.*

**Step 1)** Add the folder containing the class into google drive by selecting “New” > “Folder Upload”.

*Note: There are about 600 files in the folder. It may take a few minutes to complete the upload.*

**Step 2)** Select the lab you want to start working on and open it in colab.

*Note: The lab should contain one or more csv files.*

**Step 3)** Copy and paste the following code to get all the imports and authenticate your gmail account.

```
from pydrive.auth import GoogleAuth
from pydrive.drive import GoogleDrive
from google.colab import auth
from oauth2client.client import GoogleCredentials
auth.authenticate_user()
gauth = GoogleAuth()
gauth.credentials = GoogleCredentials.get_application_default()
drive = GoogleDrive(gauth)
```

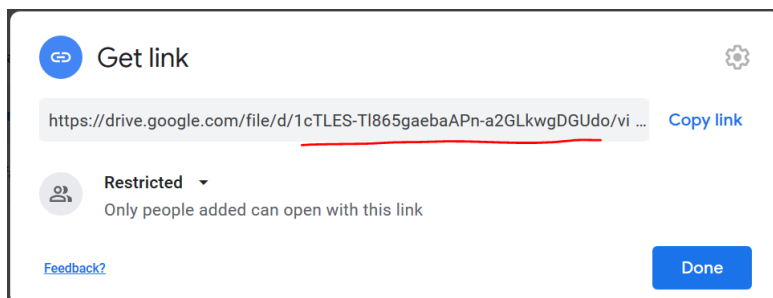
*Note: When you run this cell block follow the link generated. Choose your gmail account and paste the verification code back into the code block.*

**Step 5)** Copy and paste the following code into a new code block

```
downloaded = drive.CreateFile({'id': "#####"}) # replace the id
with id of file you want to access
downloaded.GetContentFile('data_name.csv') # replace the file
name with your file
```

**Step 6)** In google drive navigate to the lab folder and find the data you would like to work with. Left click it and press “Get Shareable Link”

**Step 7)** Copy the file ID from the shareable link



*Note: The file ID is only the red underlined portion. The file ID will always appear in this part of the link.*



**Step 8)** Replace the id placeholder and name placeholder with the actual information. You can now begin working with your data!

```
[19] downloaded = drive.CreateFile({'id': "1wPjzBNsSSD-m6tF9g0rPmnJBMSoQCN9f"}) # replace the id with id of file you want to access
downloaded.GetContentFile('world_population.csv') # replace the file name with your file
```

```
population_amounts = Table.read_table("world_population.csv").column("Population")
years = np.arange(1950, 2015+1)
print("Population column:", population_amounts)
print("Years column:", years)
```

```
Population column: [2557628654 2594939877 2636772306 2682053389 2730228104 2782098943
2835299673 2891349717 2948137248 3000716593 3043001508 3083966929
3140093217 3209827882 3281201306 3350425793 3420677923 3490333715
3562313822 3637159050 3712697742 3790326948 3866568653 3942096442
4016608813 4089083233 4160185010 4232084578 4304105753 4379013942
4451362735 4534410125 4614566561 4695736743 4774569391 4856462699
4940571232 5027200492 5114557167 5201440110 5288955934 5371585922
5456136278 5538268316 5618682132 5699202985 5779440593 5857972543
5935213248 6012074922 6088571383 6165219247 6242016348 6318590956
6395699509 6473044732 6551263534 6629913759 6709049780 6788214394
6866332358 6944055583 7022349283 7101027895 7178722893 7256490011]
Years column: [1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963
1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991
1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005
2006 2007 2008 2009 2010 2011 2012 2013 2014 2015]
```