```
1 import matplotlib.pyplot as plt
2 import pandas as pd
 3 import xlrd
 4 import seaborn as sns
 5 import numpy as np
    _____
8 # Step 1: Import the the Data Set using Pandas using the following UR1
9 # http://www.randalolson.com/wp-content/uploads/percent-bachelors-degrees-women-usa.csv
10
11 gender degree data = pd.read csv("http://www.randalolson.com/wp-content/uploads/percent-bachelors-degree
12
13 #
14 # Step 2: Import the the Data Set using Pandas (Data Set 2.csv)
15
16 gender degree data = pd.read csv("Data Set 2.csv")
17
18 # -----
19 # Step 3: Find the majors and list it as characters.
2.0
21 fig = plt.figure(figsize=(14,12))
22 majors = list(gender degree data)
23 # df.columns.tolist() Should work too
24
25 majors = ['Health Professions', 'Public Administration', 'Education', 'Psychology',
26
           'Foreign Languages', 'English', 'Communications and Journalism',
           'Art and Performance', 'Biology', 'Agriculture',
27
           'Social Sciences and History', 'Business', 'Math and Statistics',
28
           'Architecture', 'Physical Sciences', 'Computer Science',
29
30
           'Engineering']
31
32
    _____
34 # Step 4: Use for loop an plot all the majors measures data.
35
```

```
36 for ind, column in enumerate (majors):
37
       plt.plot(gender degree data['Year'], gender degree data[majors[ind]], lw=2.5)
38
       y pos = gender degree data[majors[ind]].values[-1] - 0.5
39
       if column == "Foreign Languages":
40
           y pos += 0.5
       elif column == "English":
41
           y pos -= 0.5
42
       elif column == "Communications\nand Journalism":
43
44
           y pos += 0.75
45
       elif column == "Art and Performance":
           y pos -= 0.25
46
       elif column == "Agriculture":
47
           y pos += 1.25
48
       elif column == "Social Sciences and History":
49
50
           y pos += 0.25
51
       elif column == "Business":
52
           y pos -= 0.75
53
       elif column == "Math and Statistics":
54
           y pos += 0.75
55
       elif column == "Architecture":
           y pos -= 0.75
56
57
       elif column == "Computer Science":
           y pos += 0.75
58
59
       elif column == "Engineering":
           y pos -= 0.25
60
61
       plt.text(2011.5, y pos, column, fontsize=14)
62
63
64 plt.ylim(0, 90)
65 plt.xlim(1968, 2014)
66 plt.xticks(fontsize=14)
67 plt.yticks(fontsize=14)
68 plt.title("Percentage of Bachelor's degrees conferred to women in the U.S.A. by major (1970-2012)", for
70 # Step 5: Save your plot in a separate file.
```

File - D:\GWU\Data Visualization\CourseLectures\DV_Lecture9\Materials\Python 2\Labs\Class_Exercise_2.py

