```
import matplotlib.pyplot as plt
         import x1rd
In [5]: plt.style.use('ggplot')
         Load the data
In [6]: obama_approval_ratings = pd.read_excel('Data\obama-approval-ratings.xls')
         obama_approval_ratings.head()
                    Issue Approve Disapprove None
Out[6]:
                                                 10
         0 Race Relations
                Education
                               49
                                           40
                                                 11
         2
                               48
                                           45
                                                 7
                 Terrorism
         3 Energy Policy
                               47
                                           42
                                                 11
                                           48
                                                 8
         4 Foreign Affairs
                               44
         Bar Chart
         obama_approval_ratings.set_index('Issue').plot(kind='bar')
         plt.xticks(rotation=90)
         plt.xlabel('Issue')
         plt.ylabel('Approve/disapprove')
         plt.title('Obama approval')
         plt.legend(loc='center right', bbox_to_anchor=(1.3, 0.5))
         plt.show()
                               Obama approval
                                                                  Approve
                                                                  Disapprove
                                                                  None
            20
            10
                           Energy Policy
                              Foreign Affairs
                   Education
                                                         Federal Budget Deficit
                                      Situation in Iraq
                                      Issue
         Stacked Bar Chart
         obama_approval_ratings.set_index('Issue').plot(kind='bar', stacked=True)
         plt.xticks(rotation=90)
         plt.xlabel('Issue')
         plt.ylabel('Approve/disapprove')
         plt.title('Obama approval')
         plt.legend(loc='center right', bbox_to_anchor=(1.3, 0.5))
         plt.show()
                                Obama approval
          Approve/disapprove
             60
                                                                    Approve
                                                                   Disapprove
                                Foreign Affairs
                        Terrorism
                                        Situation in Iraq
                Race Relations
                            Energy Policy
                                      Issue
         Pie Chart
In [9]: issues = obama_approval_ratings["Issue"]
         approve = obama_approval_ratings["Approve"]
         fig, ax = plt.subplots()
         ax.pie(approve, labels=issues, autopct='%1.1f%%',
                   startangle=90)
         ax.axis('equal')
         plt.show()
                                     Immigration
                   Race Relations
                                          Federal Budget Deficit
               Education
                                               Situation in Afghanistan
                          9.1%
                                                  Economy
            Terrorism
                        8.9%
                                                  Healthcare Policy
                           8.2% 8.0% 7.6%
          Energy Policy
               Foreign Affairs
                                         Situation in Iraq
                       Environment
         Donut Chart
         issues = obama_approval_ratings["Issue"]
         approve = obama_approval_ratings["Approve"]
         fig, ax = plt.subplots()
         ax.pie(approve, labels=issues, autopct='%1.1f%%',
                   startangle=90)
         ax.axis('equal')
         # draw circle
         centre_circle = plt.Circle((0, 0), 0.70, fc='white')
         fig = plt.gcf()
         # Adding Circle in Pie chart
         fig.gca().add_artist(centre_circle)
         plt.show()
                                     Immigration
                   Race Relations
                                           Federal Budget Deficit
               Education
                                               Situation in Afghanistan
                                                  Economy
            Terrorism
                                                  Healthcare Policy
          Energy Policy
               Foreign Affairs
```

In [4]: **import** pandas **as** pd

import seaborn as sns

Situation in Iraq

Environment