```
import seaborn as sns
          %matplotlib inline
In [7]: water_leakage=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/water_usage.csv")
          plt.pie(data=water_leakage, x="Percentage", labels="Usage", explode=(0,0,0.1,0,0,0), autopct="%1.f%%")
          plt.title("Water usage")
          plt.show()
                     Water usage
                               Clothes Washer
           Faucet
                                       Leak
                                        Other
                   20%
          Shower
                            24%
                               Toilet
In [8]: | google=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/G00GL_data.csv")
          amazon=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/AMZN_data.csv")
          facebook=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/FB_data.csv")
          apple=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/AAPL_data.csv")
          microsoft=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/MSFT_data.csv")
          data=pd.concat([google.date,google.close,facebook.close,apple.close,amazon.close,microsoft.close],axis=1)
          data.columns=["date", "Google", "Facebook", "Apple", "Amazon", "Microsoft"]
          data.plot(x="date")
          plt.xticks(rotation=65)
          plt.xlabel(None)
          plt.title("Stock trend")
          plt.ylabel("Closing price in $")
          plt.locator_params(axis='y', nbins=16)
          plt.grid()
          plt.show()
                                   Stock trend
            1500
                     Google
            1400
            1300
                     Facebook

    Apple

            1200
                   Amazon
            1100
          5 1000
E 900
                     Microsoft
             900
          Closing price
             800
             700
             600
             500
             400
             300
             200
             100
          flight_data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/flight_details.csv")
          flight_data_pivot=flight_data.pivot(index="Months", columns="Years", values="Passengers")
          flight_data_pivot=flight_data_pivot.loc[['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December']
          sns.heatmap(flight_data_pivot, cmap="Blues")
          plt.title("Flight Passengers from 1949 to 1960")
          plt.show()
                        Flight Passengers from 1949 to 1960
              January -
                                                               - 600
             February -
               March -
                                                               500
                April -
                 May
                                                               400
                 June -
                 July
                                                               - 300
               August
            September
              October -
                                                               200
            November -
                                    , 1954
1955
                                          1956
                                                1958
                                              1957
          movie_scores=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/movie_scores.csv")
In [10]:
          movie_scores=movie_scores.melt(id_vars="MovieTitle", value_vars=["Tomatometer", "AudienceScore"], var_name="Type")
          sns.barplot(data=movie_scores, x="MovieTitle", y="value", hue="Type", hue_order=["AudienceScore", "Tomatometer"])
          plt.xlabel("Movies")
          plt.ylabel("Scores")
          plt.title("Movies Scores Comparision")
          plt.xticks(rotation=15)
          plt.show()
                           Movies Scores Comparision
            100
                                                    Туре
                                                   AudienceScore
                                                  Tomatometer
             80
             60
             40
             20
                                             The Hobbit: An Unexpected Journey
             The Shape of Water
                       Black Panther
                                    Dunkirk
                                     Movies
         iq_scores=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/iq_scores.csv")
          iq_scores.columns=(iq_scores.columns.str.replace("_"," ").str.capitalize()).map(lambda x:" ".join([x.split(" ")[0],x.split(" ")[1].upper()]))
          sns.violinplot(data=iq_scores)
          plt.title("IQ Scores for different test groups")
          plt.xlabel("Groups")
          plt.ylabel("IQ score")
          plt.show()
          sns.boxplot(data=iq_scores)
          plt.title("IQ Scores for different test groups")
          plt.xlabel("Groups")
          plt.ylabel("IQ score")
          plt.show()
                         IQ Scores for different test groups
            160
            120
          g
100
             80
             60
             40
                   Group A
                              Group B
                                          Group C
                                                      Group D
                                    Groups
                         IQ Scores for different test groups
            140
            120
          မ်
၂၀၀
          <u>0</u>
             80
             60
                              Group B
                                          Group C
                                                      Group D
                   Group A
                                    Groups
          animal\_data = pd.read\_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9\%20Assignment/Data/anage\_data.csv")
          animal_data_new=animal_data[["Class", "Maximum longevity (yrs)", "Body mass (g)"]]
          animal_filter_data=animal_data_new.query("(Class=='Amphibia')or(Class=='Aves')or(Class=='Reptilia')or(Class=='Mammalia')")
          sns.scatterplot(data=animal_filter_data, x="Body mass (g)", y="Maximum longevity (yrs)", hue="Class")
          plt.xscale("log")
          plt.yscale("log")
          plt.ylabel("Maximum longevity in years")
          plt.xlabel("Body mass in grams")
          plt.legend(loc="upper left")
          plt.show()
                    Amphibia
            10^{2}
          Maximum longevity in years
                 10°
                                    10^{3}
                                          10^{4}
                                                 10<sup>5</sup>
                                                       10°
                                Body mass in grams
```

In [6]: **import** pandas **as** pd

import matplotlib.pyplot as plt