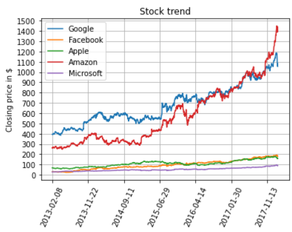
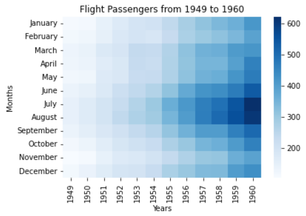
In [6]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
```

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()
```

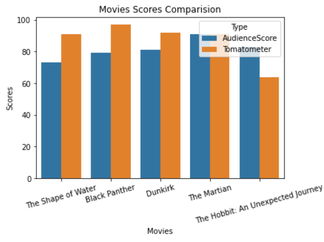
In [8]:
```
google=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/GOOGL_data.csv")
amazon=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/AMZN_data.csv")
facebook=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%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()
```



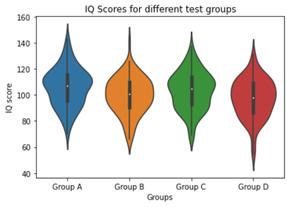
In [9]:
```
flight_data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/flight_details.csv")

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()
```

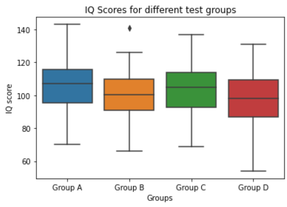


In [10]:
```
movie_scores=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/movie_scores.csv")

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()
```

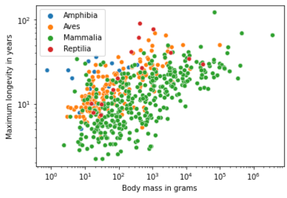


In [11]:
```
iq_scores=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advanced-python/main/WEEK-9%20Assignment/Data/iq_scores.csv")

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()
```





In [12]:
```
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()
```



In [ ]: