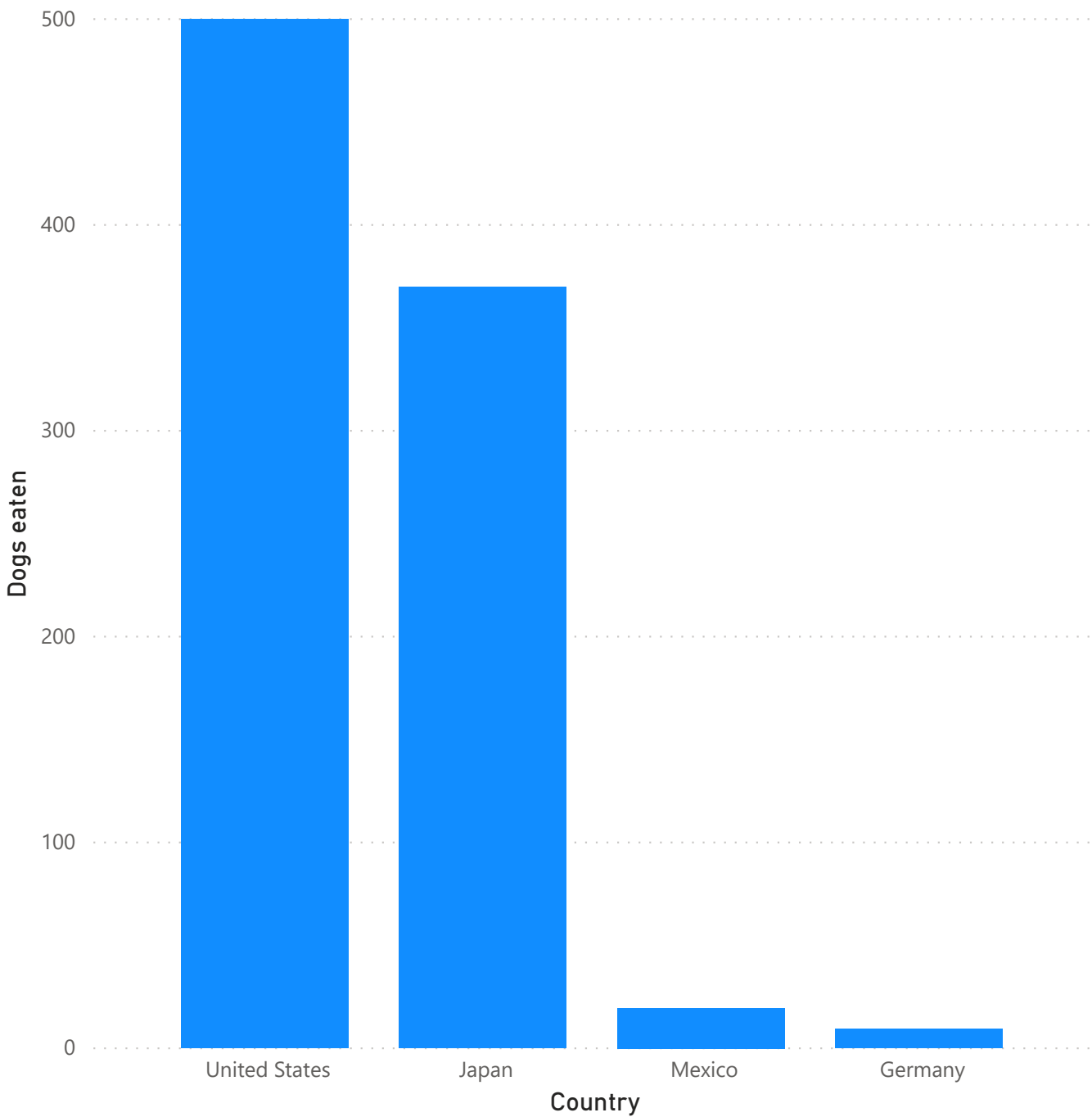
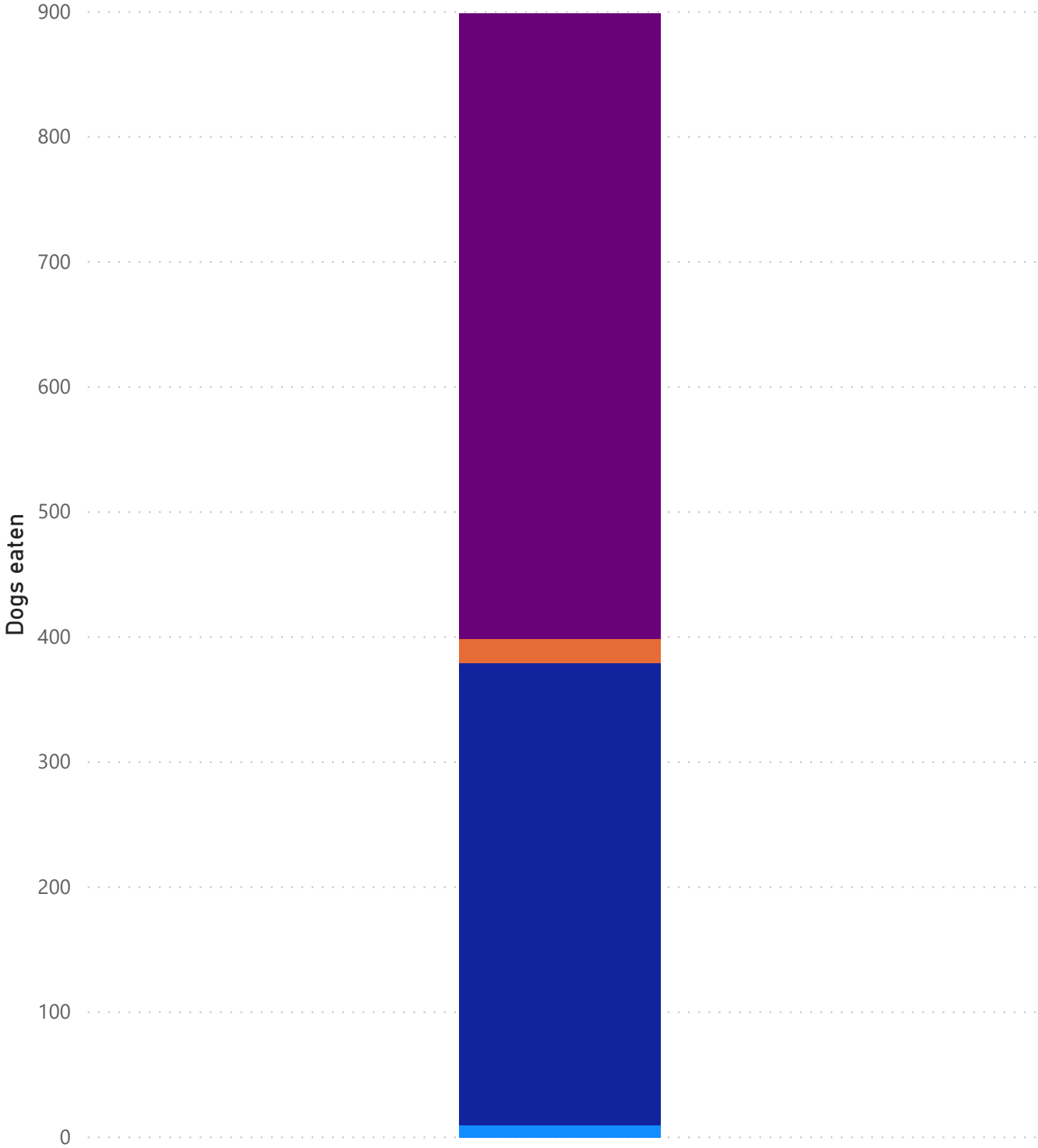


Dogs eaten by Country

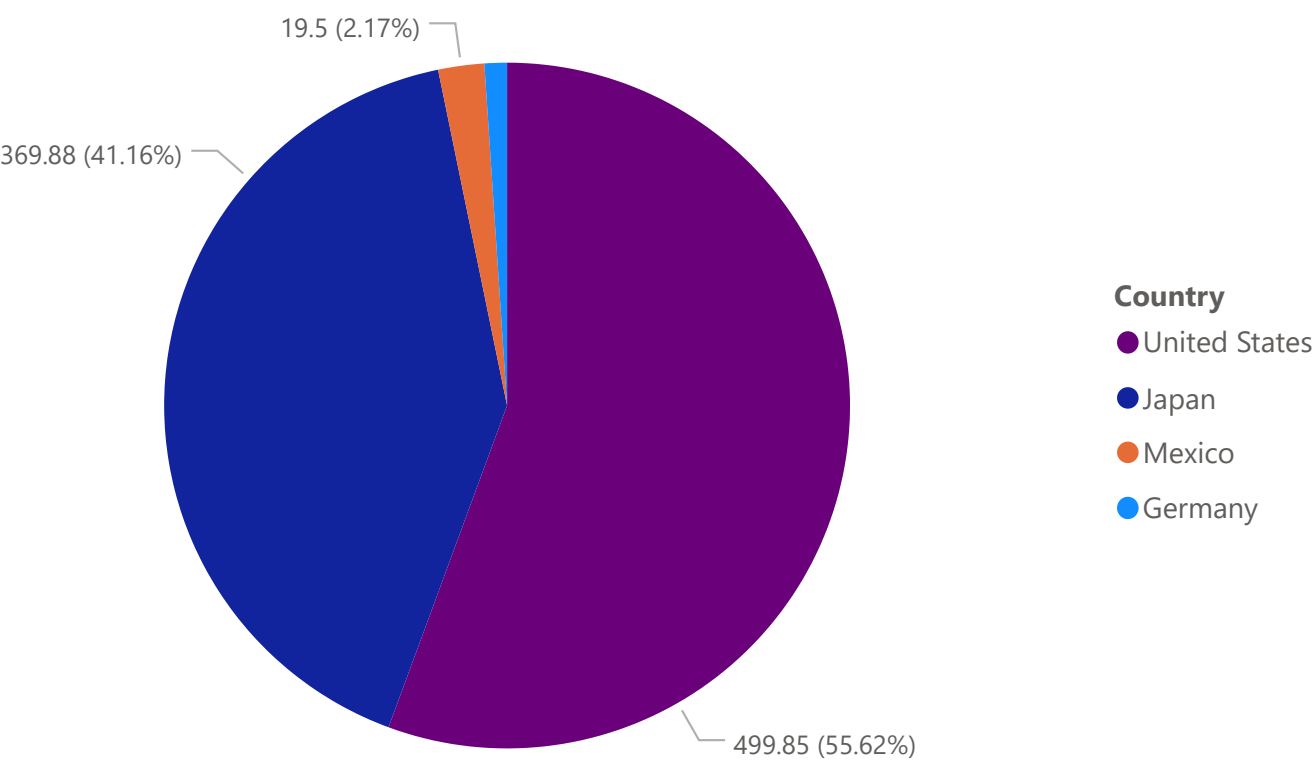


Dogs eaten by Country

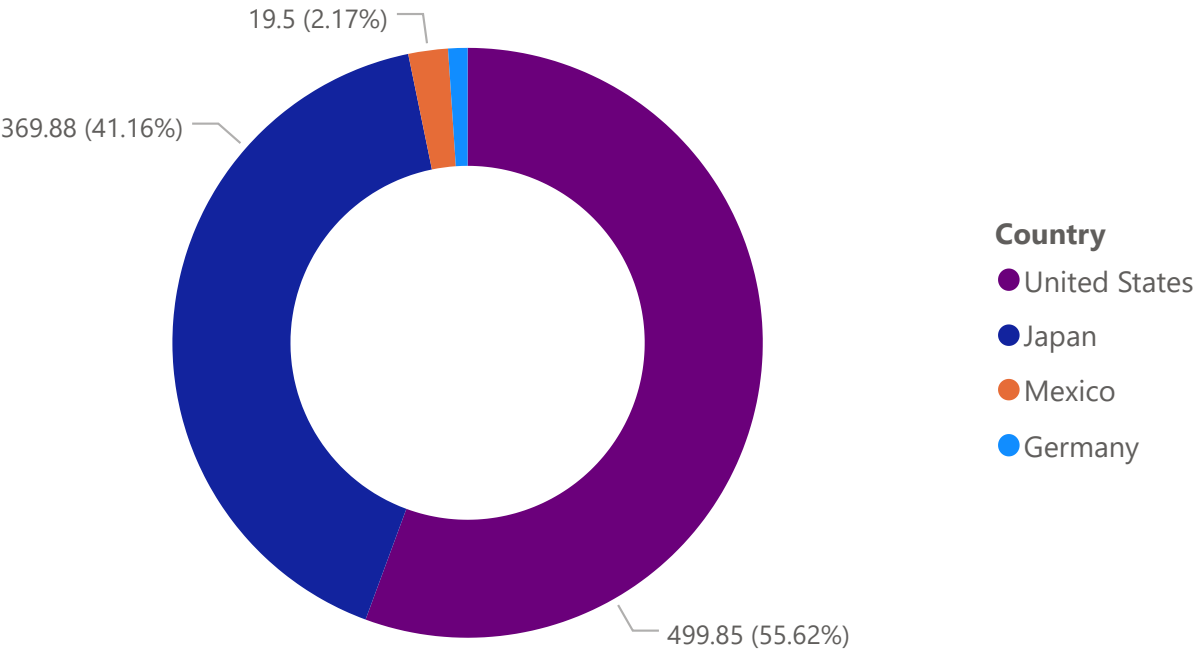
Country Germany Japan Mexico United States



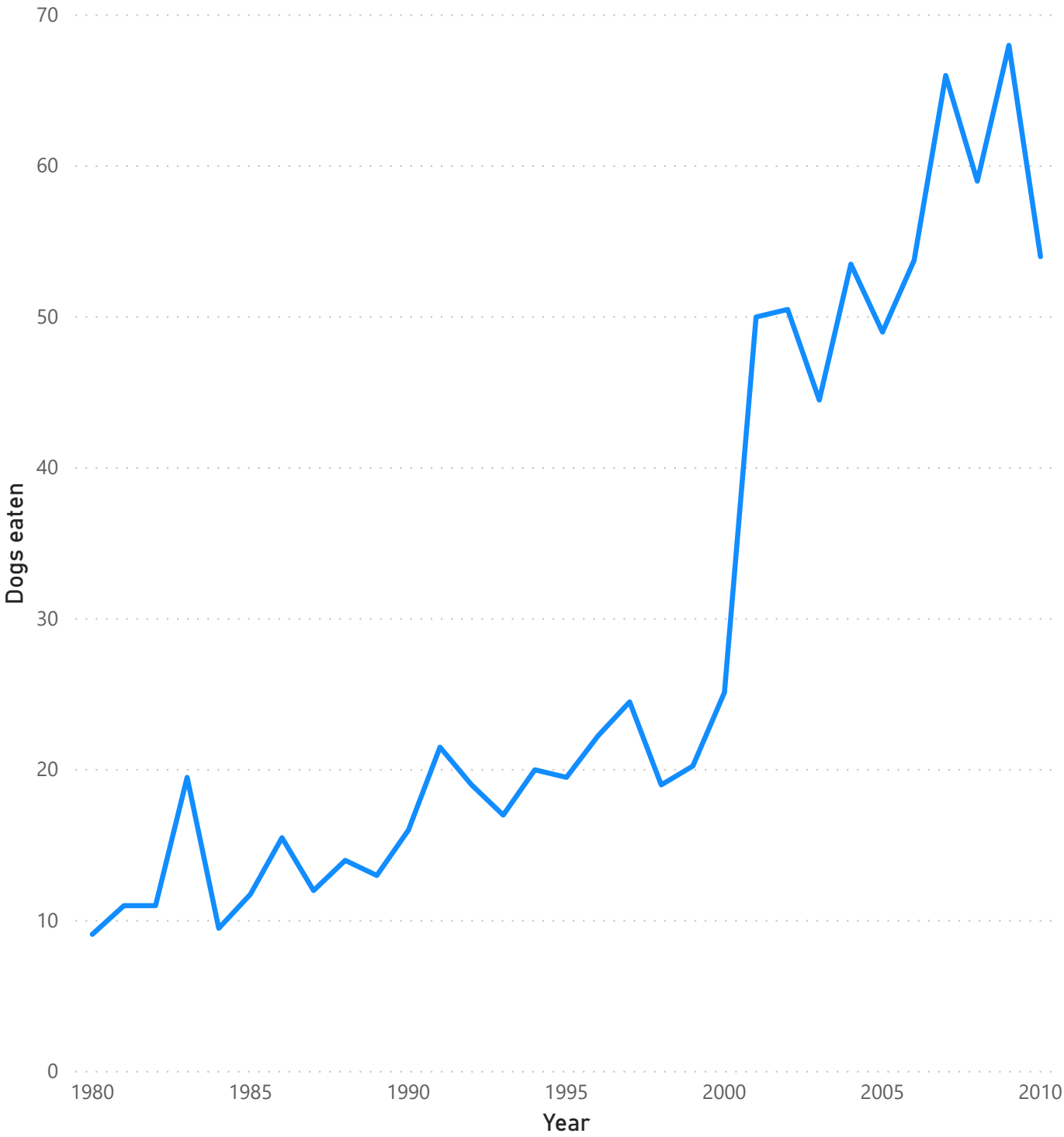
Dogs eaten by Country



Dogs eaten by Country



Dogs eaten by Year



```
In [1]: # Import libraries
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

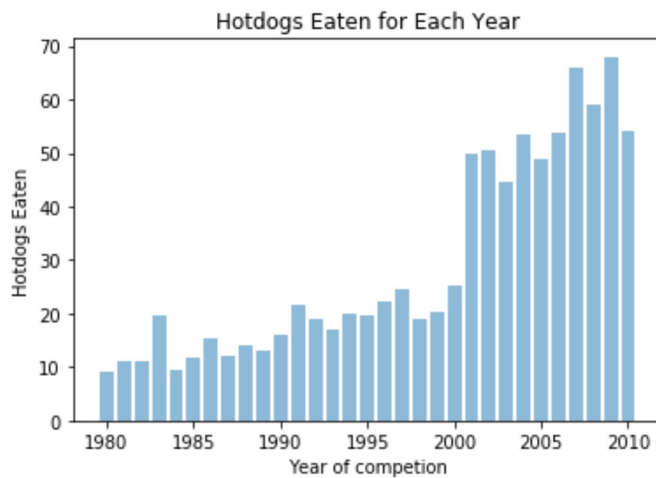
hotdogs_df = pd.read_excel(r"C:\\Users\\Gabe\\Documents\\Bellevue University\\Data
Visualizations\\Week 1 & 2\\hotdog-contest-winners.xlsx")
hotdogs_df.head()
```

```
Out[1]:
```

	Year	Winner	Dogs eaten	Country	New record
0	1980	Paul Siederman & Joe Baldini	9.1	United States	0
1	1981	Thomas DeBerry	11.0	United States	0
2	1982	Steven Abrams	11.0	United States	0
3	1983	Luis Llamas	19.5	Mexico	0
4	1984	Birgit Felden	9.5	Germany	0

```
In [2]: # Bar chart

plt.bar(hotdogs_df['Year'], hotdogs_df['Dogs eaten'], align='center', alpha = 0.5)
plt.xlabel('Year of competition')
plt.ylabel('Hotdogs Eaten')
plt.title('Hotdogs Eaten for Each Year')
plt.show()
```



```
In [3]: # Stacked Bar Chart

fig, ax = plt.subplots(figsize=(10,7))
years = hotdogs_df['Year']
margin_bottom = np.zeros(len(hotdogs_df['Country'].drop_duplicates()))
colors = ["#bda000", "#ccad00", "#d6b600", "#e6c300", "#f0cc00", "#ffdd1a", "#ffe033", "#f
fe44d", "#ffe866", "#ffec80", "#bd7b00", "#cc8500", "#d68b00", "#e69500", "#f09c00", "#ffaf
1a", "#ffb833", "#ffc14d", "#ffc966", "#ffd280", "#8a3900", "#994000", "#a34400", "#b34a0
0", "#bd4f00", "#e66000", "#ff6a00", "#ff791a", "#ff8833", "#ff974d", "#bd0000"]

for num, year in enumerate(years):

    values = list(hotdogs_df[hotdogs_df['Year'] == year].loc[:, 'Dogs eaten'])

    hotdogs_df[hotdogs_df['Year'] == year].plot.bar(x='Country', y='Dogs eaten', ax
=ax, stacked=True, bottom = margin_bottom, color = colors[num], label = year)

    margin_bottom += values

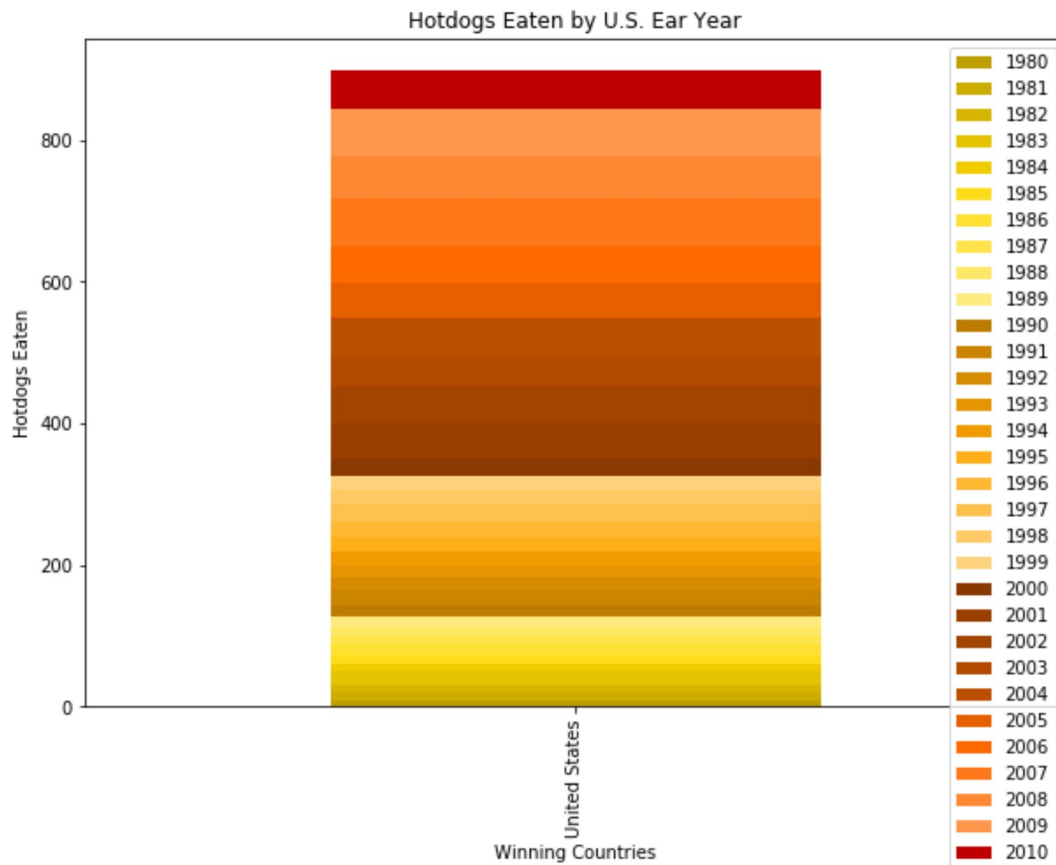
plt.ylabel('Hotdogs Eaten')
plt.xlabel('Winning Countries')
plt.title("Hotdogs Eaten by U.S. Ear Year")
plt.show()

#us_hotdogs = hotdogs_df[hotdogs_df['Country']=='United States']
#jpn_hotdogs = hotdogs_df[hotdogs_df['Country']=='Japan']
#mx_hotdogs = hotdogs_df[hotdogs_df['Country']=='Mexico']
#grm_hotdogs = hotdogs_df[hotdogs_df['Country']=='Germany']

#plt.bar(us_hotdogs['Year'], us_hotdogs['Dogs eaten'])
#plt.bar(jpn_hotdogs['Year'], jpn_hotdogs['Dogs eaten'], bottom=us_hotdogs)
#plt.bar(mx_hotdogs['Year'], mx_hotdogs['Dogs eaten'], bottom=jpn_hotdogs)
#plt.bar(grm_hotdogs['Year'], grm_hotdogs['Dogs eaten'], bottom=mx_hotdogs)

#plt.xticks(countries, fontweight='bold')
#plt.xlabel('Winning Countries')

#plt.show()
```



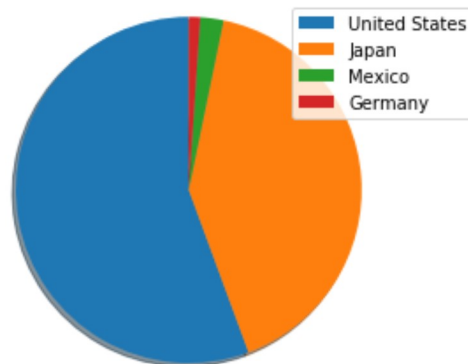
In [4]: # Pie Chart

```
# Determine how many hotdogs were eaten per country
#print(hotdogs_df.groupby(['Country']).sum())
```

```
labels = 'United States', 'Japan', 'Mexico', 'Germany'
sizes = [499.85, 369.88, 19.50, 9.50]
explode = (0.1, 0, 0, 0)
```

```
plt.pie(sizes, shadow=True, startangle=90)
plt.legend(labels, loc='best')
plt.axis('equal')
plt.title("Hotdogs eaten by Winning Countries (1980-2010)")
plt.show()
```

Hotdogs eaten by Winning Countries (1980-2010)




```
In [5]: # Donut Chart
```

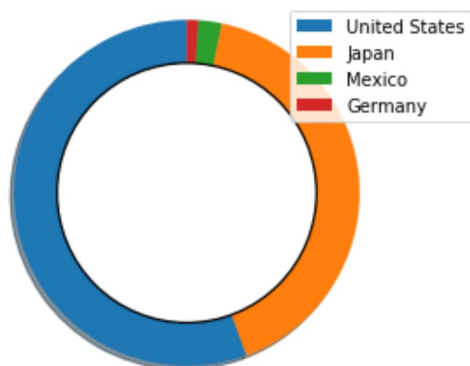
```
labels = 'United States', 'Japan', 'Mexico', 'Germany'
sizes = [499.85, 369.88, 19.50, 9.50]
explode = (0.1, 0, 0, 0)

plt.pie(sizes, shadow=True, startangle=90)
plt.legend(labels, loc='best')

centre_circle = plt.Circle((0,0),0.75,color='black', fc='white',linewidth=1.25)
fig = plt.gcf()
fig.gca().add_artist(centre_circle)

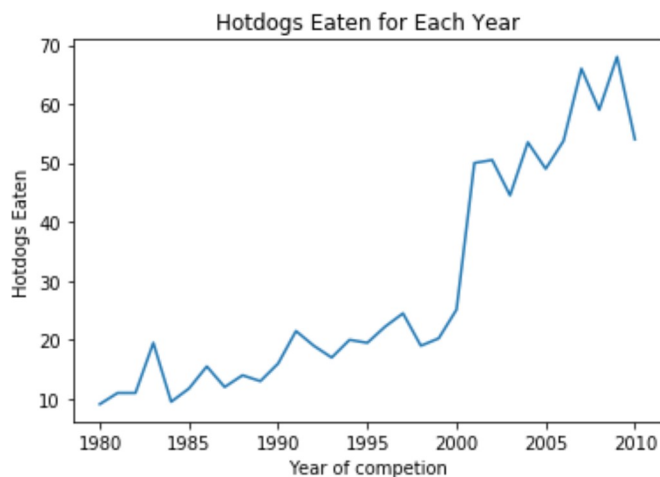
plt.axis('equal')
plt.title("Hotdogs eaten by Winning Countries (1980-2010)")
plt.show()
```

Hotdogs eaten by Winning Countries (1980-2010)



```
In [6]: # Line Chart
```

```
plt.plot(hotdogs_df['Year'], hotdogs_df['Dogs eaten'])
plt.xlabel('Year of competition')
plt.ylabel('Hotdogs Eaten')
plt.title('Hotdogs Eaten for Each Year')
plt.show()
```



1.2 Exercise Charts

Gabriel Valenzuela

6/8/2020

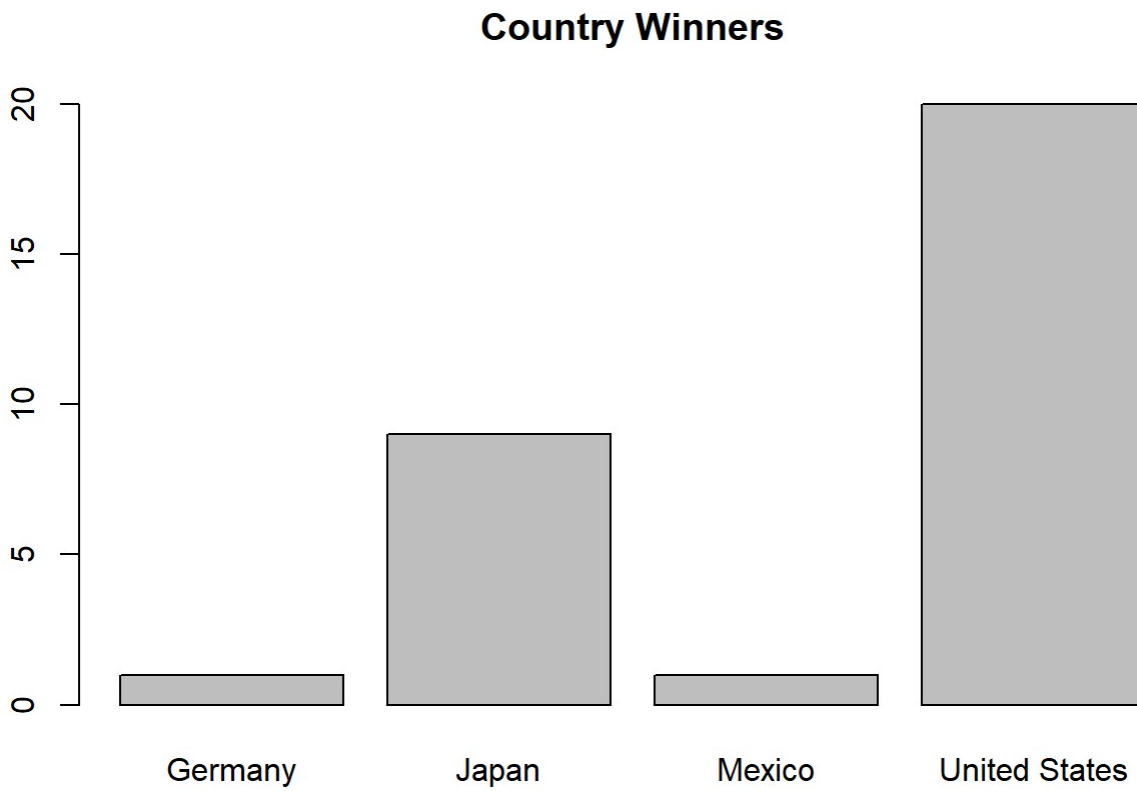
Charts

```
## Warning: package 'ggplot2' was built under R version 3.6.2
```

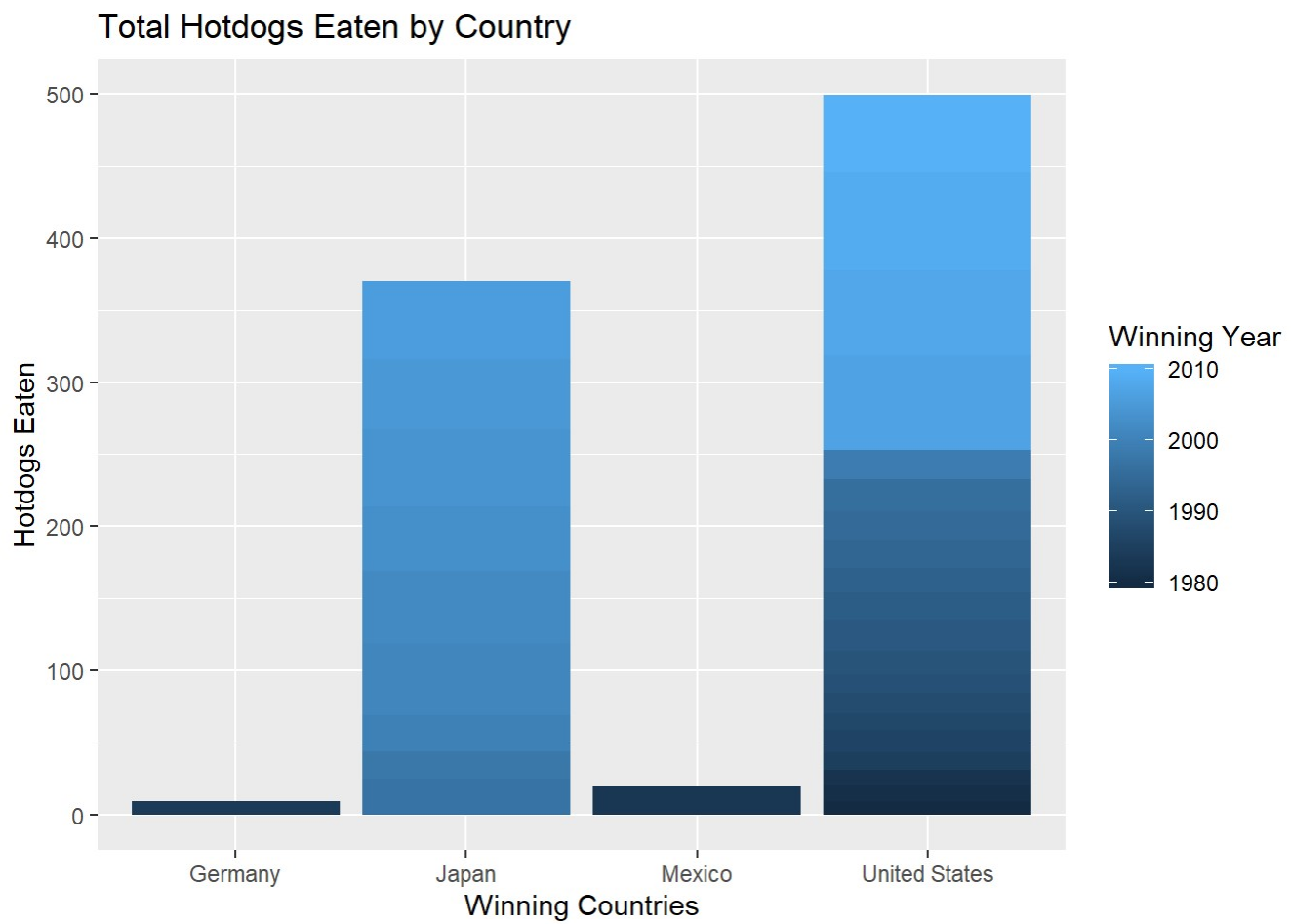
```
## Warning: package 'readxl' was built under R version 3.6.2
```

```
## # A tibble: 6 x 5
##   Year Winner                `Dogs eaten` Country      `New record`
##   <dbl> <chr>                <dbl> <chr>          <dbl>
## 1  1980 Paul Siederman & Joe Baldini      9.1 United States      0
## 2  1981 Thomas DeBerry          11 United States      0
## 3  1982 Steven Abrams            11 United States      0
## 4  1983 Luis Llamas            19.5 Mexico              0
## 5  1984 Birgit Felden           9.5 Germany              0
## 6  1985 Oscar Rodriguez        11.8 United States      0
```

Bar Chart

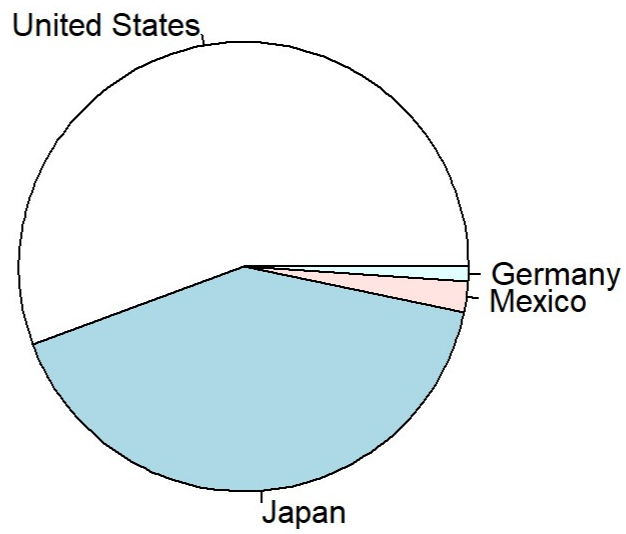


Stacked Bar Chart

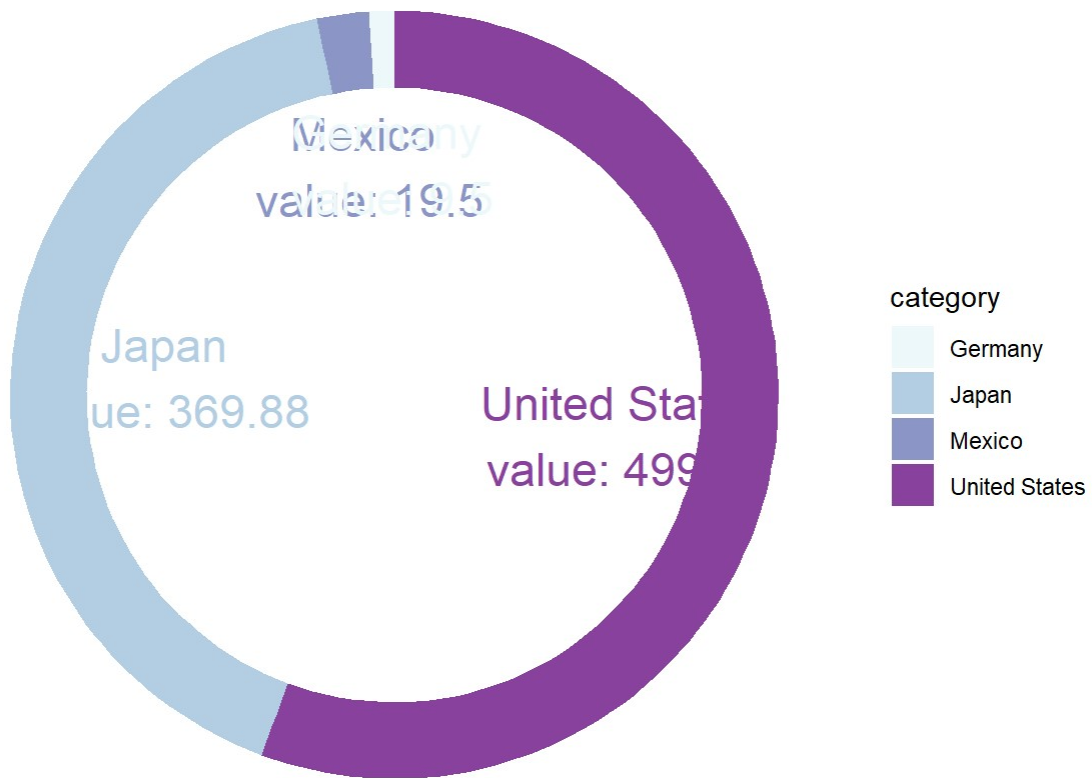


Pie Chart

Total hotdogs eaten by winning countries



Donut Chart



Line Chart

