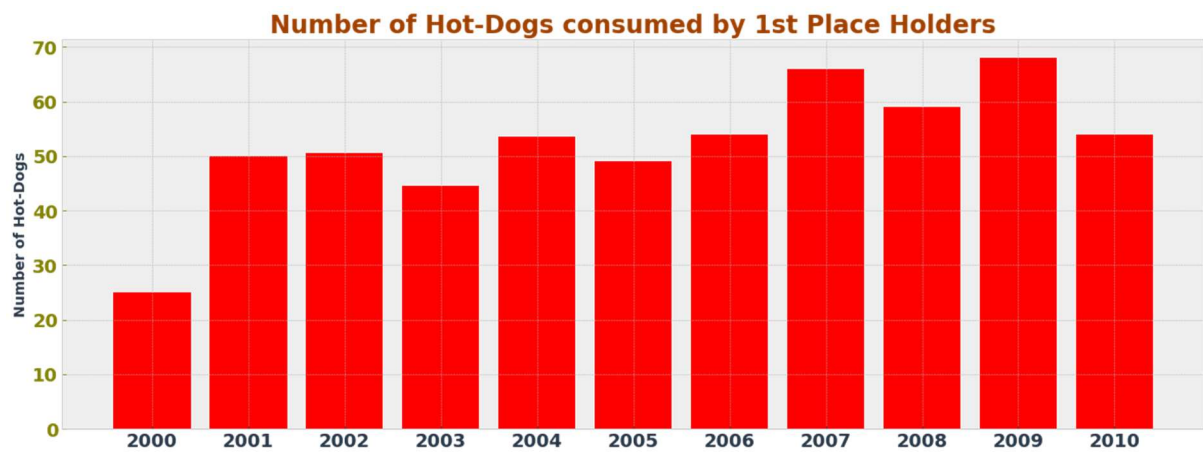
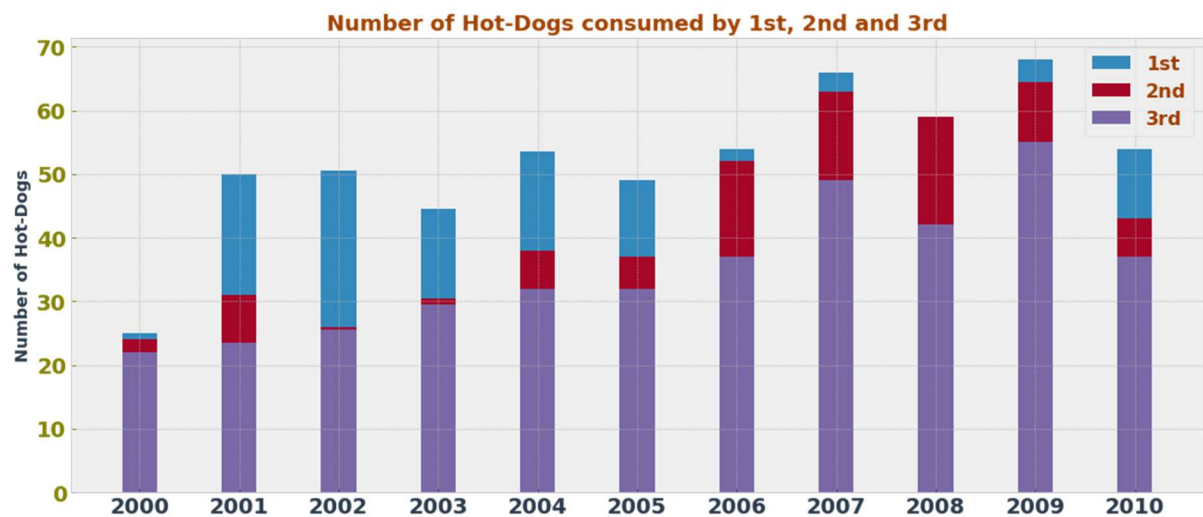


Barplot

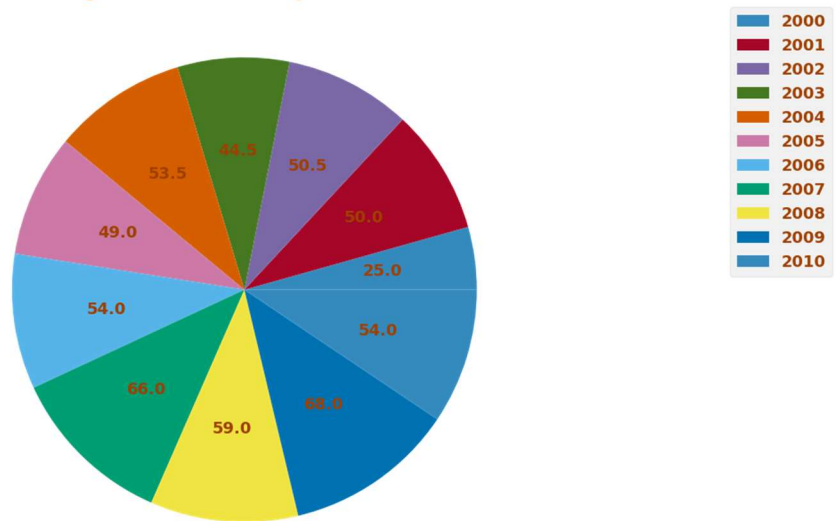


Stacked bar plot



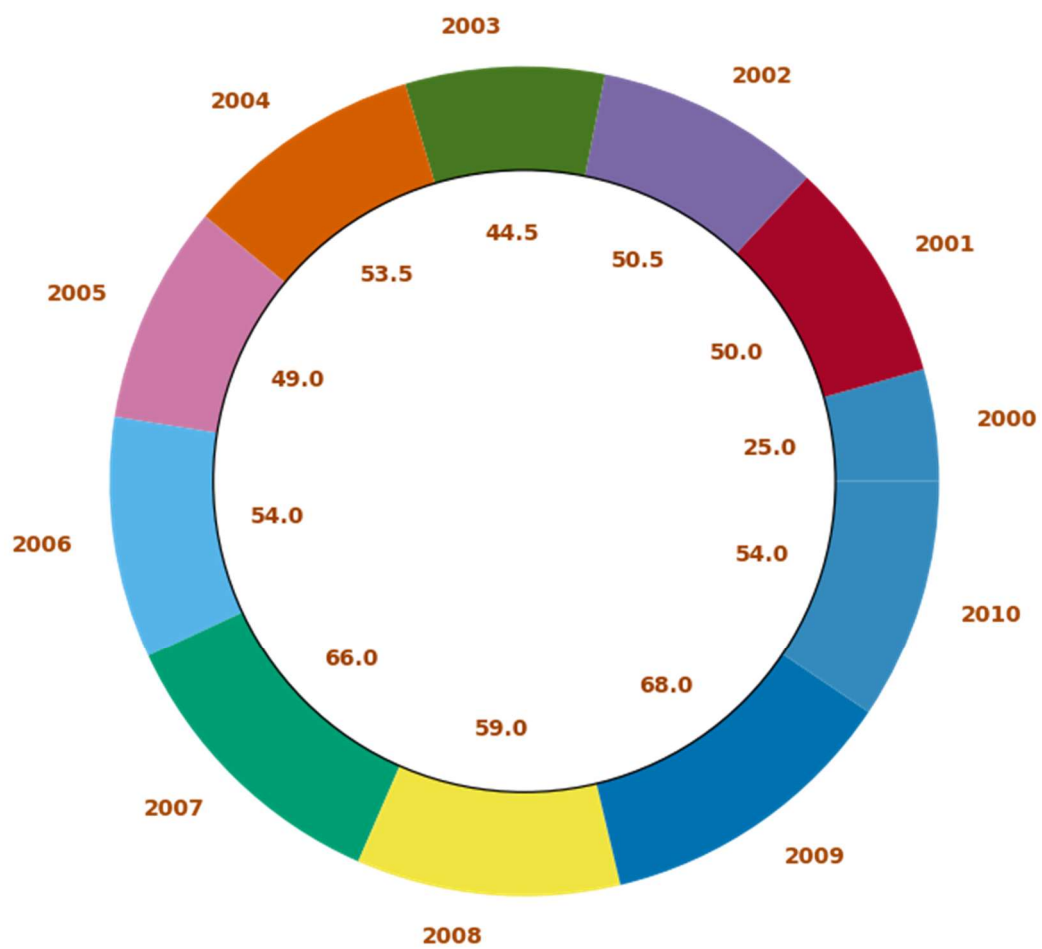
Pie chart

Total Hot Dogs consumed by 1st Place Winners



Donut chart

Number of Hot Dogs consumed by 1st Place Holders



Appendix

Import the required libraries.

```
import warnings
```

Disable warnings emitted by warnings.warn calls from different packages

```
warnings.filterwarnings('ignore')
```

```
import pandas as pd
```

```
import matplotlib.pyplot as plt
```

```
import numpy as np
```

```
import matplotlib.pyplot as plt
```

```
import seaborn as sns
```

```
get_ipython().run_line_magic('matplotlib', 'inline')
```

```
import plotly.graph_objs as go
```

```
import plotly.figure_factory as ff
```

```
from plotly import tools
```

```
from plotly.offline import download_plotlyjs, init_notebook_mode, plot, iplot
```

```
init_notebook_mode(connected=True)
```

Set up Matplotlib Configurations

```
plt.style.use('bmh')
```

```
params = {'legend.fontsize': '16',
```

```
         'figure.figsize': (15, 5),
```

```
         'axes.labelsize': '20',
```

```
         'axes.titlesize': '30',
```

```
         'xtick.labelsize': '18',
```

```
         'ytick.labelsize': '18'}
```

```
plt.rcParams.update(params)
```

```
plt.rcParams['text.color'] = '#A04000'
```

```
plt.rcParams['xtick.color'] = '#283747'
```

```
plt.rcParams['ytick.color'] = '#808000'
```

```
plt.rcParams['axes.labelcolor'] = '#283747'
```

Import dataframe

```
df = pd.read_excel('Data/hotdog-places.xlsm', header = None)
```

```
df.head()
```

Take the transpose of the data and create/name the columns as header

```
df_t = df.transpose()
```

Rename the column names so that they are easier to call.

```
df_t.columns = ['Year', 'First', 'Second', 'Third']
```

```
df_t.head()
```

```
df_t.Year = df_t.Year.astype(int)
```

```

# Bar plot
plt.figure(figsize=(20, 7))

plt.bar(df_t['Year'], df_t['First'], color = 'r')
plt.title('Number of Hot-Dogs consumed by 1st Place Holders', fontsize = 24)
plt.ylabel('Number of Hot-Dogs', fontsize = 14)
plt.xticks(df_t['Year'])
plt.show()

# # Stacked bar plot

fig, ax = plt.subplots(figsize = (17, 7))

ax.bar(df_t.Year, df_t.First, 0.35, label='1st')
ax.bar(df_t.Year, df_t.Second, 0.35, label='2nd')
ax.bar(df_t.Year, df_t.Third, 0.35, label='3rd')

ax.set_ylabel('Number of Hot-Dogs', size = 14)
ax.set_title('Number of Hot-Dogs consumed by 1st, 2nd and 3rd', size = 18)
ax.set_xticks(df_t['Year'])
ax.legend()
plt.show()

# # Pie chart

sizes = df_t['First']
fig, ax1 = plt.subplots(figsize = (24,12))
labels = df_t['Year']

def absolute_value(val):
    a = np.round(val/100*sizes.sum(), decimals = 1)
    return a

ax1.axis('equal')
wedges, texts, autotexts = ax1.pie(sizes, autopct = absolute_value)

ax1.legend(wedges,
           loc="center left",
           bbox_to_anchor=(1, 0, 0.5, 1))

plt.setp(autotexts, size=18)
ax1.legend(labels, loc = 'upper right', fontsize = 18)
plt.title('Total Hot Dogs consumed by 1st Place Winners ', fontsize = 28)
plt.show()

#
# # Donut chart

sizes2 = df_t['First']

```

```
fig, ax1 = plt.subplots(figsize = (24,12))
labels2 = df_t['Year']

plt.pie(sizes2, labels=labels2,
        autopct= absolute_value, textprops={'fontsize': 14})

#draw a circle at the center of pie to make it look like a donut
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.title('Number of Hot Dogs consumed by 1st Place Holders', fontsize = 18)
plt.show()
```