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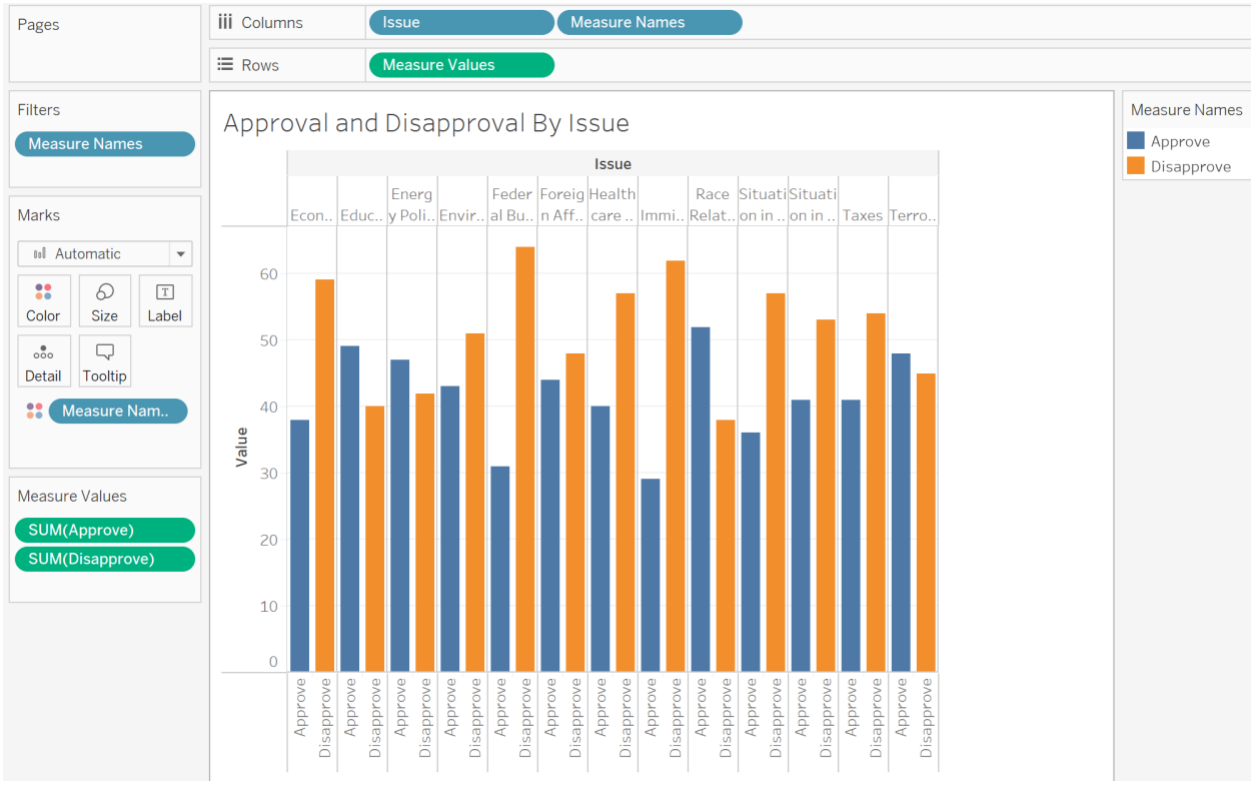
06/09/2022
DSC640-T301 2227-1

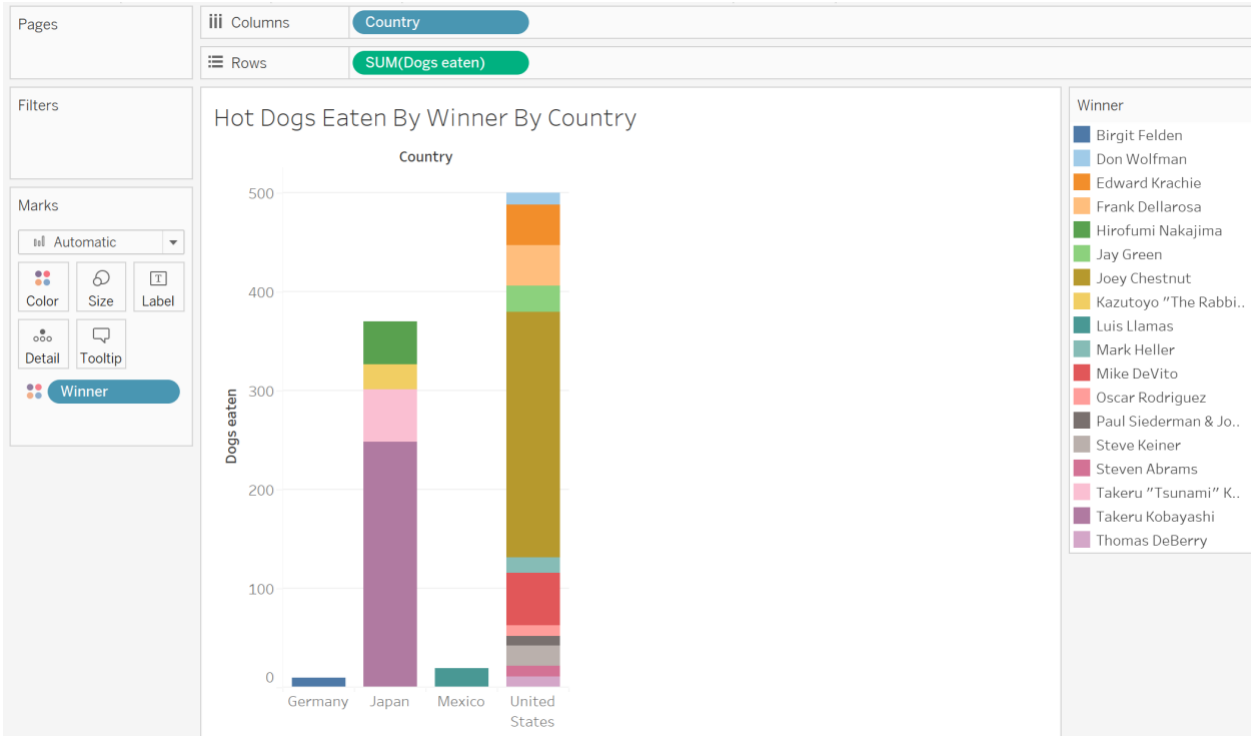
1.2 Exercise Charts

Tableau Charts

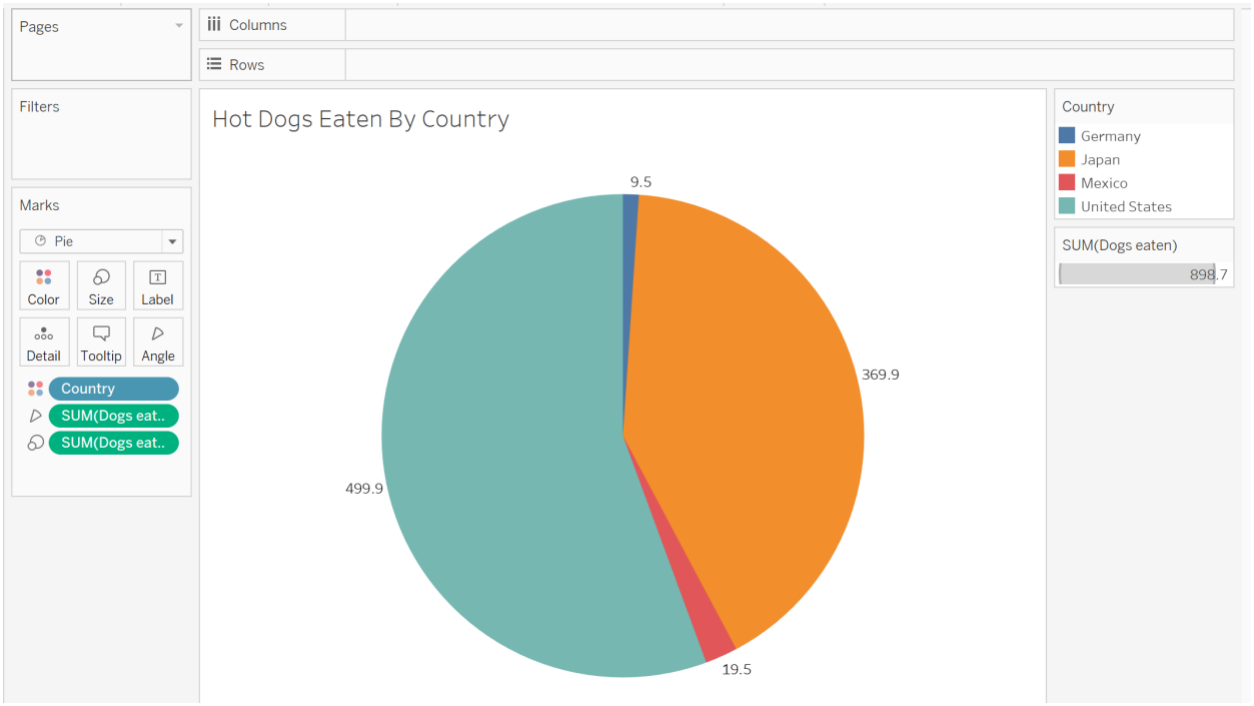
- Tableau - Bar Chart



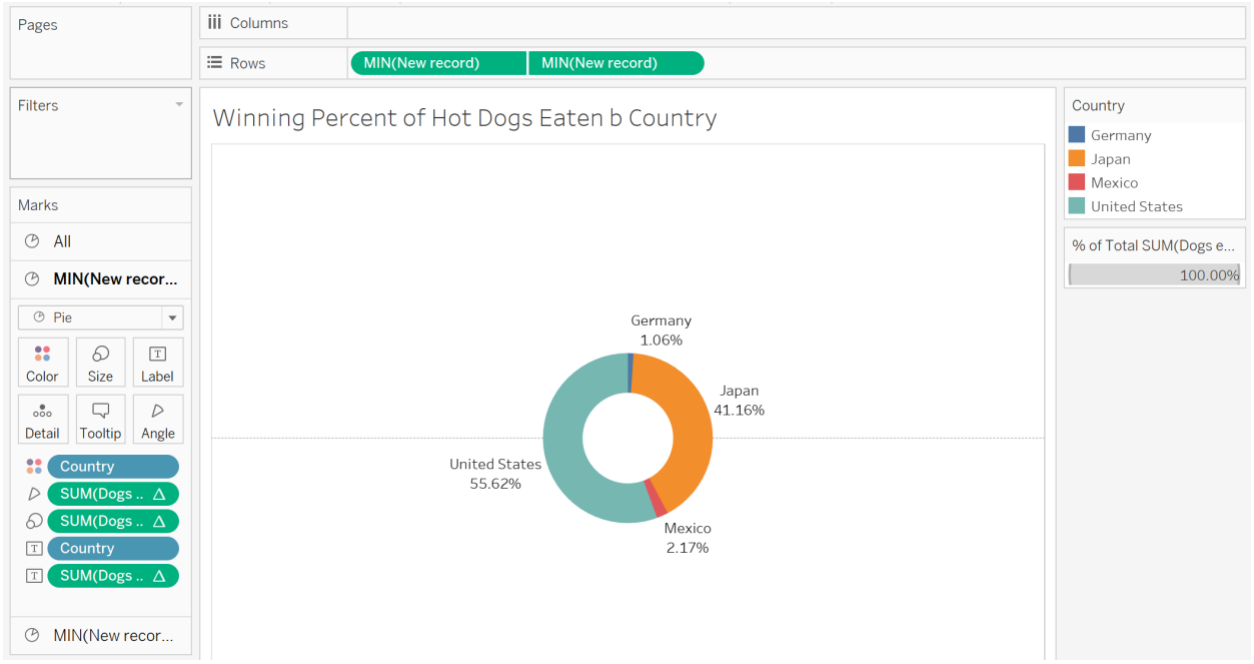
- Tableau – Stacked Bar Chart



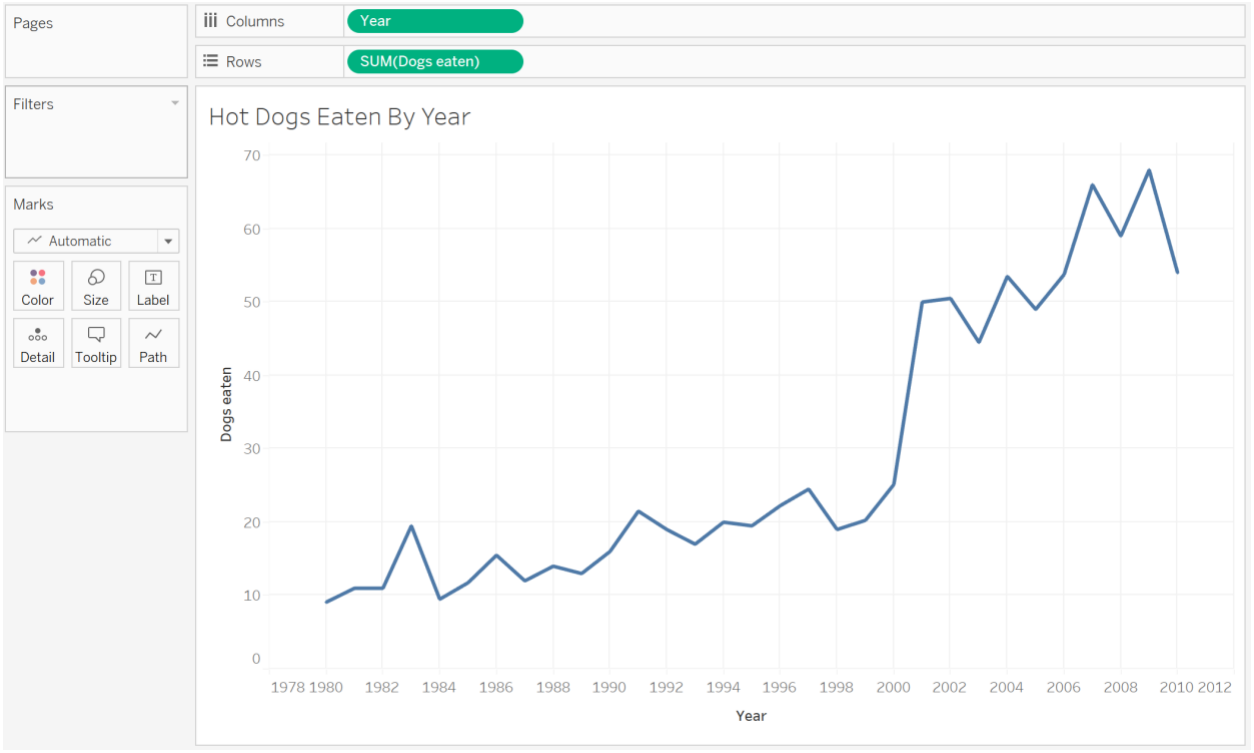
- Tableau - Pie Chart



- Tableau - Donut Chart



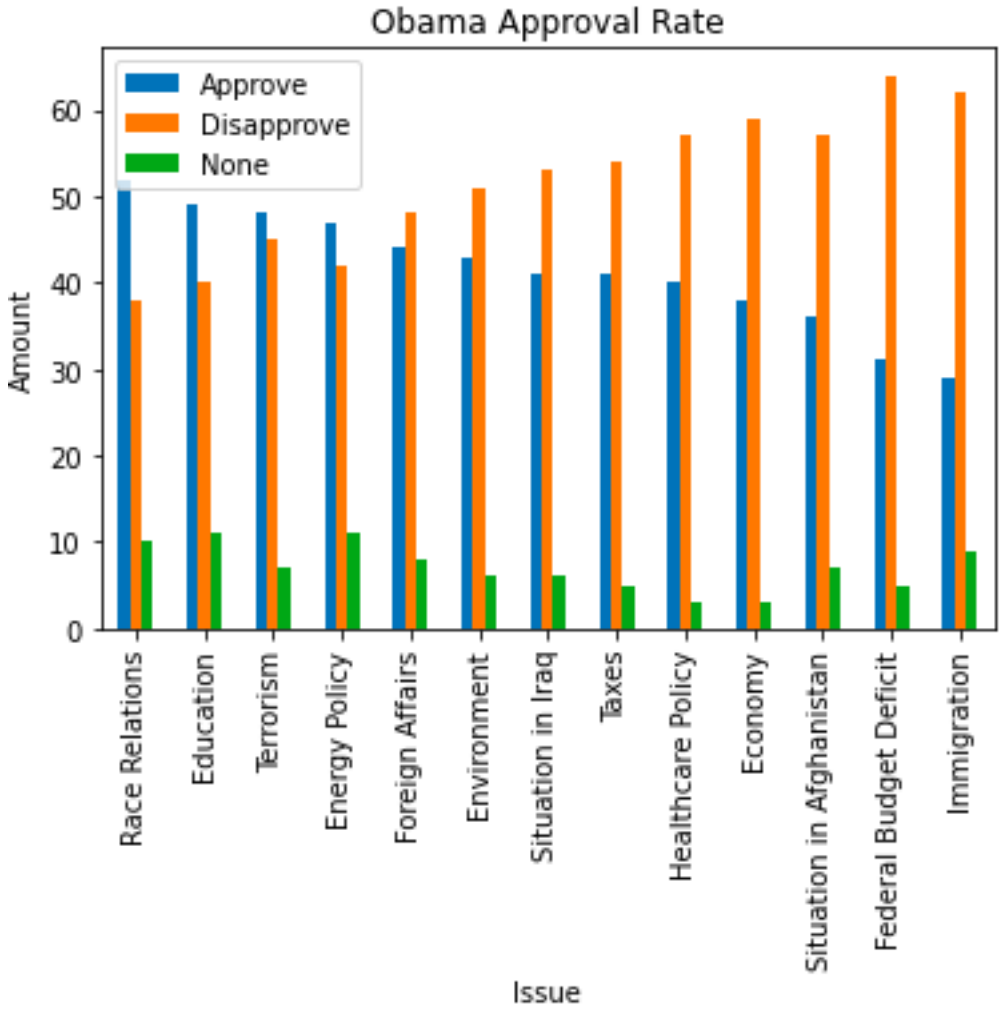
- Tableau - Line Chart



Python Charts

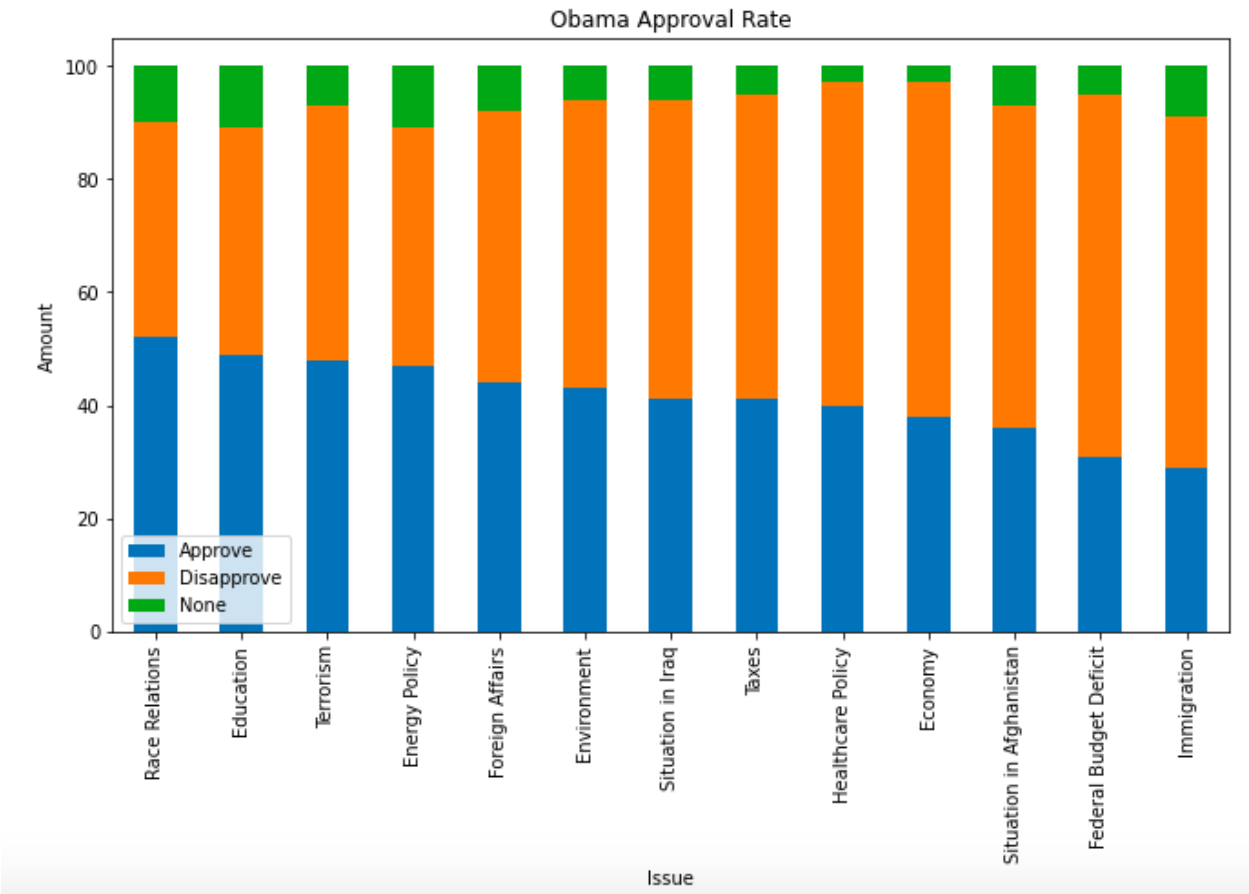
- Python - Bar Chart

```
In [11]: Obama_Approval.plot(kind='bar' , x='Issue', title="Obama Approval Rate", ylabel="Amount");
```



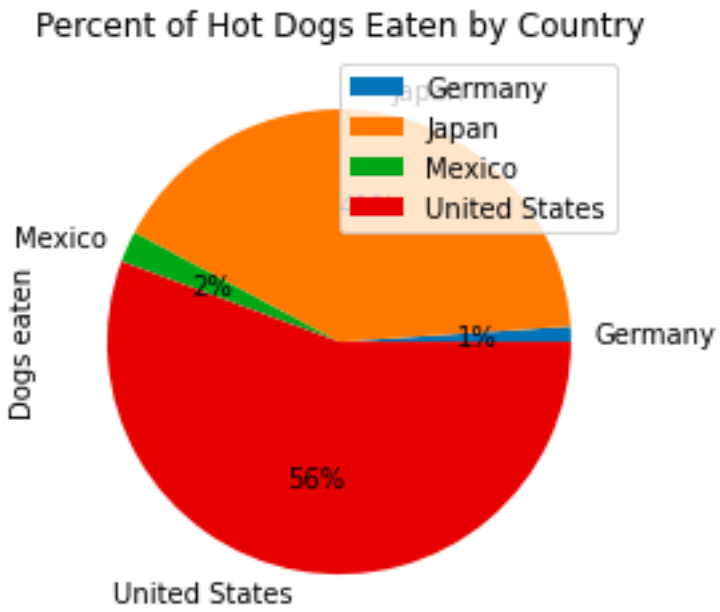
- Python - Stacked Bar Chart

```
In [13]: Obama_Approval.plot(kind='bar' , x='Issue', stacked=True, figsize= (11,6), title="Obama Approval Rate",
                             ylabel="Amount");
```



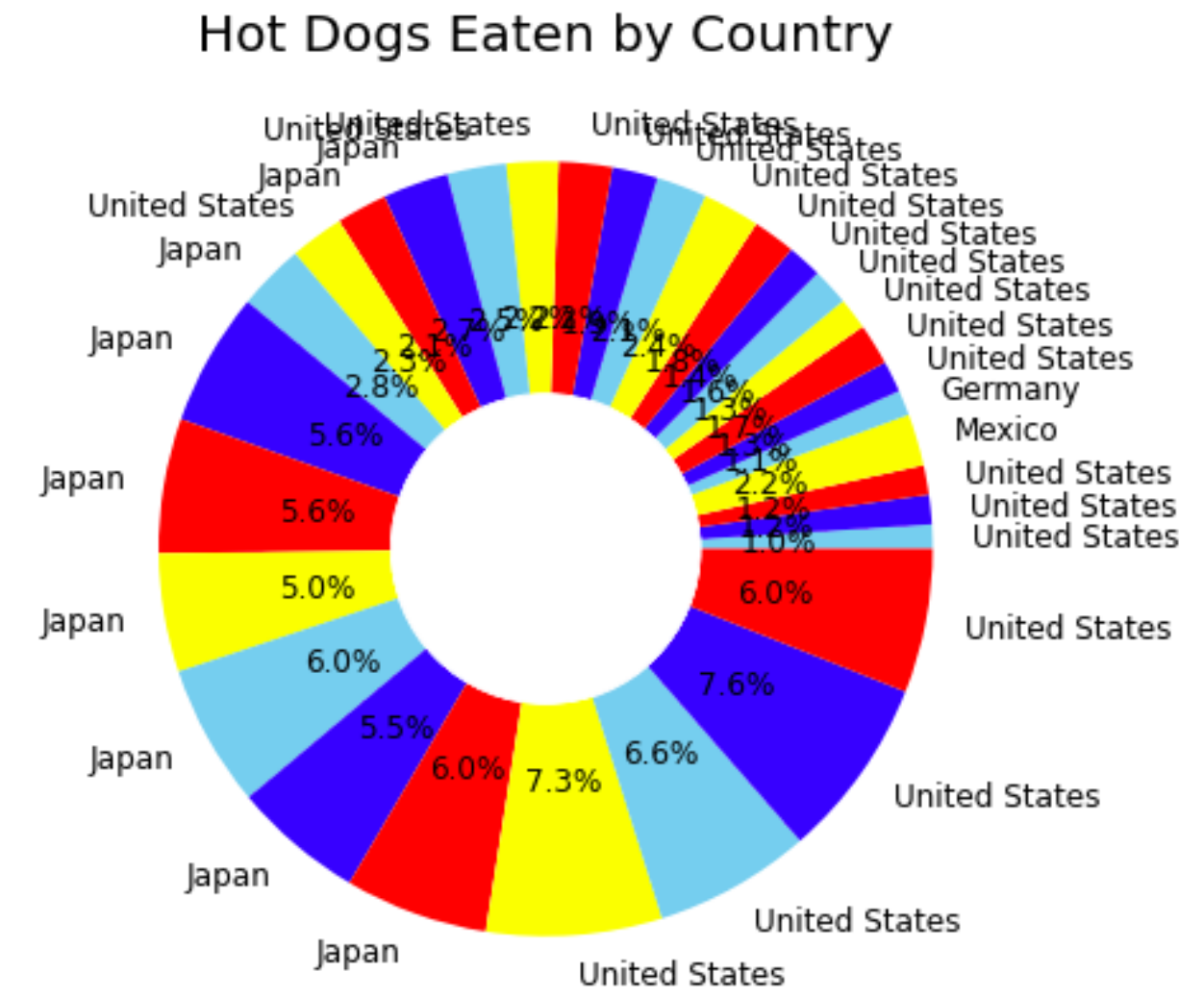
- Python - Pie Chart

```
In [23]: Updated_Hotdog_Winner.groupby(['Country']).sum().plot(
             kind='pie', y='Dogs eaten', autopct='%1.0f%%', title='Percent of Hot Dogs Eaten by Country')
```



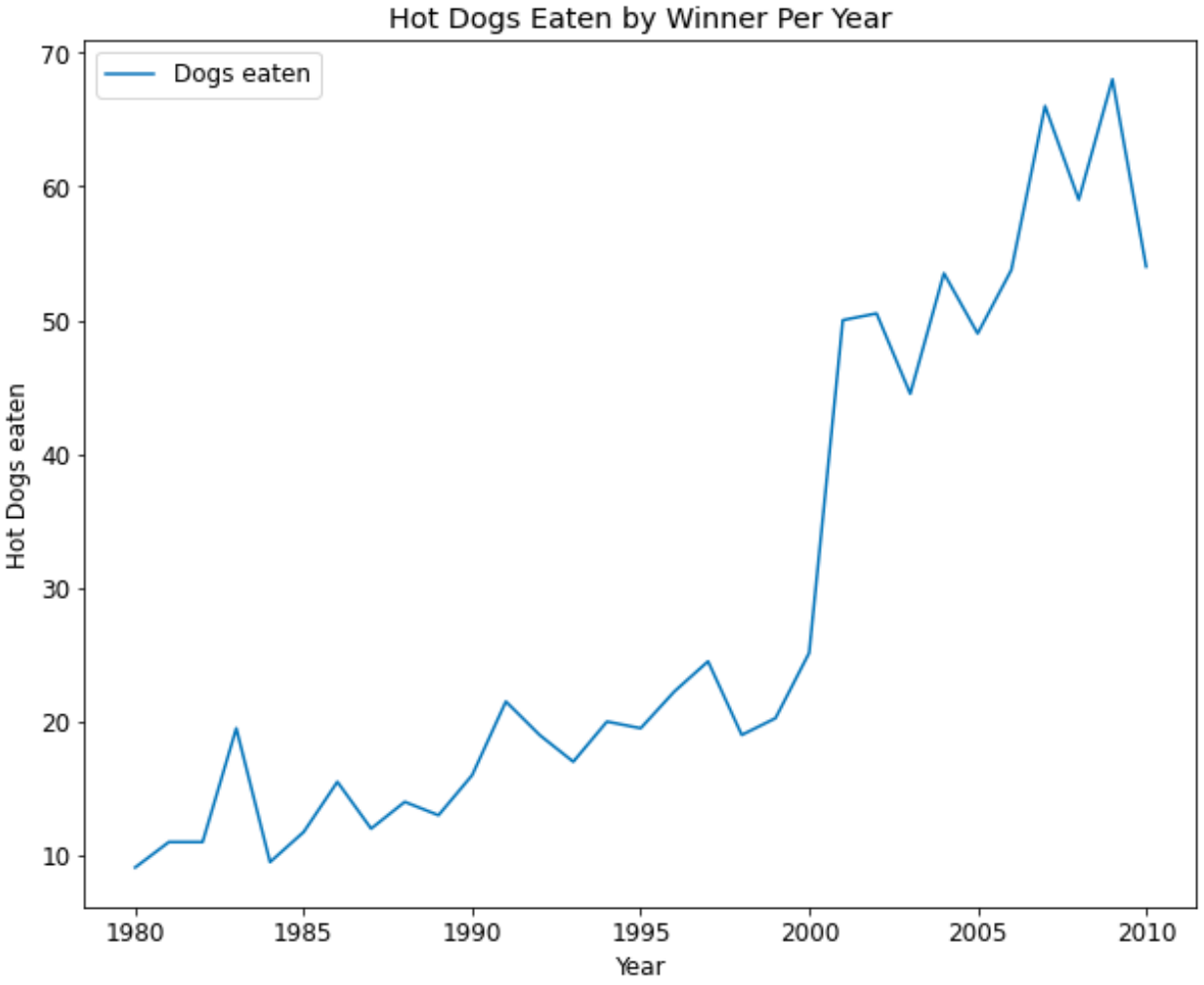
- Python – Donut

```
Country = Update_Hotdog_Winner.Country
eaten = Update_Hotdog_Winner.Dogs_eaten
colours = ["skyblue", "blue", "red", "yellow"]
plt.figure(figsize=(7,7))
plt.pie(eaten, labels=Country, autopct='%1.1f%%', colors=colours)
central_circle = plt.Circle((0, 0), 0.4, color='white')
fig = plt.gcf()
fig.gca().add_artist(central_circle)
plt.rc('font', size=12)
plt.title("Hot Dogs Eaten by Country", fontsize=20)
plt.show()
```



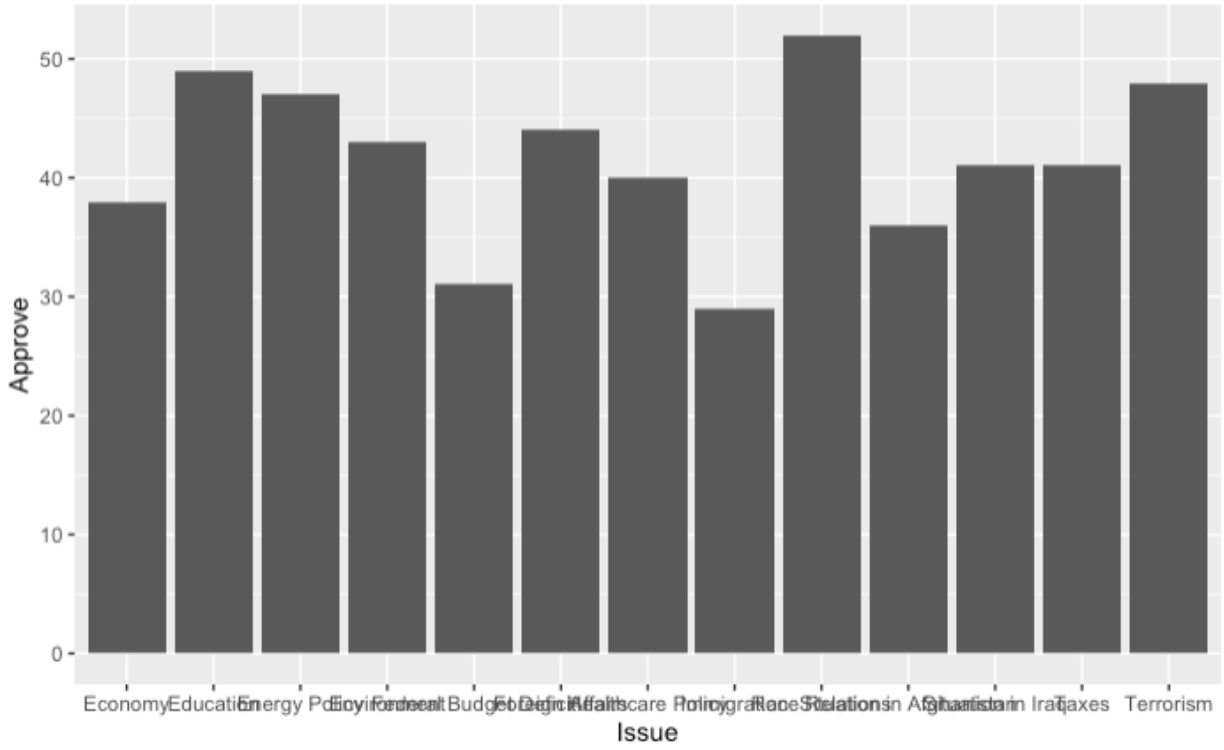
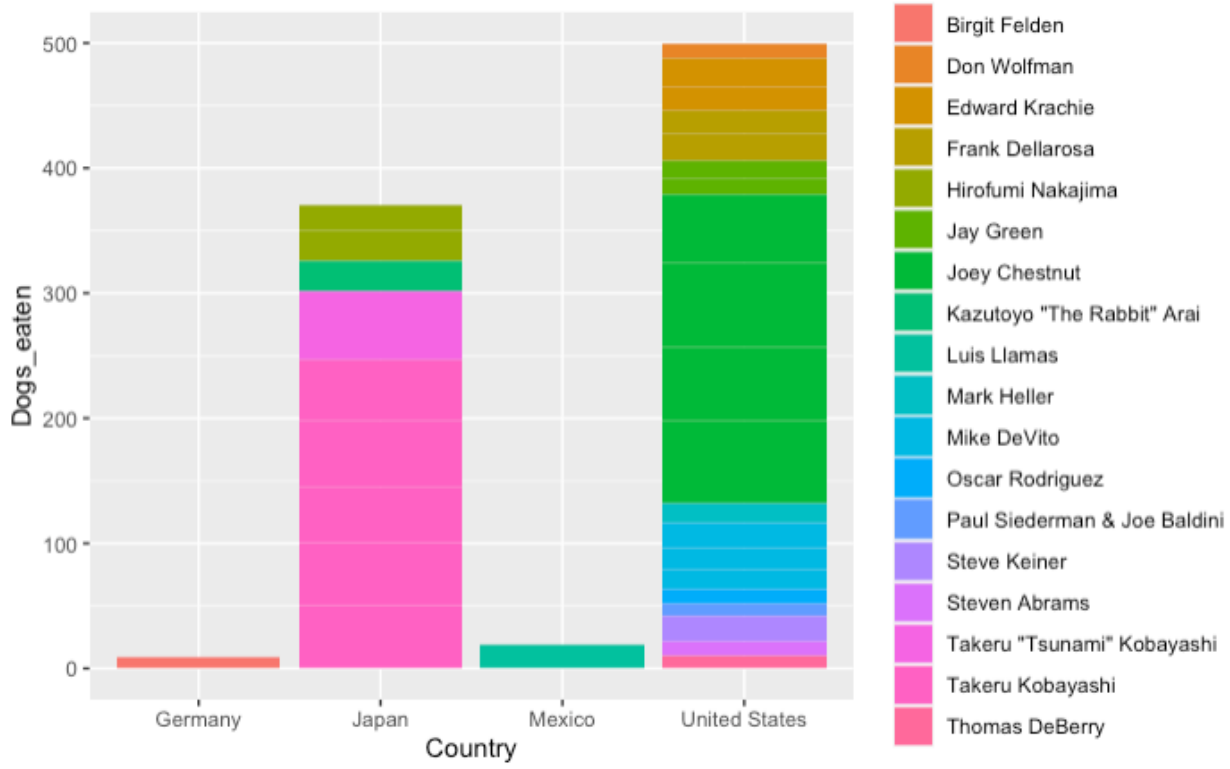
- Python - Line Chart

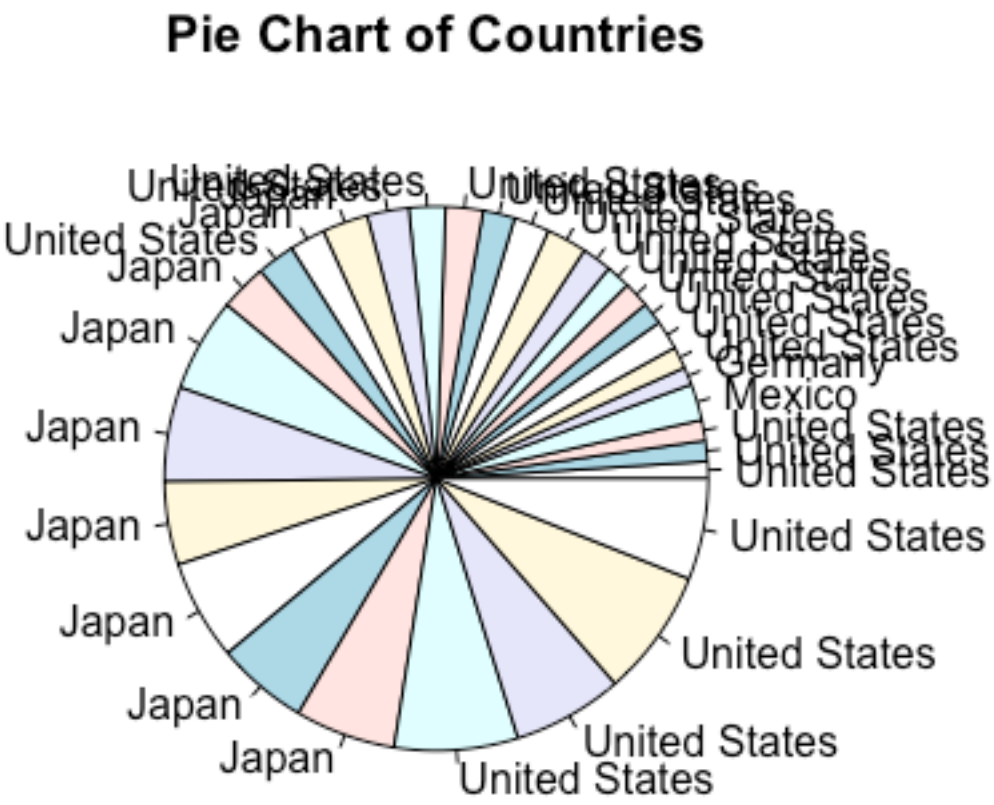
```
In [44]: fig, ax = plt.subplots(figsize=(10,8))
Hotdog_Winner.plot.line(x='Year', y='Dogs eaten', ax=ax)
plt.ylabel("Hot Dogs eaten")
plt.title("Hot Dogs Eaten by Winner Per Year")
plt.show()
```



R Studios Charts

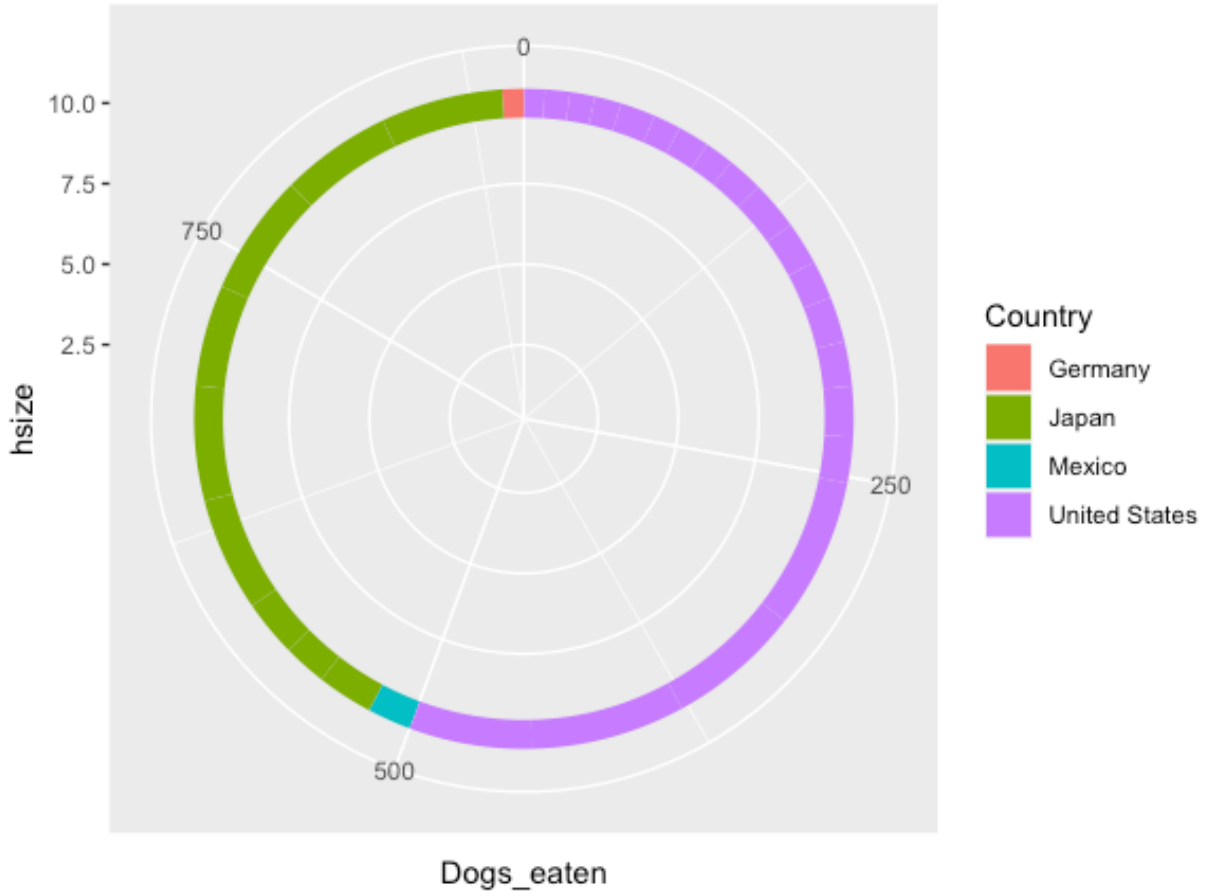
- R Studios - Bar Chart

```
```{r Bar Chart, include=TRUE}
# Barplot
library(ggplot2)
ggplot(obama_approval_ratings, aes(x=Issue, y=Approve)) +
  geom_bar(stat = "identity")
```
```



- R Studios - Stacked Bar Chart

```
```{r Stacked Bar Chart, include=TRUE}
ggplot(hotdog_contest_winners,
       aes(x = Country,
           y = Dogs_eaten,
           fill = Winner)) +
  geom_bar(stat = "identity")
```
```



- R Studios - Pie Chart

```
```{r Pie Chart, include=TRUE}
pie(hotdog_contest_winners$Dogs_eaten, labels =
      hotdog_contest_winners$Country,
    main="Pie Chart of Countries")
```
```



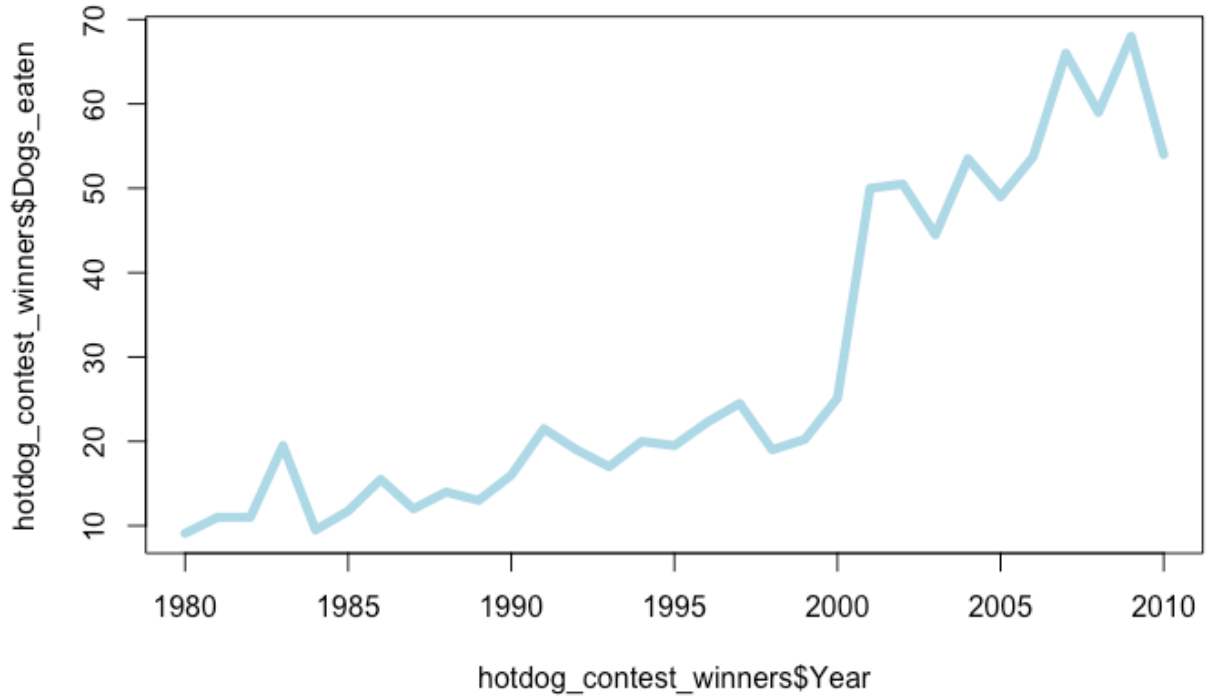
- R Studios – Donut

```r
```{r Donut Chart, include=TRUE}
library(ggplot2)
library(dplyr)
# Donut Chart
hsize <- 10
hotdog_contest_winners <- hotdog_contest_winners %>%
  mutate(x = hsize)
ggplot(hotdog_contest_winners, aes(x = hsize, y = Dogs_eaten,
                                   fill = Country)) + geom_col() + coord_polar(theta = "y") +
  xlim(c(0.2, hsize + 0.5))
```
```



- R Studios - Line Chart

```{r Line Chart, include=TRUE}
## Line Plot hot dogs per year
plot(hotdog_contest_winners$Year,
     hotdog_contest_winners$Dogs_eaten,
     type = "l",
     col = "lightblue", lwd = 5)
```



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