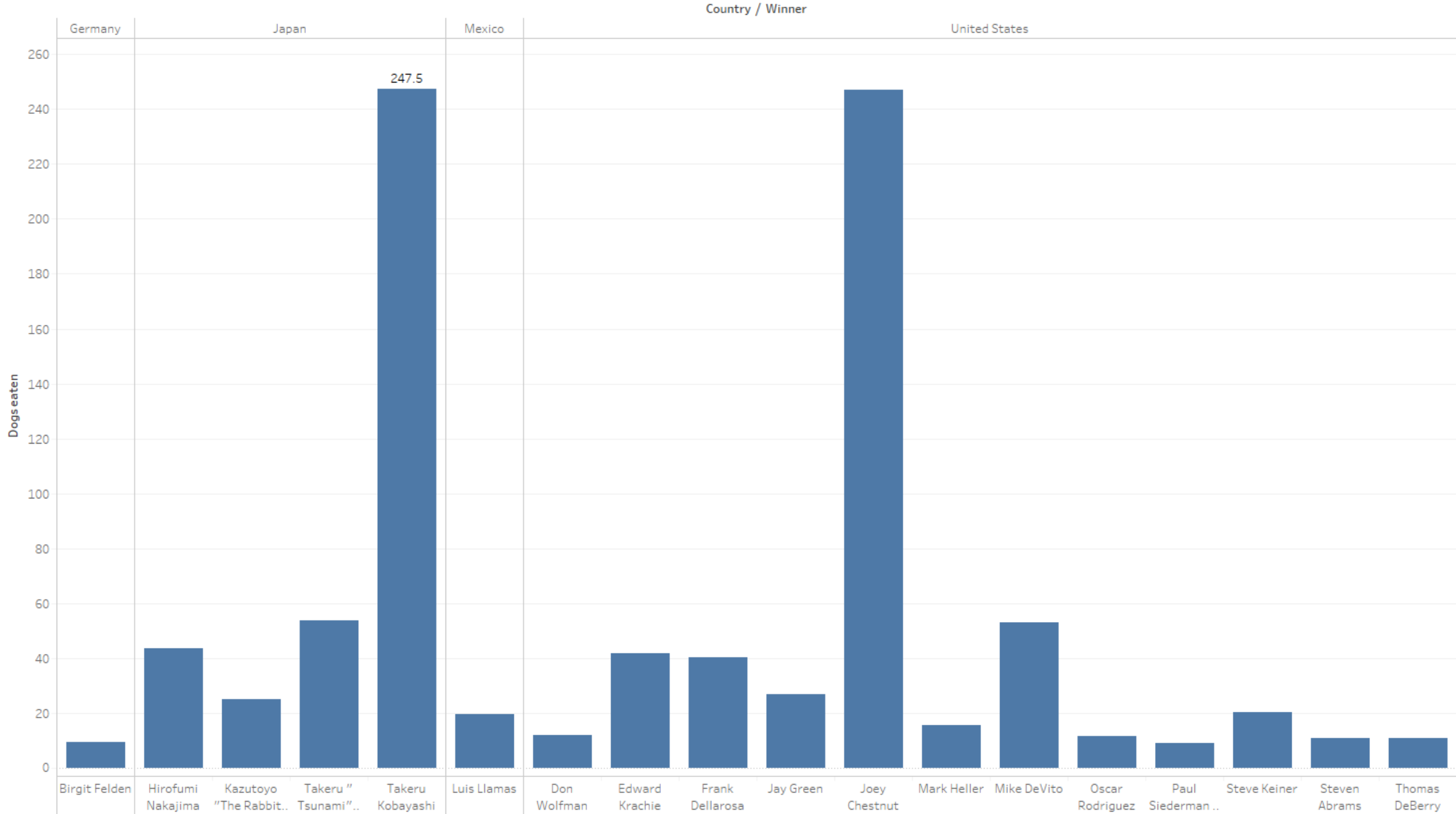
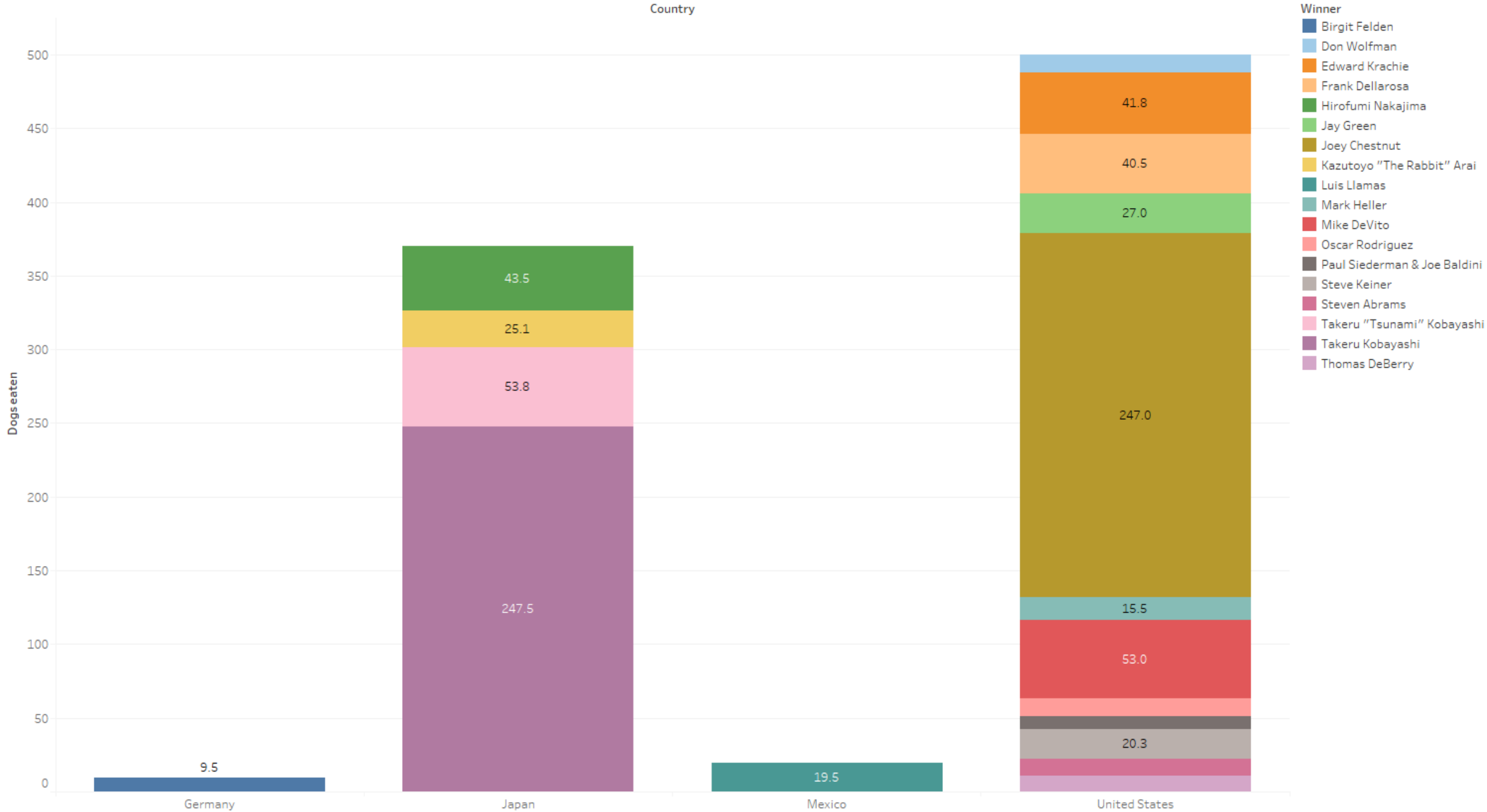
Country Winner Vs Dogs Eaten (Bar Chart)



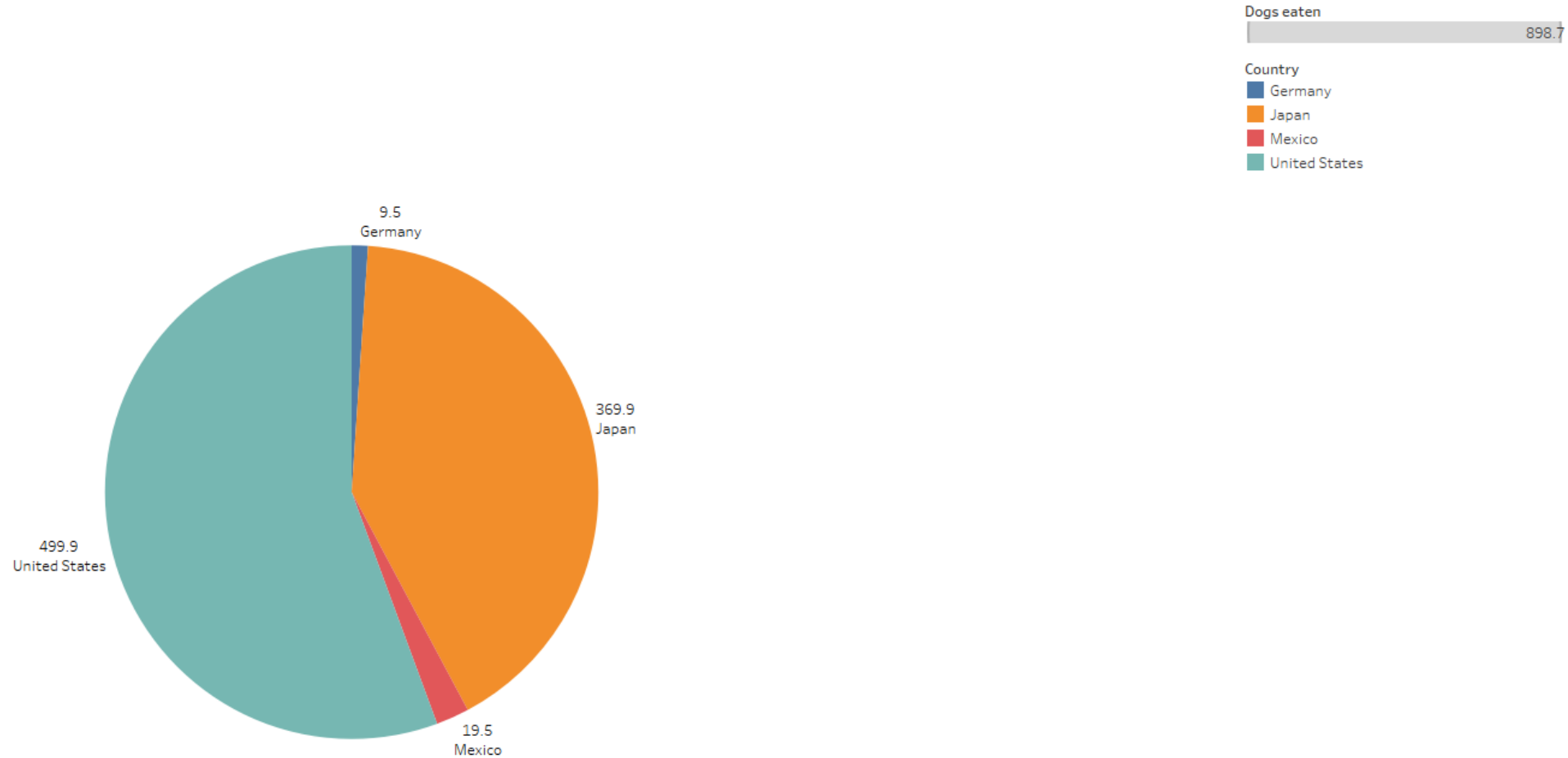
Sum of Dogs eaten for each Winner broken down by Country.

Country vs Dogs Eaten (Stacked Bar Chart)



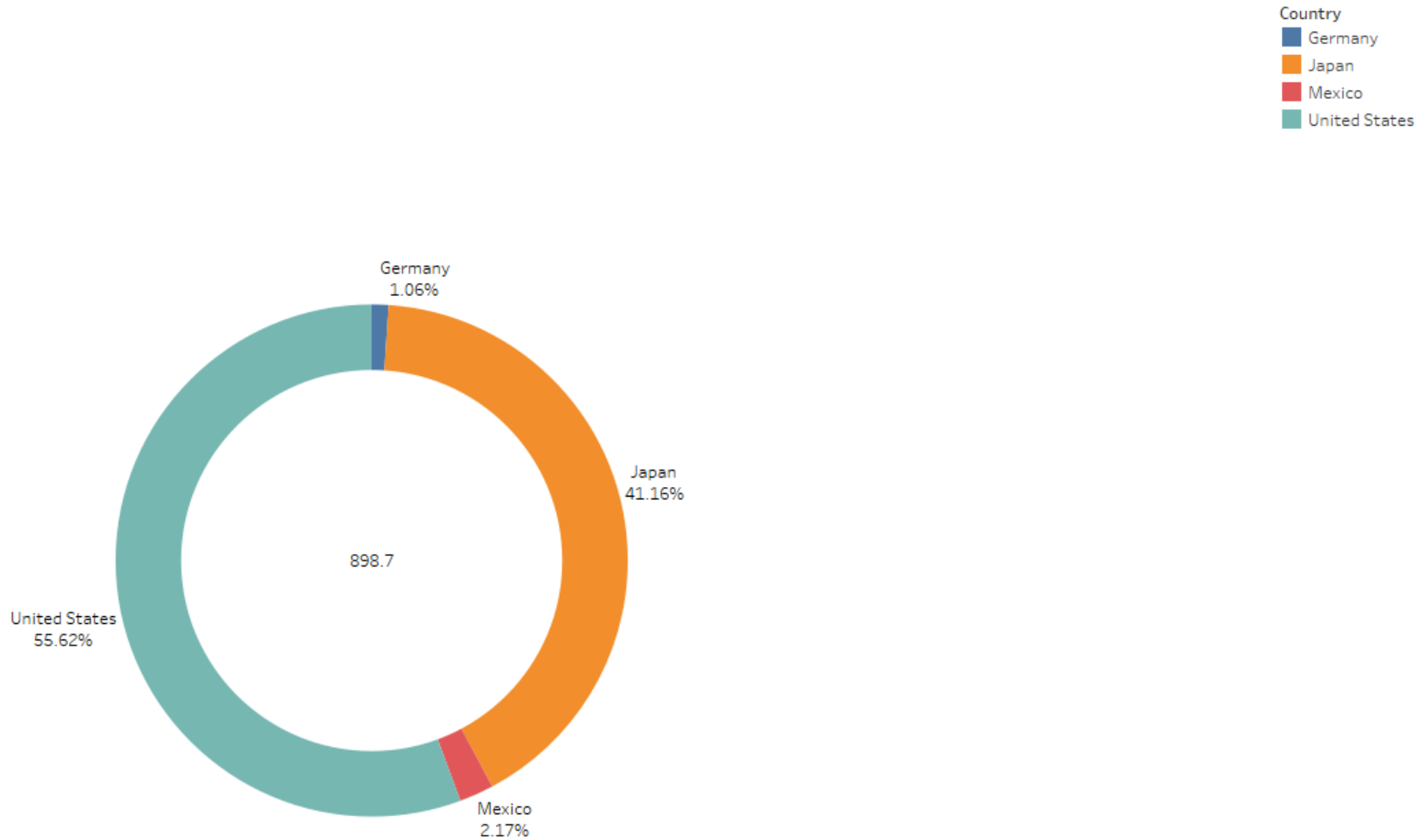
Sum of Dogs eaten for each Country. Color shows details about Winner. The marks are labeled by sum of Dogs eaten.

Country Dogs eaten (PIE Chart)



Sum of Dogs eaten and Country. Color shows details about Country. Size shows sum of Dogs eaten. The marks are labeled by sum of Dogs eaten and Country. The view is filtered on sum of Dogs eaten, which includes everything.

Country Dogs eaten (Donut Chart)



Minimum of New record and minimum of New record. For pane Minimum of New record: Color shows details about Country. The marks are labeled by Country and % of Total Dogs eaten. For pane Minimum of New record (2): The marks are labeled by sum of Dogs eaten.

Assignment 1

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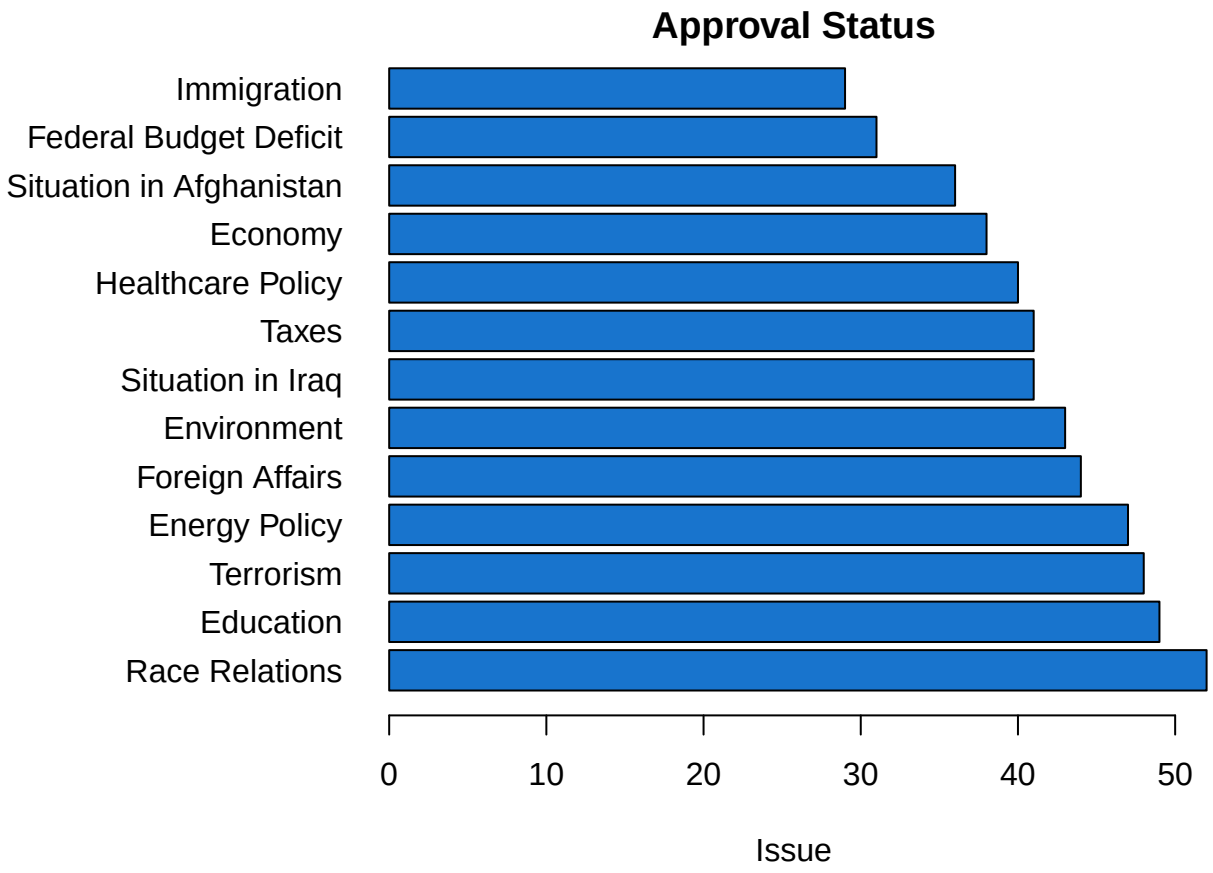
```
# loading dataframe
df<-read.csv("obama-approval-ratings.csv")
```

```
# head of df
head(df)
```

```
##          ï..Issue Approve Disapprove None
## 1  Race Relations      52         38   10
## 2       Education      49         40   11
## 3       Terrorism      48         45    7
## 4   Energy Policy      47         42   11
## 5 Foreign Affairs      44         48    8
## 6     Environment      43         51    6
```

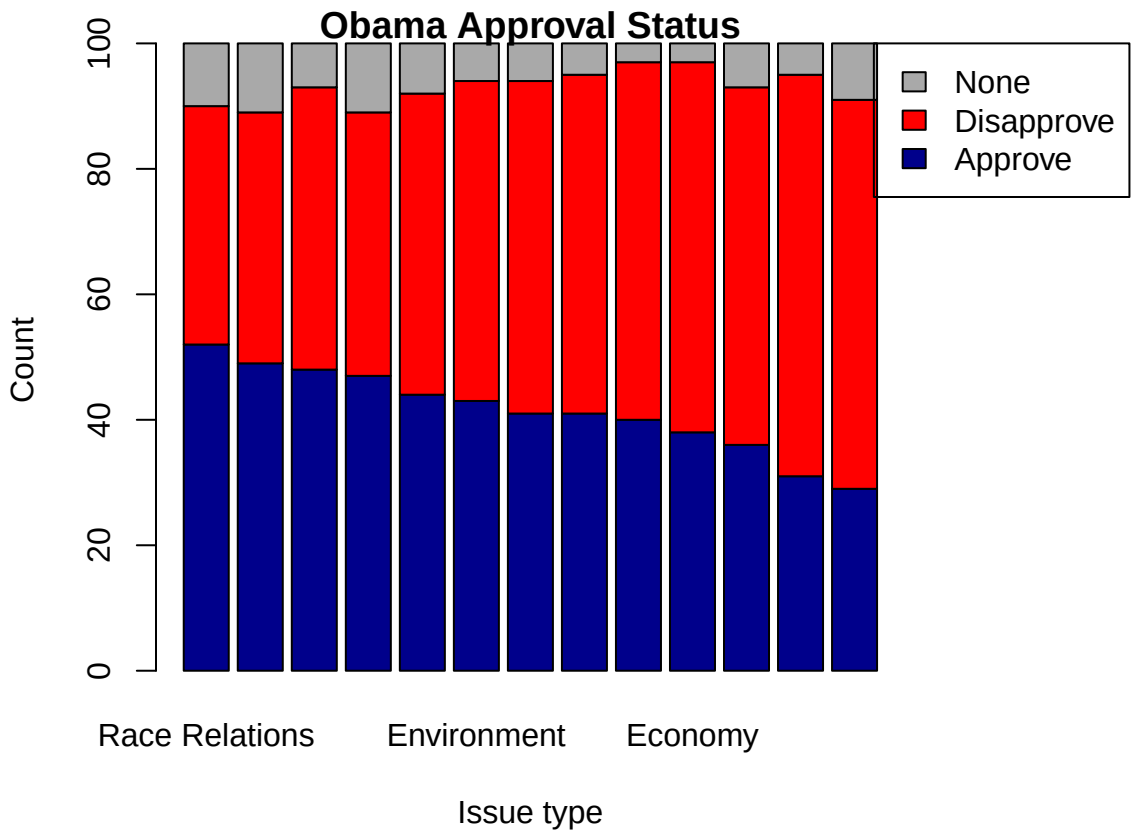
```
par(mar=c(4, 10, 1, 1))
barplot(t(as.matrix(df$Approve)),names.arg = df$ï..Issue,
        col="dodgerblue3",main="Approval Status",xlab="Issue",horiz=TRUE,las=1)
```



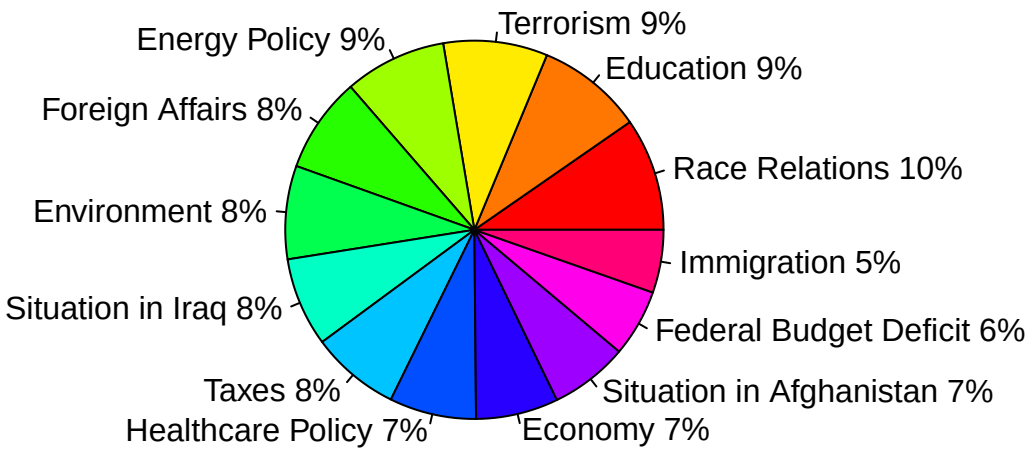

```
rownames(df)<-df$ï..Issue
df<-subset(df,select=c(Approve,Disapprove,None))
head(df)
```

```
##                 Approve Disapprove None
## Race Relations       52         38   10
## Education            49         40   11
## Terrorism            48         45    7
## Energy Policy        47         42   11
## Foreign Affairs      44         48    8
## Environment          43         51    6
```

```
par(mar=c(5, 5, 1, 8))
barplot(t(as.matrix(df)),
        main = "Obama Approval Status",
        xlab = "Issue type", ylab = "Count",
        col = c( "darkblue", "red","darkgrey"),
        legend.text = c("Approve","Disapprove","None"),args.legend = list(x = "topright",
                        inset = c(-0.3, 0)),
        beside = FALSE)
```



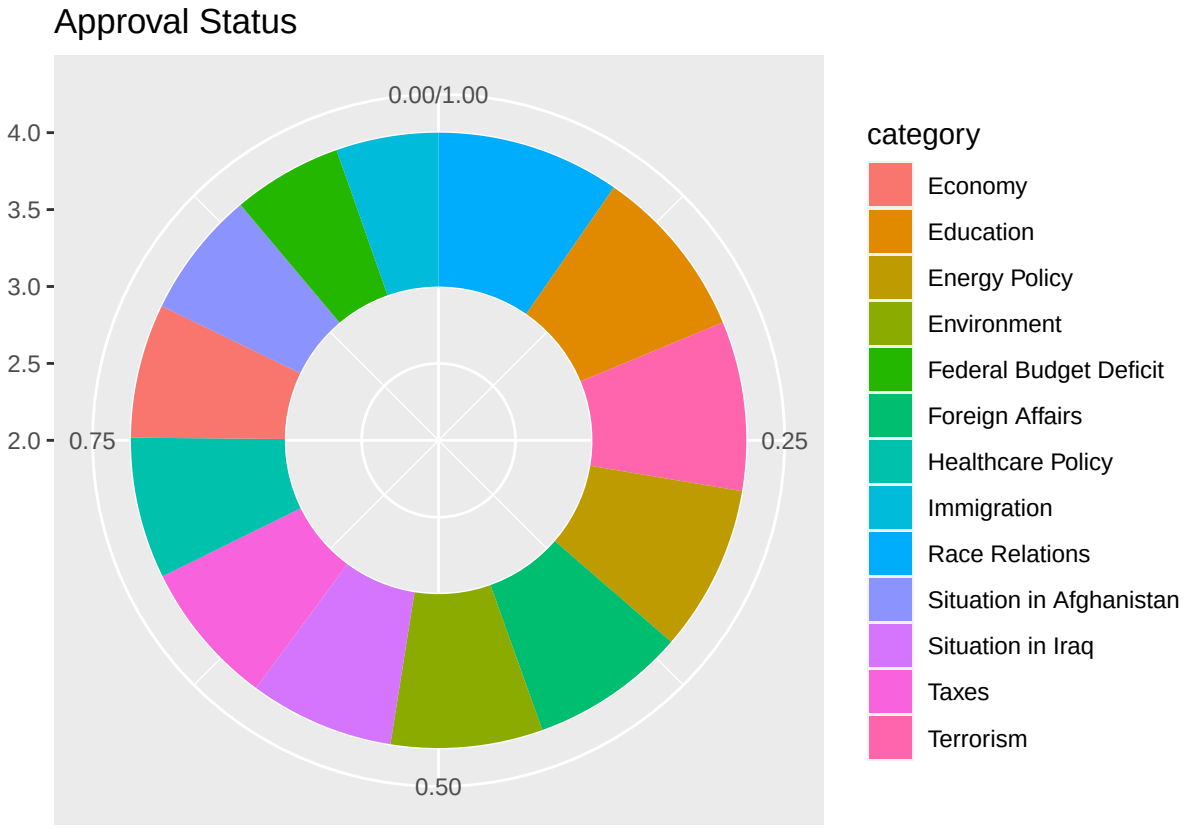

```
pct<-round(df$Approve/sum(df$Approve)*100)
lbls<-paste(rownames(df),pct)
lbls <- paste(lbls,"%",sep="")
pie(df$Approve,labels = lbls,col=rainbow(length(lbls)),main="Approval Status")
```




```
library(ggplot2)
```

```
## Warning: package 'ggplot2' was built under R version 4.0.5
```

```
# Create test data.
data <- data.frame(
  category=rownames(df),
  count=df$Approve
)

# Compute percentages
data$fraction = data$count / sum(data$count)

# Compute the cumulative percentages (top of each rectangle)
data$ymax = cumsum(data$fraction)

# Compute the bottom of each rectangle
data$ymin = c(0, head(data$ymax, n=-1))

# Make the plot
ggplot(data, aes(ymax=ymax, ymin=ymin, xmax=4, xmin=3, fill=category)) +ggtitle("Approval Status")+
     geom_rect() +
     coord_polar(theta="y") +
     xlim(c(2, 4))
```


Approval Status
0.00/1.00
0.25
0.50
0.75
4.0
3.5
3.0
2.5
2.0
category
Economy
Education
Energy Policy
Environment
Federal Budget Deficit
Foreign Affairs
Healthcare Policy
Immigration
Race Relations
Situation in Afghanistan
Situation in Iraq
Taxes
Terrorism

In [28]:
```
#importing libraries
import pandas as pd
from matplotlib import pyplot as plt
import seaborn as sns
```

In [29]:
```
#importing dataframe
df=pd.read_excel("obama-approval-ratings.xls")
```

In [30]:
```
df.head()
```

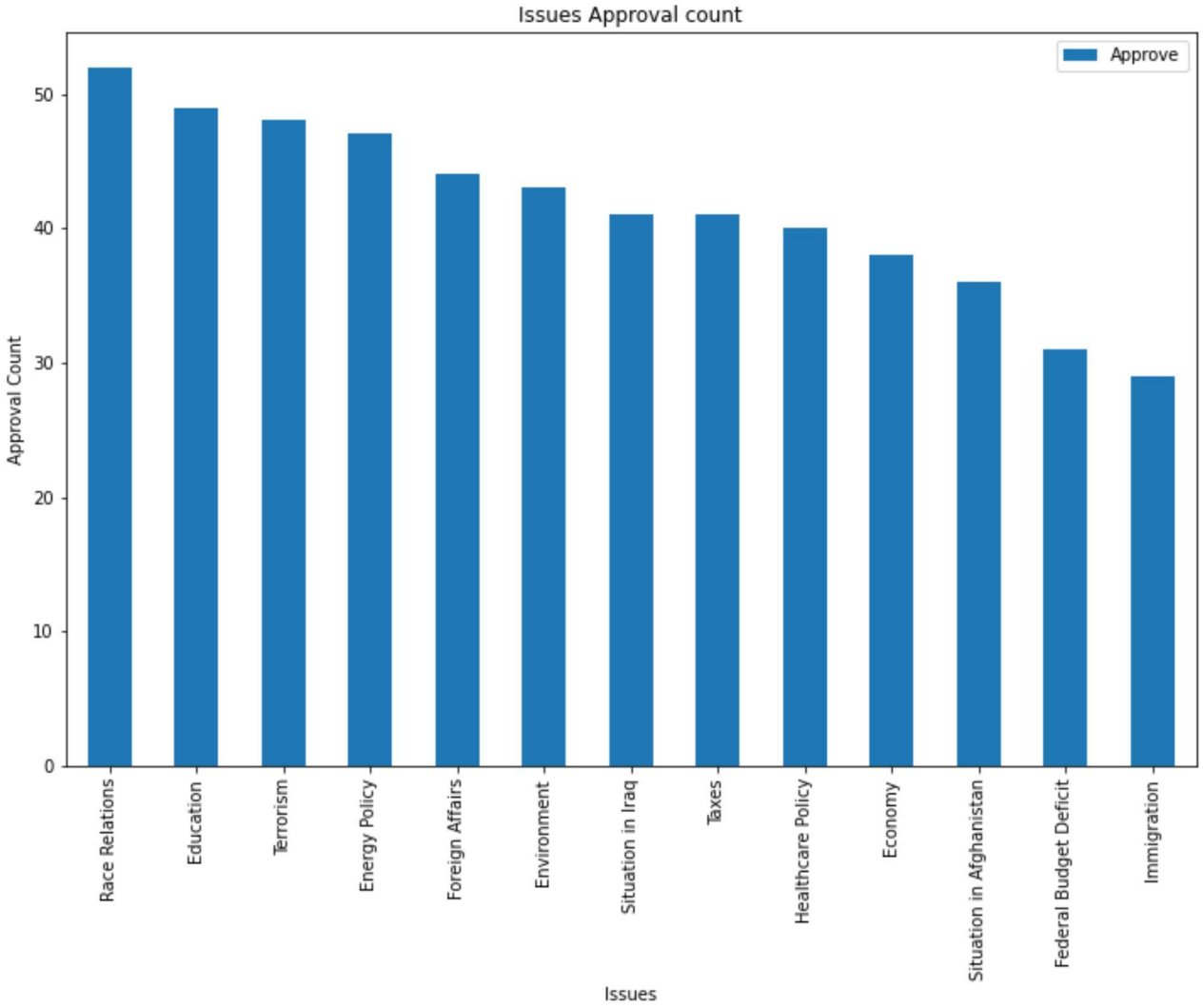
Out[30]:

	Issue	Approve	Disapprove	None
0	Race Relations	52	38	10
1	Education	49	40	11
2	Terrorism	48	45	7
3	Energy Policy	47	42	11
4	Foreign Affairs	44	48	8

1. Bar plot

In [53]:
```
df.plot.bar(x="Issue",y="Approve", title="Issues Approval count",xlabel="Issues",ylabel
```

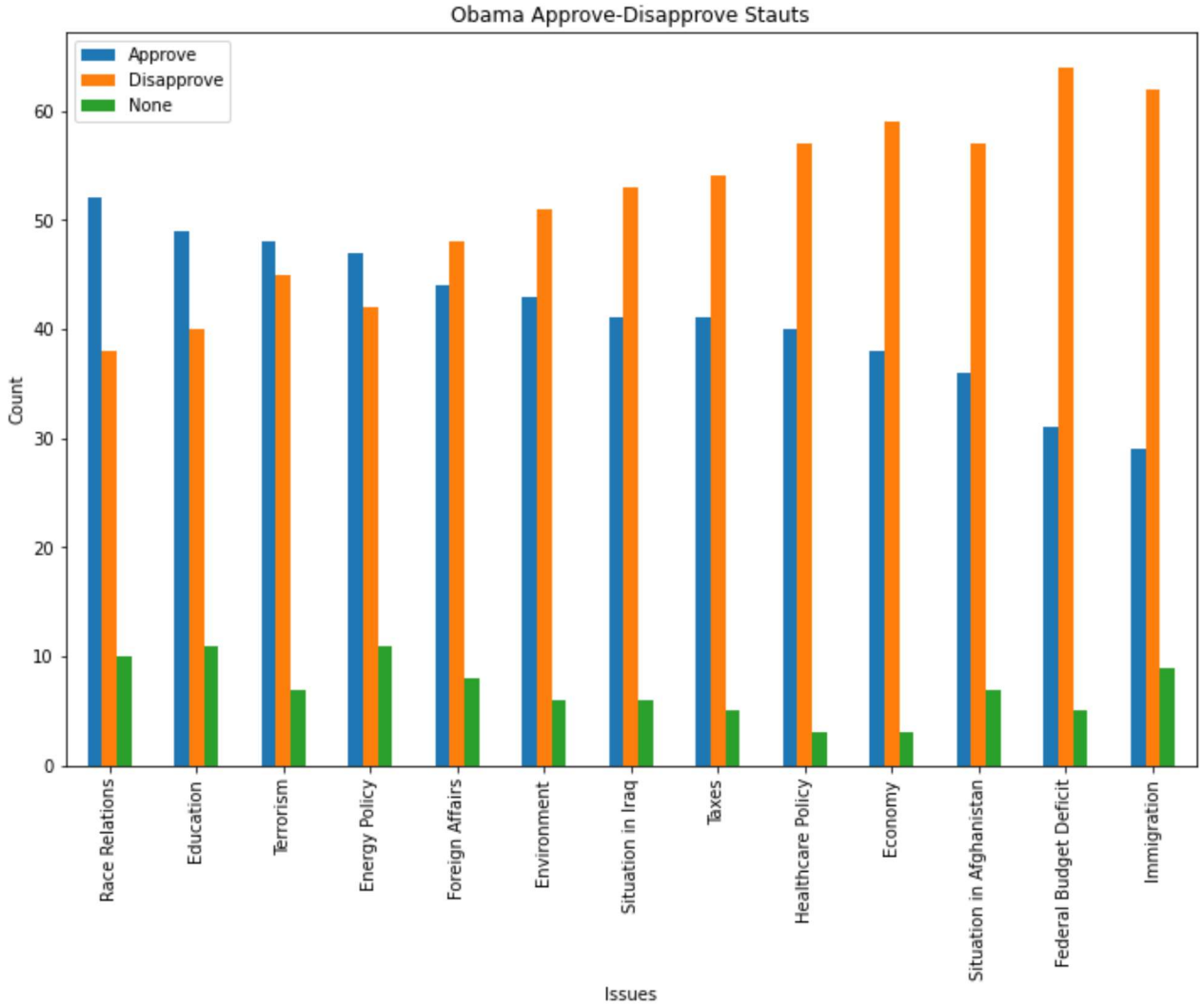
Out[53]:
```
<AxesSubplot:title={'center':'Issues Approval count'}, xlabel='Issues', ylabel='Approval
Count'>
```



2. Stacked Bar Plot

In [54]:
```
df.plot.bar(x="Issue",title="Obama Approve-Disapprove Stauts",xlabel="Issues",ylabel="C
```

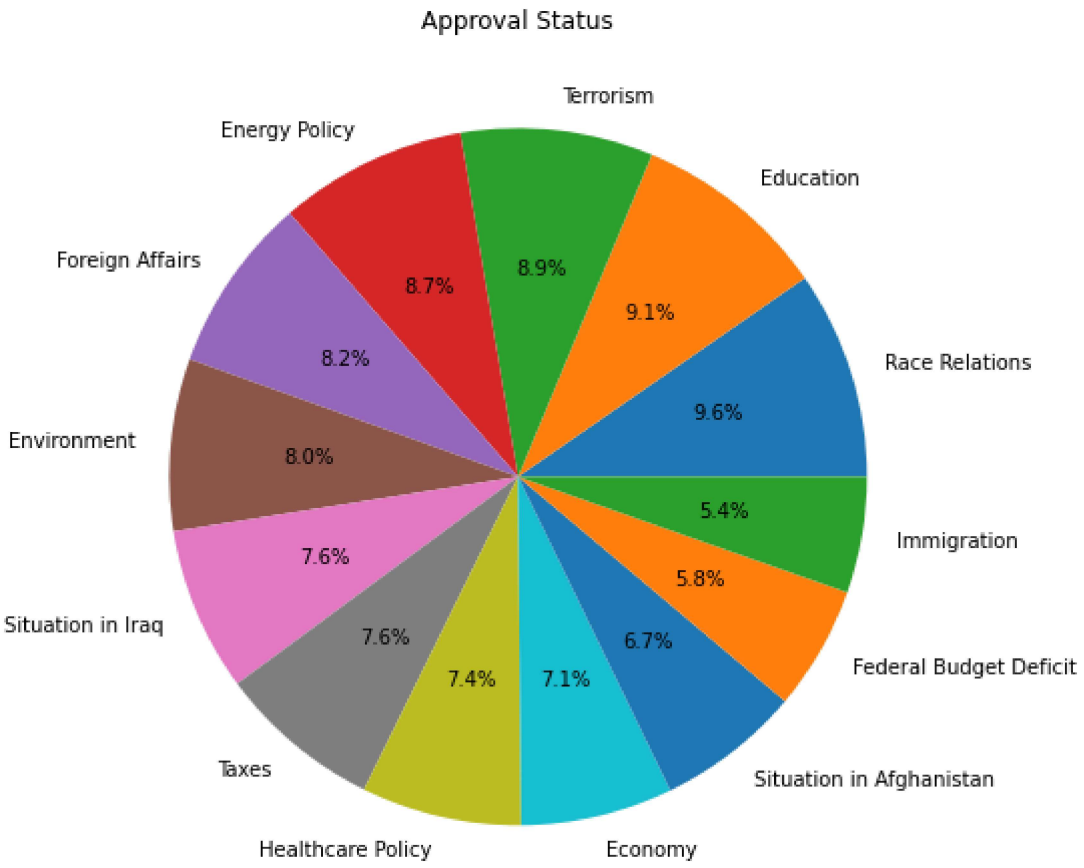
Out[54]:
```
<AxesSubplot:title={'center':'Obama Approve-Disapprove Stauts'}, xlabel='Issues', ylabel
='Count'>
```



3. Pie Plot

In [62]:

```
plt.figure(figsize=(12,8))
plt.pie(df['Approve'],labels=df['Issue'],autopct='%1.1f%%')
plt.title('Approval Status')
plt.show()
```

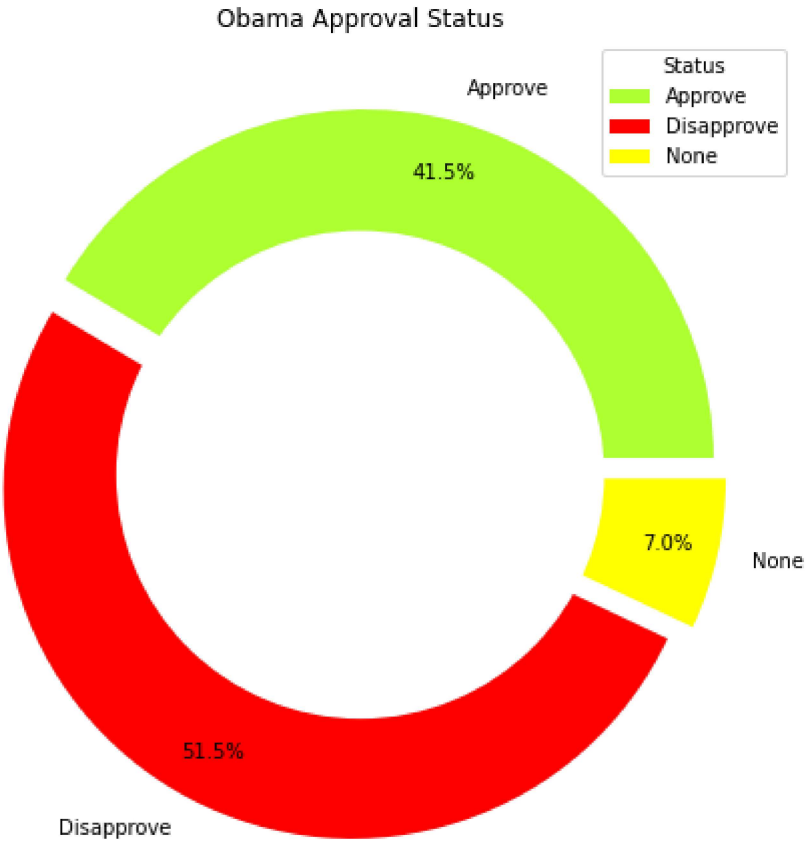


4. Donut Plot

In [71]:

```
plt.figure(figsize=(12,8))
#Creating sum
total=[sum(df['Approve']),sum(df['Disapprove']),sum(df['None'])]

#labels
labels=['Approve','Disapprove','None']

#coloe
colors=['#ADFF2F', '#FF0000', '#FFFF00']

#explosion
explode=(0.05,0.05,0.05)

# Pie Chart
plt.pie(total, colors=colors, labels=labels,
        autopct='%1.1f%%', pctdistance=0.85,
        explode=explode)

# draw circle
centre_circle = plt.Circle((0, 0), 0.70, fc='white')
fig = plt.gcf()

# Adding Circle in Pie chart
fig.gca().add_artist(centre_circle)

# Adding Title of chart
plt.title('Obama Approval Status')
```

```
# Add Legends
plt.legend(labels, loc="upper right", title="Status")

# Displaing Chart
plt.show()
```



In [ ]: