Assignment_1_2_Vayuvegula_Soma_Shekar_R

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Importing and Cleaning Data

Dataset importing

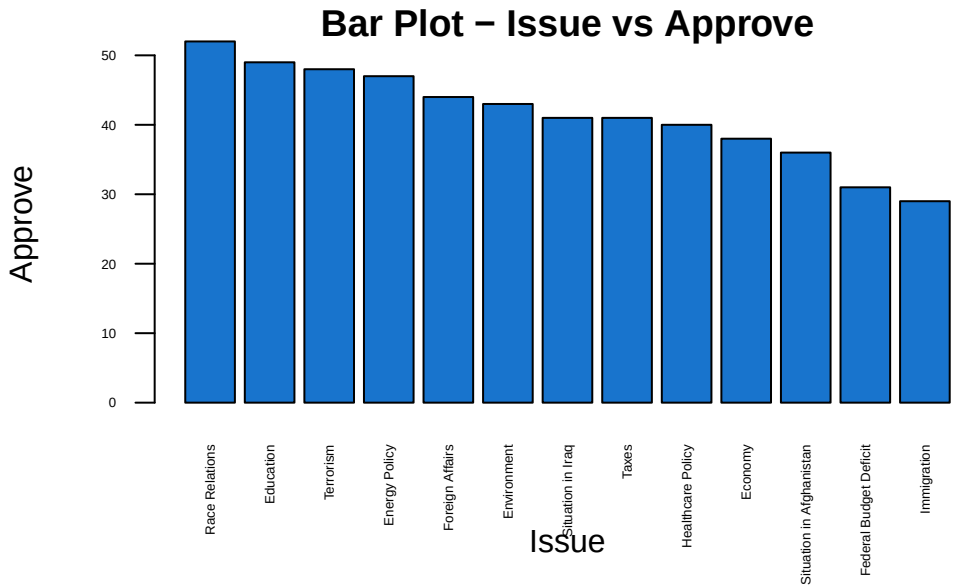
```
library("readxl")

df_obama <- read_excel("/Users/somashekarvayuvegula/Documents/Workspace/Data_Presentation_Visualization/

head(df_obama)
```

```
## # A tibble: 6 x 4
##   Issue           Approve Disapprove  None
##   <chr>             <dbl>      <dbl> <dbl>
## 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
```

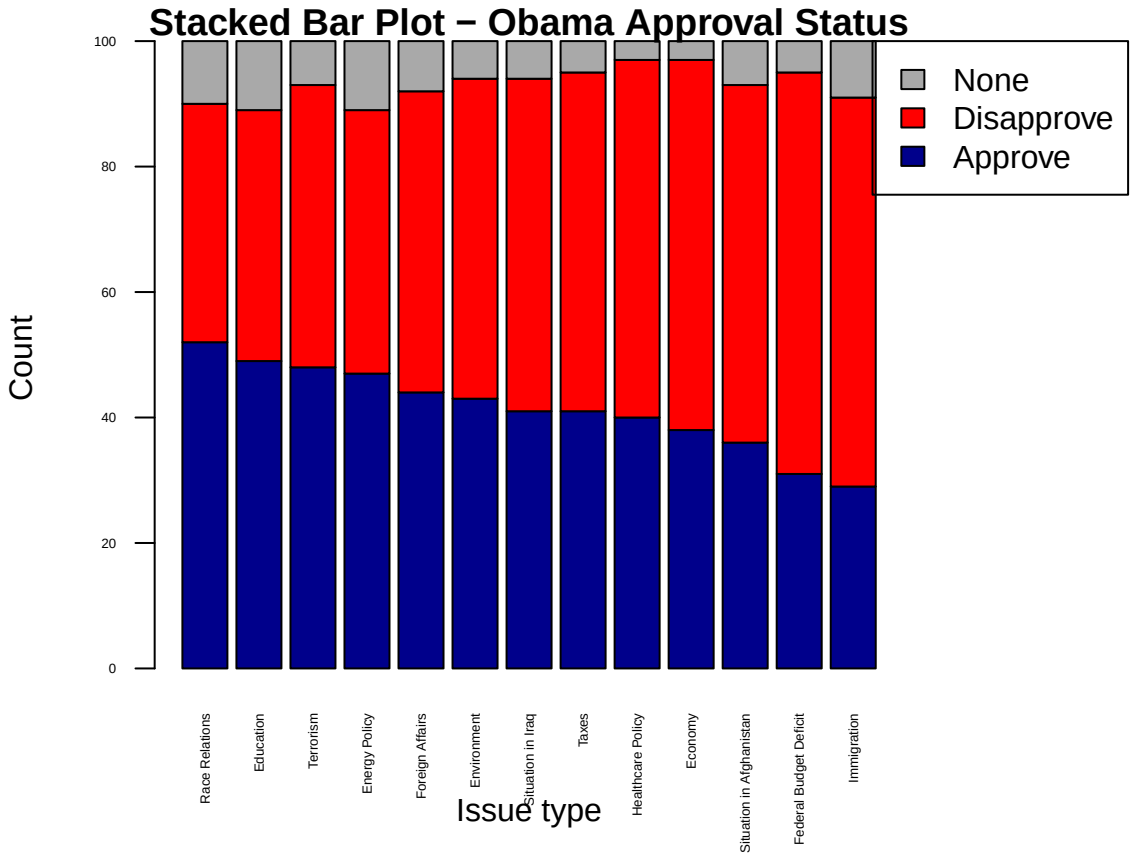
```
par(mar=c(12, 10, 1, 1))
barplot(t(as.matrix(df_obama$Approve)),names.arg = df_obama$Issue,
        col="dodgerblue3",main="Bar Plot - Issue vs Approve",xlab="Issue",ylab="Approve",las=2,cex.axis=
```



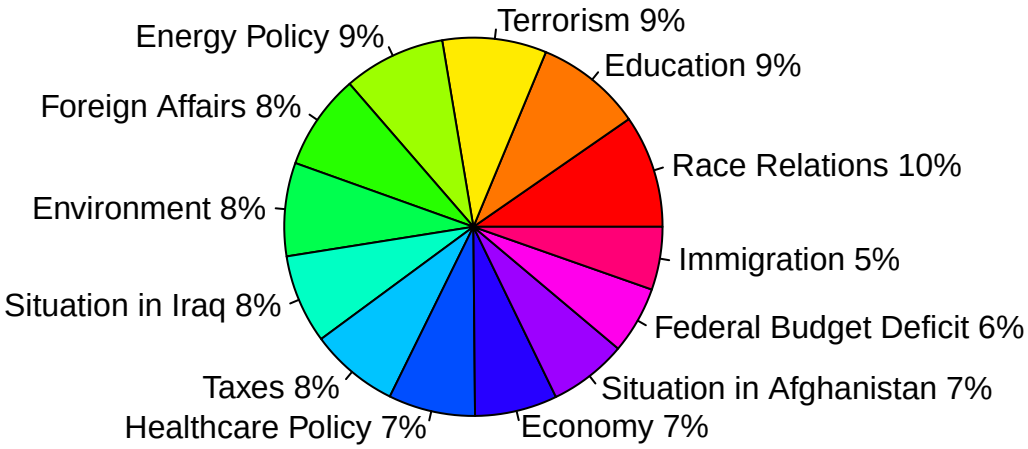
```
issues <- df_obama$Issue
df_obama<-subset(df_obama,select=c(Approve,Disapprove,None))
head(df_obama)
```

```
## # A tibble: 6 x 3
##   Approve Disapprove  None
##     <dbl>      <dbl> <dbl>
## 1      52         38    10
## 2      49         40    11
## 3      48         45     7
## 4      47         42    11
## 5      44         48     8
## 6      43         51     6
```

```
par(mar=c(5, 5, 1, 8))
barplot(t(as.matrix(df_obama)),names.arg = issues,
        main = "Stacked Bar Plot - Obama Approval Status",
        xlab = "Issue type", ylab = "Count", las=2,cex.axis=0.4, cex.names=0.4,
        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_obama$Approve/sum(df_obama$Approve)*100)
lbls<-paste(issues,pct)
lbls <- paste(lbls,"%",sep="")
pie(df_obama$Approve,labels = lbls,col=rainbow(length(lbls)),main="Pie Chart - Obama Approval Status")
```




```
library(ggplot2)

# Create test data.
data <- data.frame(
  category=issues,
  count=df_obama$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))

# Compute label position
data$labelPosition <- (data$ymax + data$ymin) / 2

# Compute a good label
data$label <- paste0(data$category, "\n value: ", data$count)

# Make the plot
ggplot(data, aes(ymax=ymax, ymin=ymin, xmax=4, xmin=3, fill=category)) +
  geom_rect() +
  geom_label( x=3.55, aes(y=labelPosition, label=label), size=1.75) +
  scale_fill_brewer(palette=4) +
  coord_polar(theta="y") +
  xlim(c(2, 4)) +
  theme_void() +
  theme(legend.position = "none")
```

```
## Warning in RColorBrewer::brewer.pal(n, pal): n too large, allowed maximum for palette GnBu is 9
## Returning the palette you asked for with that many colors
```


Immigration
value: 29
Race Relations
value: 52
Federal Budget Deficit
value: 31
Education
value: 49
Situation in Afghanistan
value: 36
Economy
value: 38
Terrorism
value: 48
Healthcare Policy
value: 40
Energy Policy
value: 47
Taxes
value: 41
Foreign Affairs
value: 44
Situation in Iraq
value: 41
Environment
value: 43