Name : Gourav Verma
Method : R
Assignment 1.2 - Charts
DSC-640 Week 1-2

In [1]:

```
# import libraries and data
library(ggplot2)
library(readxl)
```

```
Warning message:
"package 'ggplot2' was built under R version 3.6.3"Warning message:
"package 'readxl' was built under R version 3.6.3"
```

In [2]:

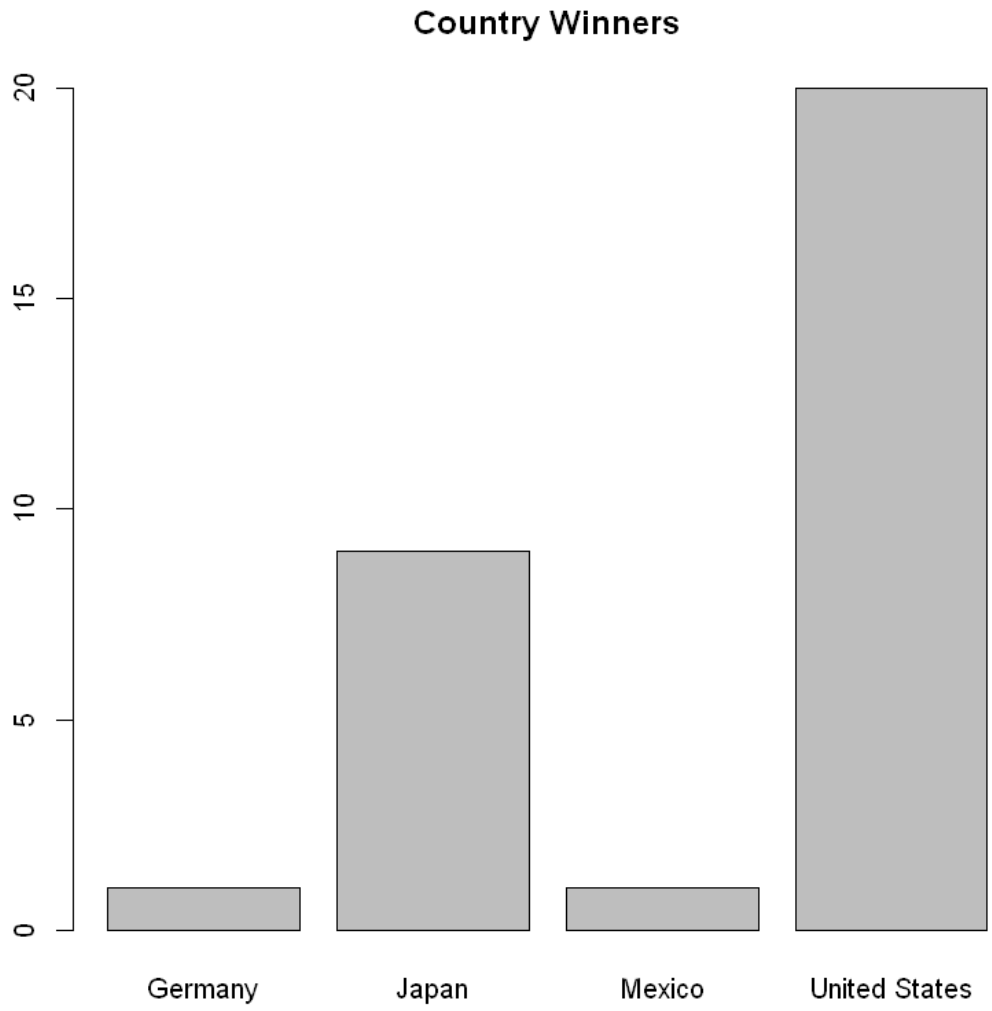
```
hotdog_data <- read_excel("hotdog-contest-winners.xlsm")
head(hotdog_data)
```

A tibble: 6 × 5

Year	Winner	Dogs eaten	Country	New record
<dbl>	<chr>	<dbl>	<chr>	<dbl>
1980	Paul Siederman & Joe Baldini	9.10	United States	0
1981	Thomas DeBerry	11.00	United States	0
1982	Steven Abrams	11.00	United States	0
1983	Luis Llamas	19.50	Mexico	0
1984	Birgit Felden	9.50	Germany	0
1985	Oscar Rodriguez	11.75	United States	0

In [3]:

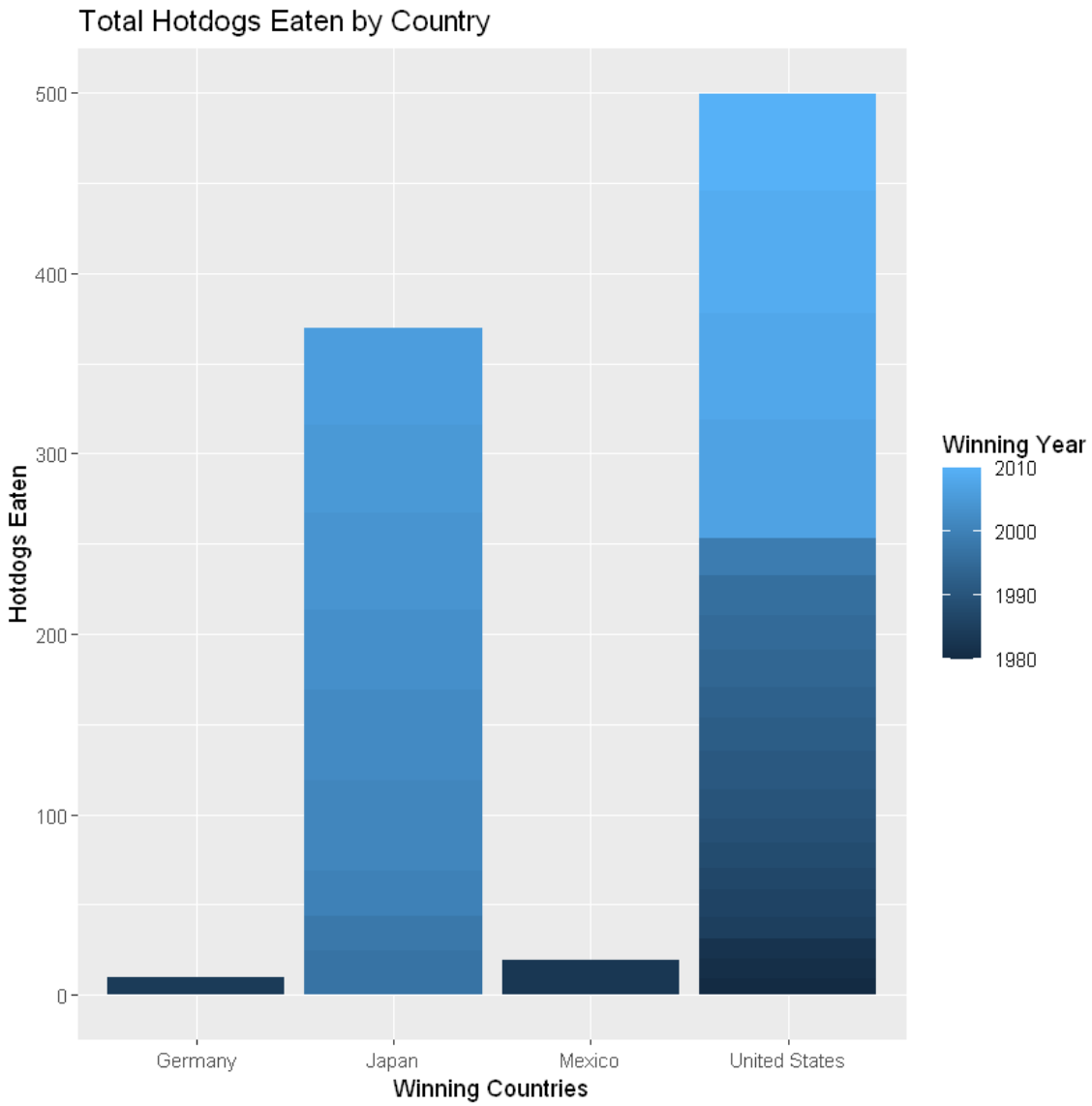
```
# Bar Chart
counts <- table(hotdog_data$Country)
barplot(counts, main='Country Winners')
```



In [4]:

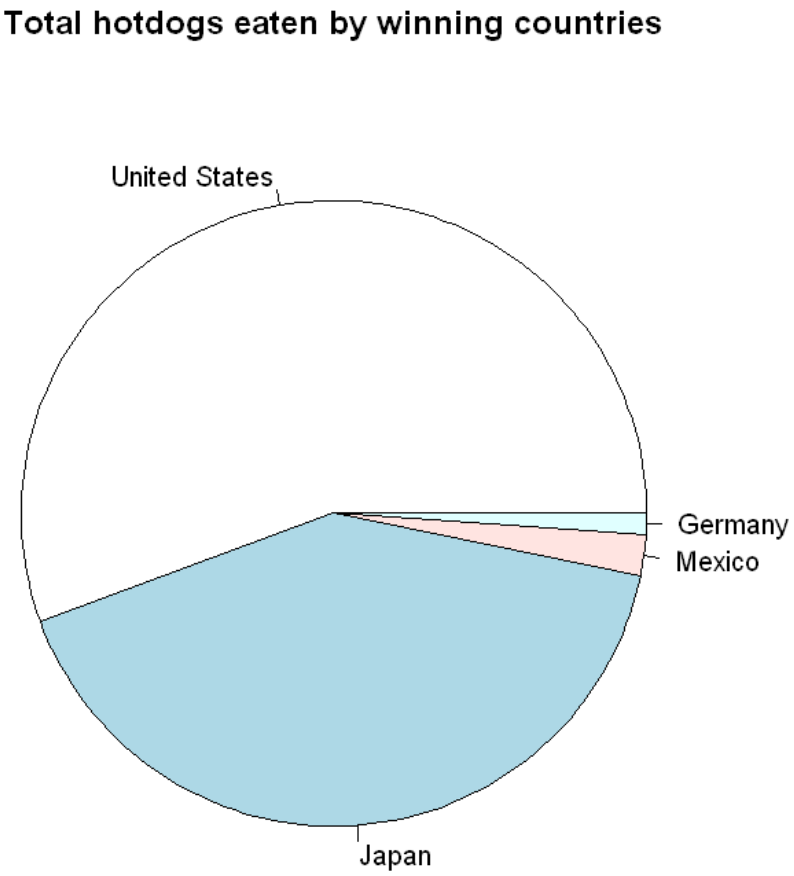
```
# Stacked Bar Chart
ggplot2::ggplot(hotdog_data,
                ggplot2::aes(fill=hotdog_data$Year, y = hotdog_data$`Dogs eaten`, x= ho
tdog_data$Country)) +
ggplot2::geom_bar(position = "stack", stat = "identity") +
ggplot2::ggtitle('Total Hotdogs Eaten by Country') +
ggplot2::xlab('Winning Countries') +
ggplot2::ylab('Hotdogs Eaten') +
ggplot2::labs(fill='Winning Year')
```

```
Warning message:
"Use of `hotdog_data$Country` is discouraged. Use `Country` instead."Warni
ng message:
"Use of `hotdog_data$`Dogs eaten`` is discouraged. Use `Dogs eaten` instea
d."Warning message:
"Use of `hotdog_data$Year` is discouraged. Use `Year` instead."
```



In [5]:

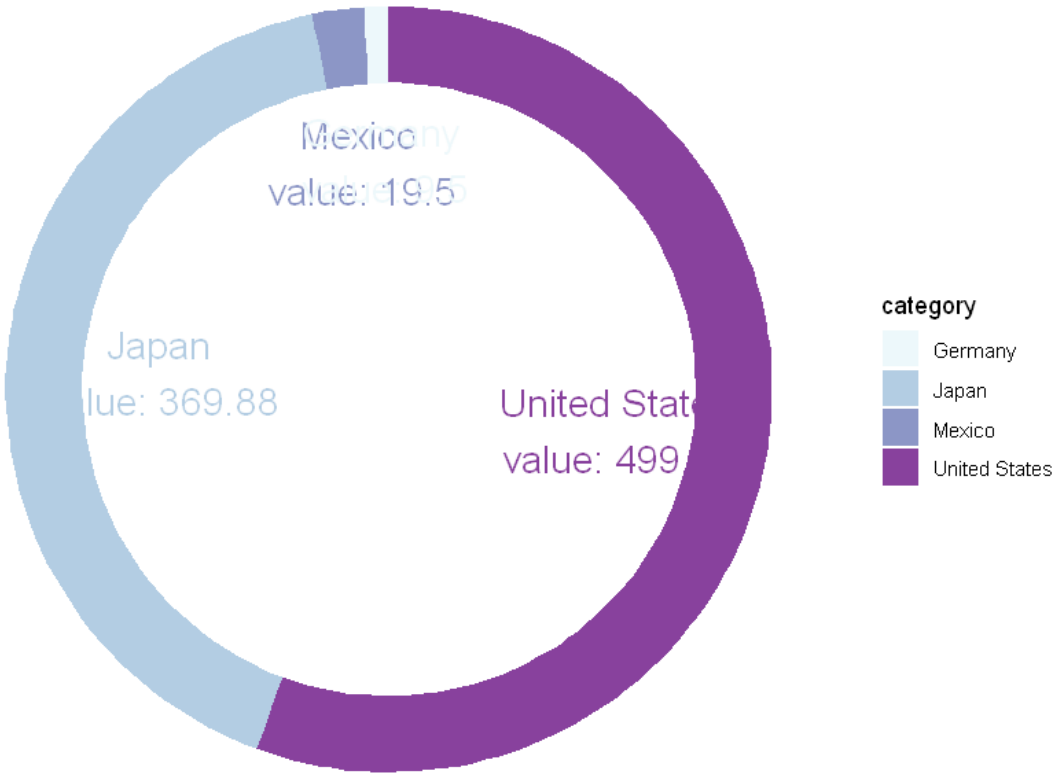
```
# Pie Chart
slices <- c(499.85, 369.88, 19.50, 9.50)
lbls <- c('United States', 'Japan', 'Mexico', 'Germany')
pie(slices, labels = lbls, main='Total hotdogs eaten by winning countries')
```



In [6]:

```
# Donut Pie Chart
data <- data.frame(category=c('United States', 'Japan', 'Mexico', 'Germany'), count=c(4
99.85, 369.88, 19.50, 9.50))
data$fraction <- data$count / sum(data$count)
data$ymax <- cumsum(data$fraction)
data$ymin <- c(0, head(data$ymax, n=-1))
data$labelPosition <- (data$ymax + data$ymin) / 2
data$label <- paste0(data$category, "\n value: ", data$count)


ggplot2::ggplot(data, ggplot2::aes(ymax=ymax, ymin=ymin, xmax=4, xmin=3, fill=category
)) +
ggplot2::geom_rect() +
ggplot2::geom_text(x=2, ggplot2::aes(y=labelPosition, label=label, color=category), siz
e=6) +
ggplot2::scale_fill_brewer(palette=3) + ggplot2::scale_color_brewer(palette = 3) +
ggplot2::coord_polar(theta = "y") +
ggplot2::xlim(c(-1,4)) +
ggplot2::theme_void()
```



In [ ]: