R Notebook

Code

Hide

```
iphone_count <- c(10783,541,922,8737)
galaxy_count <- c(10953,541,911,8578)
sentiment <- c("1: negative","2: somewhat negative","3: somewhat positive","4: positive"
)
sentiment2 <- c("Negative","Somewhat Negative","Somewhat Positive","Positive")
```

Hide

```
vectorList <- list(sentiment, iphone_count, galaxy_count, sentiment2)
results_df <- as.data.frame(do.call(cbind, vectorList))
results_df
```

V1 <fctr>	**V2** <fctr>	**V3** <fctr>	**V4** <fctr>
1: negative	10783	10953	Negative
2: somewhat negative	541	541	Somewhat Negative
3: somewhat positive	922	911	Somewhat Positive
4: positive	8737	8578	Positive

4 rows

Hide

```
names(results_df)[names(results_df) == "V1"] <- "Sentiment"
names(results_df)[names(results_df) == "V2"] <- "iPhoneCount"
names(results_df)[names(results_df) == "V3"] <- "GalaxyCount"
names(results_df)[names(results_df) == "V4"] <- "Sentiment2"
```

Hide

```
results_df
```

Sentiment <fctr>	**iPhoneCount** <fctr>	**GalaxyCount** <fctr>	**Sentiment2** <fctr>
1: negative	10783	10953	Negative
2: somewhat negative	541	541	Somewhat Negative
3: somewhat positive	922	911	Somewhat Positive
4: positive	8737	8578	Positive

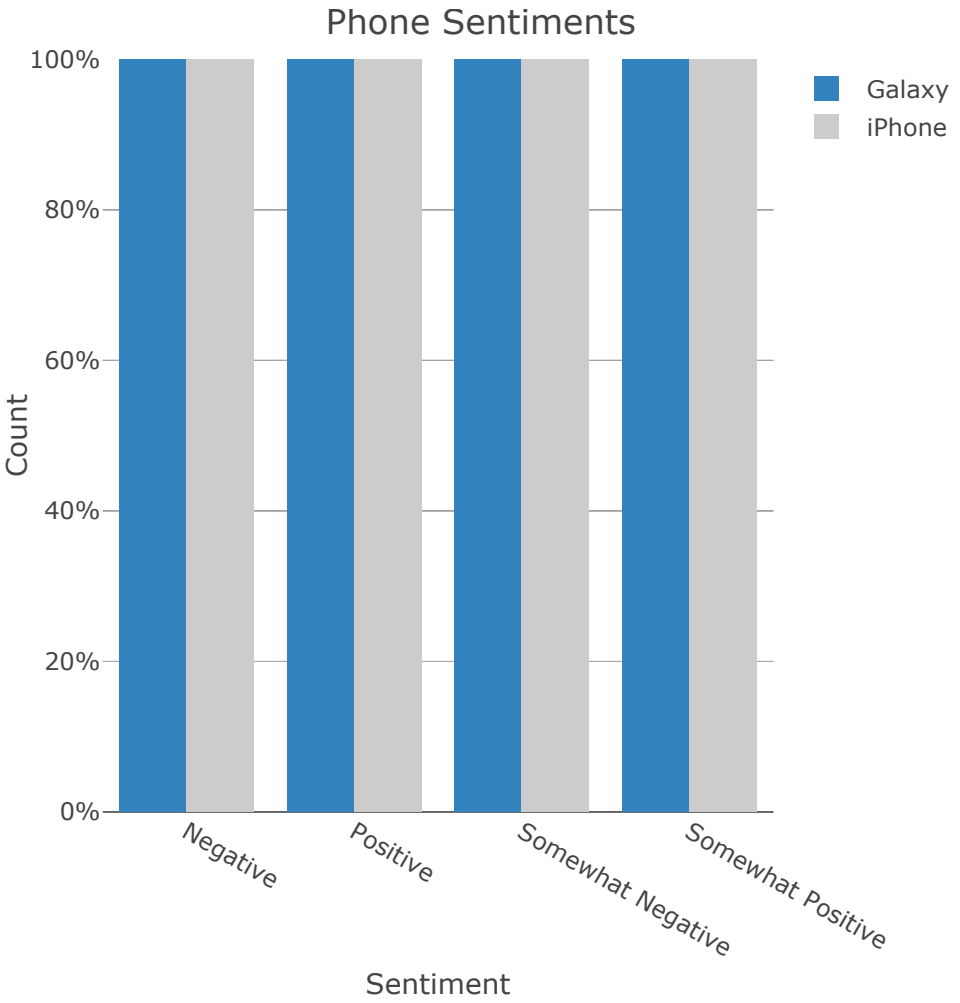
4 rows

Hide

```
Animals <- c("giraffes", "orangutans", "monkeys")
SF_Zoo <- c(20, 14, 23)
LA_Zoo <- c(12, 18, 29)
data <- data.frame(Animals, SF_Zoo, LA_Zoo)

fig <- plot_ly(results_df, x = ~Sentiment2, y = ~galaxy_count, type = 'bar', name = 'Gal
axy',  marker = list(color = 'rgb(49,130,189)'), text=galaxy_count,textposition = 'auto'
)
fig <- fig %>% add_trace(y = ~iphone_count, name = 'iPhone',  marker = list(color = 'rgb
(204,204,204)') , text=iphone_count,textposition = 'auto')
fig <- fig %>% layout(title = 'Phone Sentiments',yaxis = list(title = 'Count',range = c(
0, 100), ticksuffix = "%"), xaxis = list(title = 'Sentiment'), barmode = 'group')

fig
```



Hide

```
# combine somewhat negative and somewhat positive
results_df
```

Sentiment <fctr>	iPhoneCount <fctr>	GalaxyCount <fctr>	Sentiment2 <fctr>
1: negative	10783	10953	Negative
2: somewhat negative	541	541	Somewhat Negative
3: somewhat positive	922	911	Somewhat Positive
4: positive	8737	8578	Positive

4 rows

Hide

```
negatives_iPhone <- c(sum(10783,541))
positives_iPhone <- c(sum(922,8737))
negatives_Galaxy <- c(sum(10953,541))
positives_Galaxy <- c(sum(911,8578))
```

Hide

```
sentiment3 <- c("negative", "positive")
iphoneCount3 <- c(negatives_iPhone, positives_iPhone)
galaxyCount3 <- c(negatives_Galaxy, positives_Galaxy)
```

Hide

```
results_df3 <- tibble(sentiment3, iphoneCount3, galaxyCount3)
```

Hide

```
results_df3
```

sentiment3 <chr>	iphoneCount3 <dbl>	galaxyCount3 <dbl>
negative	11324	11494
positive	9659	9489

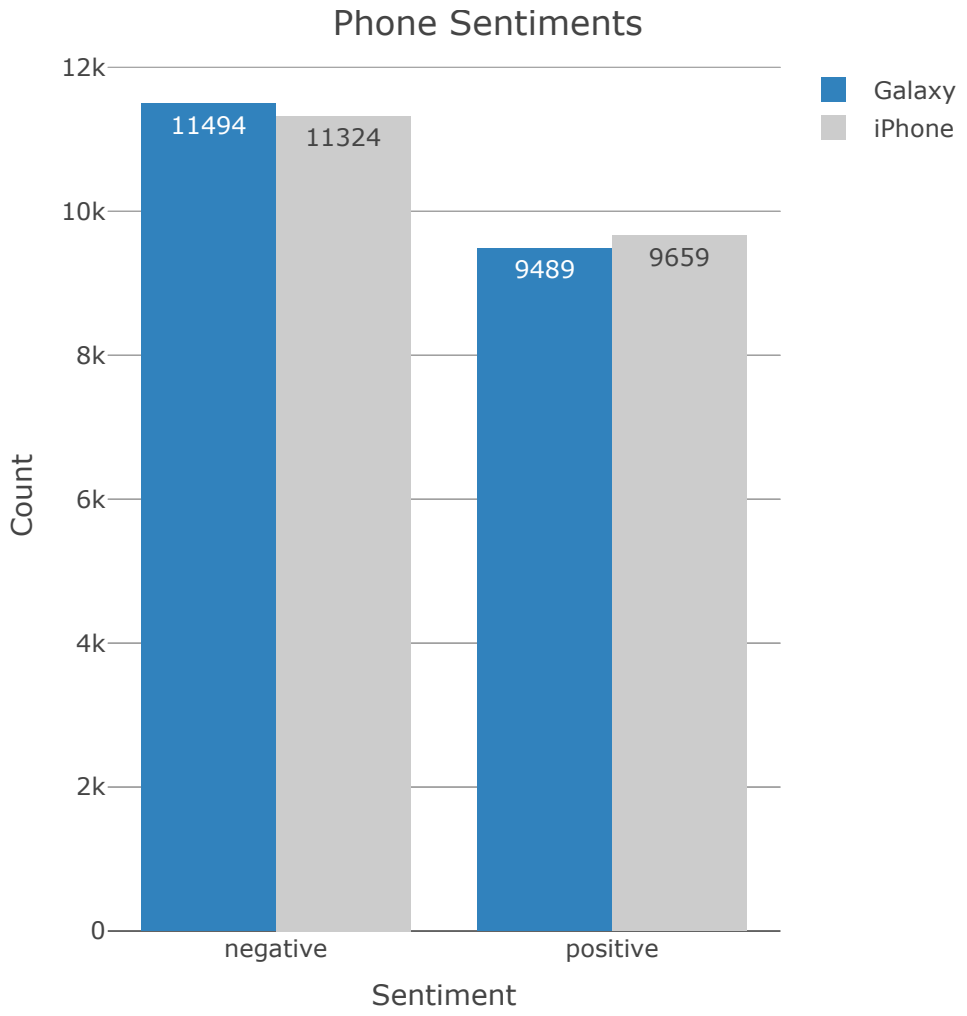
2 rows

Hide

```
#Animals <- c("giraffes", "orangutans", "monkeys")
#S#F_Zoo <- c(20, 14, 23)
#LA_Zoo <- c(12, 18, 29)
#data <- data.frame(Animals, SF_Zoo, LA_Zoo)

fig <- plot_ly(results_df, x = ~sentiment3, y = ~galaxyCount3, type = 'bar', name = 'Gal
axy',  marker = list(color = 'rgb(49,130,189)'), text=galaxyCount3,textposition = 'auto'
)
fig <- fig %>% add_trace(y = ~iphoneCount3, name = 'iPhone',  marker = list(color = 'rgb
(204,204,204)') ,text=iphoneCount3,textposition = 'auto')
fig <- fig %>% layout(title = 'Phone Sentiments',yaxis = list(title = 'Count'), xaxis =
 list(title = 'Sentiment'), barmode = 'group')

fig
```



Hide

```
# combine somewhat negative and somewhat positive
negatives_iPhone_per <- negatives_iPhone/sum(negatives_iPhone, positives_iPhone)
positives_iPhone_per <- positives_iPhone/sum(negatives_iPhone, positives_iPhone)
negatives_Galaxy_per <- negatives_Galaxy/sum(negatives_Galaxy,positives_Galaxy)
positives_Galaxy_per <- positives_Galaxy/sum(negatives_Galaxy,positives_Galaxy)
```

Hide

```
sentiment4 <- c("negative", "positive")
iphoneCount4 <- c(53.97, 46.03)
galaxyCount4 <- c(54.78, 45.22)
```

Hide

```
results_df4 <- cbind(sentiment4, iphoneCount4, galaxyCount4)
```

Hide

```
results_df4 <- tibble(sentiment4, iphoneCount4, galaxyCount4, iphoneCount3, galaxyCount
3)
results_df4
```

sentiment4	iphoneCount4	galaxyCount4	iphoneCount3	galaxyCount3
<chr>	<dbl>	<dbl>	<dbl>	<dbl>
negative	53.97	54.78	11324	11494
positive	46.03	45.22	9659	9489

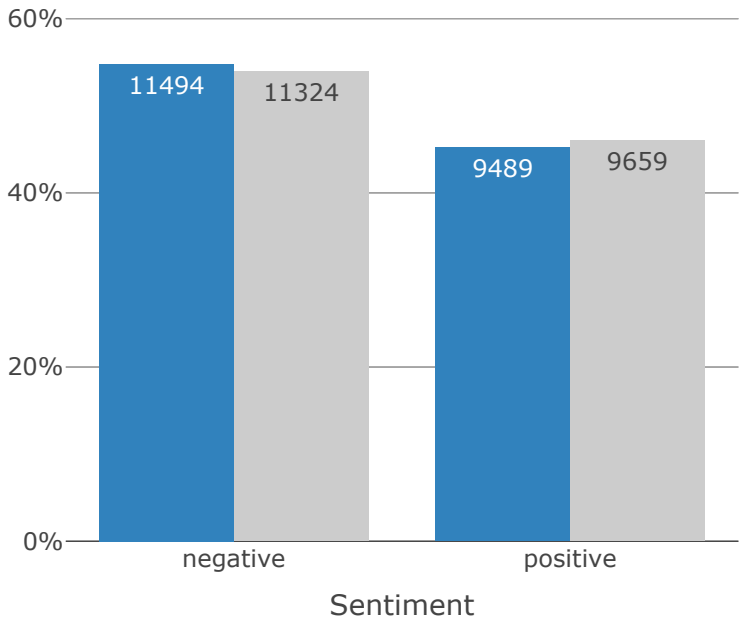
2 rows

Hide

```
#Animals <- c("giraffes", "orangutans", "monkeys")
#S#F_Zoo <- c(20, 14, 23)
#LA_Zoo <- c(12, 18, 29)
#data <- data.frame(Animals, SF_Zoo, LA_Zoo)

fig <- plot_ly(results_df, x = ~sentiment4, y = ~galaxyCount4, type = 'bar', name = 'Gal
axy',  marker = list(color = 'rgb(49,130,189)'), text=galaxyCount3,textposition = 'auto'
)
fig <- fig %>% add_trace(y = ~iphoneCount4, name = 'iPhone',  marker = list(color = 'rgb
(204,204,204)') ,text=iphoneCount3,textposition = 'auto')
fig <- fig %>% layout(title = 'Phone Sentiments by Percentage',yaxis = list(title = '',r
ange = c(0, 100), ticksuffix = "%"), xaxis = list(title = 'Sentiment'), barmode = 'grou
p')

fig
```


60%
40%
20%
0%
11494
11324
9489
9659
negative
positive
Sentiment