library(readxl)

mcdonalds <- "C:/Users/Kolbe/Downloads/McDonald\_s\_Reviews (1).xlsx"

mcdonalds

View(mcdonalds)

library(tidyverse)

library(stringr)

mcdonalds <- read\_excel("C:/Users/Kolbe/Downloads/McDonald\_s\_Reviews (1).xlsx")

mcdonalds

data <- mcdonalds %>%

unnest\_tokens(word, text) %>%

inner\_join(get\_sentiments("afinn"), by = "word")

sentiment <- as.data.frame(table(mcdonalds$review))

colnames(sentiment) = c("Sentiment", "Freq")

histplot1 = ggplot(sentiment) + aes(x=Sent)

overallsentiment <- as.data.frame(table(mcdonalds$review))

colnames(overallsentiment) = c("Sentiment", "Freq")

histplot1 = ggplot(sentiment) + aes(x=sentiment, y=Freq, fill = sentiment) + scale\_fill\_manual(values = c("indianred1", "deepskyblue", "chartreuse3"))

histPlot1 = histPlot1 + geom\_bar(stat="identity")

histPlot1 = histPlot1 + geom\_bar(stat="identity")

histplot1 = histPlot1 + geom\_bar(stat="identity")

histplot1 = histplot1 + geom\_bar(stat="identity")

histplot1

histplot1 <- ggplot(data, aes(x = values)) +

geom\_histogram(binwidth = 1, fill = "skyblue", color = "black") +

labs(title = "Histogram", x = "Values", y = "Frequency")

histplot1 <- ggplot(overallsentiment, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

geom\_bar(stat = "identity") +  # Use geom\_bar with stat = "identity" for the bar plot

scale\_fill\_manual(values = c("indianred1", "deepskyblue", "chartreuse3")) +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency")

histplot1

print(histplot1)

histplot1 <- ggplot(overallsentiment\_grouped, aes(x = Sentiment\_Grouped, y = Freq, fill = Sentiment\_Grouped)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

overallsentiment\_grouped <- transform(overallsentiment,

Sentiment\_Grouped = ifelse(Sentiment %in% top\_sentiments$Sentiment,

as.character(Sentiment), "Other"))

N <- 10  # You can adjust this number to show more or fewer top sentiments

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

overallsentiment\_grouped <- transform(overallsentiment,

Sentiment\_Grouped = ifelse(Sentiment %in% top\_sentiments$Sentiment,

as.character(Sentiment), "Other"))

histplot1 <- ggplot(overallsentiment\_grouped, aes(x = Sentiment\_Grouped, y = Freq, fill = Sentiment\_Grouped)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))  # Rotate x-axis labels for better readability

histplot1

N <- 6  # You can adjust this number to show more or fewer top sentiments

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

N <- 10  # You can adjust this number to show more or fewer top sentiments

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

overallsentiment\_grouped <- transform(overallsentiment,

Sentiment\_Grouped = ifelse(Sentiment %in% top\_sentiments$Sentiment,

as.character(Sentiment), "Other"))

histplot1 <- ggplot(overallsentiment\_grouped, aes(x = Sentiment\_Grouped, y = Freq, fill = Sentiment\_Grouped)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))  # Rotate x-axis labels for better readability

histplot1

N <- 10  # You can adjust this number to show more or fewer top sentiments

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

histplot1 <- ggplot(overallsentiment\_grouped, aes(x = Sentiment\_Grouped, y = Freq, fill = Sentiment\_Grouped)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))  # Rotate x-axis labels for better readability

histplot1

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

histplot1

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

+     geom\_bar(stat = "identity") +

+     scale\_fill\_discrete(name = "Sentiment") +

+     labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

+     theme(axis.text.x = element\_text(angle = 45, hjust = 1))

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

histplot1

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

geom\_bar(stat = "identity") +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

histplot1

mcdonalds\_tokens <- mcdonalds %>%

unnest\_tokens(word, review)

library(dplyr)

mcdonalds\_tokens <- mcdonalds %>%

unnest\_tokens(word, review)

library(tidytext)

mcdonalds\_tokens <- mcdonalds %>%

unnest\_tokens(word, review)

data("bing")

sentiments <- mcdonalds\_tokens %>%

inner\_join(get\_sentiments("bing"), by = "word")

sentiment\_scores <- sentiments %>%

group\_by(review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores <- sentiments %>%

group\_by(review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores <- sentiments %>%

group\_by(mcdonalds$review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores <- sentiments %>%

group\_by(mcdonalds\_tokens$reviewer\_id) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%  # Ensure 'review' column is converted to character type

unnest\_tokens(word, review)

data("bing")

sentiments <- mcdonalds\_tokens %>%

inner\_join(get\_sentiments("bing"), by = "word")

sentiment\_scores <- sentiments %>%

group\_by(word, review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

mcdonalds$review

sentiment\_scores <- sentiments %>%

group\_by(word, mcdonalds$review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

str(mcdonalds)

sentiment\_scores <- sentiments %>%

group\_by(word, mcdonalds$review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores <- sentiments %>%

group\_by(review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores <- sentiments %>%

group\_by(rating) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

sentiment\_scores

data("bing")

sentiments <- mcdonalds %>%

inner\_join(get\_sentiments("bing"), by = "word")

data("bing")

sentiments <- mcdonalds %>%

inner\_join(get\_sentiments("bing"), by = "word")

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%

unnest\_tokens(word, review)

ata("bing")

data("bing")

sentiments <- mcdonalds\_tokens %>%

inner\_join(get\_sentiments("bing"), by = "word")

sentiment\_scores <- sentiments %>%

group\_by(review) %>%

summarize(sentiment\_score = sum(ifelse(sentiment == "positive", 1, -1)))

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%

unnest\_tokens(word, review)

term\_frequency <- mcdonalds\_tokens %>%

count(word, sort = TRUE)

term\_frequency

N <- 20  # Number of top words to display in the plot

top\_words <- head(term\_frequency, N)

term\_plot <- ggplot(top\_words, aes(x = reorder(word, n), y = n)) +

geom\_bar(stat = "identity", fill = "skyblue") +

labs(title = "Top Words in McDonald's Reviews", x = "Word", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

term\_plot

library(tokenizers)

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%

unnest\_tokens(word, review)

tf <- mcdonalds\_tokens %>%

count(review, word) %>%

bind\_tf\_idf(word, review, n)

str(mcdonalds\_tokens)

stop\_words <- stopwords("en", source = "stopwords-iso")

library(stopwords)

stop\_words <- stopwords("en", source = "stopwords-iso")

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%

unnest\_tokens(word, review) %>%

anti\_join(stop\_words)

mcdonalds\_tokens <- mcdonalds %>%

mutate(review = as.character(review)) %>%

unnest\_tokens(word, review)

mcdonalds\_tokens <- anti\_join(mcdonalds\_tokens, stop\_words, by = "word")

term\_frequency

library(tm)

library(wordcloud)

install.packages("wordcloud")

library(wordcloud)

corpus <- Corpus(VectorSource(mcdonalds$review))

corpus <- tm\_map(corpus, content\_transformer(tolower))

corpus <- tm\_map(corpus, removePunctuation)

corpus <- tm\_map(corpus, removeNumbers)

corpus <- tm\_map(corpus, removeWords, stopwords("en"))

tdm <- TermDocumentMatrix(corpus)

matrix <- as.matrix(tdm)

word\_freq <- sort(rowSums(matrix), decreasing = TRUE)

wordcloud(words = names(word\_freq), freq = word\_freq,

min.freq = 10, max.words = 100, random.order = FALSE,

colors = brewer.pal(8, "Dark2"))

mcdonalds

library(tidyr)

library(scales)

sentiments <- mcdonalds %>%

mutate(sentiment = get\_sentiment(review)) %>%

count(store\_address, sentiment) %>%

spread(sentiment, n, fill = 0)

library(tidytext)

sentiments <- mcdonalds %>%

mutate(sentiment = get\_sentiments(review)) %>%

count(store\_address, sentiment) %>%

spread(sentiment, n, fill = 0)

sentiments\_plot <- top\_sentiments %>%

gather(key = "sentiment", value = "count", -store\_address)

top\_sentiments

ggplot(top\_sentiments, aes(x = store\_address, y = count, fill = sentiment)) +

geom\_bar(stat = "identity") +

labs(title = "Top Sentiments by Store Address",

x = "Store Address",

y = "Sentiment Count") +

scale\_fill\_brewer(palette = "Set1") +  # Change palette if desired

theme\_minimal()

set.seed(123)

top\_sentiments <- data.frame(

store\_address = rep(LETTERS[1:5], each = 3),

sentiment = rep(c("positive", "negative", "neutral"), times = 5),

count = sample(10:50, 15, replace = TRUE)

)

ggplot(top\_sentiments, aes(x = store\_address, y = count, fill = sentiment)) +

geom\_bar(stat = "identity") +

labs(title = "Top Sentiments by Store Address",

x = "Store Address",

y = "Sentiment Count") +

scale\_fill\_brewer(palette = "Set1") +  # Change palette if desired

theme\_minimal()

set.seed(123)

top\_sentiments <- data.frame(

store\_address = mcdonalds$store\_address,

sentiment = rep(c("positive", "negative", "neutral"), times = 5),

count = sample(10:50, 15, replace = TRUE)

)

top\_sentiments <- data.frame(

store\_address = rep(unique(mcdonalds$store\_address), each = 3), # Repeats each address 3 times for 3 sentiments

sentiment = rep(c("positive", "negative", "neutral"), times = n\_distinct(mcdonalds$store\_address)), # Repeat sentiments for each address

count = sample(10:50, 3 \* n\_distinct(mcdonalds$store\_address), replace = TRUE) # Random counts

)

ggplot(top\_sentiments, aes(x = store\_address, y = count, fill = sentiment)) +

geom\_bar(stat = "identity") +

labs(title = "Top Sentiments by Store Address",

x = "Store Address",

y = "Sentiment Count") +

scale\_fill\_brewer(palette = "Set1") +  # Change palette if desired

theme\_minimal()

selected\_addresses <- sample(unique(mcdonalds$store\_address), 20)

top\_sentiments <- data.frame(

store\_address = rep(selected\_addresses, each = 3), # Repeats each address 3 times for 3 sentiments

sentiment = rep(c("positive", "negative", "neutral"), times = 20), # Repeat sentiments for each address

count = sample(10:50, 3 \* 20, replace = TRUE) # Random counts

)

ggplot(top\_sentiments, aes(x = store\_address, y = count, fill = sentiment)) +

geom\_bar(stat = "identity") +

labs(title = "Top Sentiments by Store Address",

x = "Store Address",

y = "Sentiment Count") +

scale\_fill\_brewer(palette = "Set1") +  # Change palette if desired

theme\_minimal()

mcdonalds <- mcdonalds %>%

mutate(state = str\_extract(store\_address, \\b[A-Z]{2}\\b))

mcdonalds

head(mcdonalds)

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

scale\_fill\_discrete(name = "Sentiment") +

labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

theme(axis.text.x = element\_text(angle = 45, hjust = 1))

histplot1

overallsentiment\_grouped <- transform(overallsentiment,

Sentiment\_Grouped = ifelse(Sentiment %in% top\_sentiments$Sentiment,

as.character(Sentiment), "Other"))

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

library(readxl)

mcdonalds <- "C:/Users/Kolbe/Downloads/McDonald\_s\_Reviews (1).xlsx"

View(mcdonalds)

mcdonalds <- read\_excel("C:/Users/Kolbe/Downloads/McDonald\_s\_Reviews (1).xlsx")

mcdonalds

library(tidyverse)

library(stringr)

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

overallsentiment\_grouped <- transform(overallsentiment,

Sentiment\_Grouped = ifelse(Sentiment %in% top\_sentiments$Sentiment,

as.character(Sentiment), "Other"))

N <- 5

top\_sentiments <- head(overallsentiment[order(-overallsentiment$Freq), ], N)

top\_sentiments <- subset(top\_sentiments, Sentiment != "Other")

histplot1 <- ggplot(top\_sentiments, aes(x = Sentiment, y = Freq, fill = Sentiment)) +

+     geom\_bar(stat = "identity") +

+     scale\_fill\_discrete(name = "Sentiment") +

+     labs(title = "Overall Sentiment", x = "Sentiment", y = "Frequency") +

+     theme(axis.text.x = element\_text(angle = 45, hjust = 1))