## Ads project1

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## Section 1: Check and install needed packages. Load the libraries and functions.

```
packages.used<-c("ggplot2","dplyr","tibble","tidyr","stringr", "tidytext","topicmodels","wordcloud",</pre>
                  "ggridges", 'igraph', 'ggraph', 'sentimentr', "devtools",
                  'exploratory', "ldatuning", 'CTM', 'purrr', 'stm', 'corpus'
                  ,'tm','quanteda')
# check packages that need to be installed.
packages.needed <- setdiff(packages.used, intersect(installed.packages()[,1], packages.used))</pre>
# install additional packages
if(length(packages.needed) > 0) {
  install.packages(packages.needed, dependencies = TRUE, repos = 'http://cran.us.r-project.org')
#devtools::install_qithub("exploratory-io/exploratory_func")
library(ggplot2)
library(dplyr)
library(tibble)
library(tidyr)
library(stringr)
library(tidytext)
library(topicmodels)
library(RColorBrewer)
library(wordcloud)
library(ggridges)
library(igraph)
library(ggraph)
library(sentimentr)
library(syuzhet)
library(broom)
library(urltools)
library(exploratory)
library(ldatuning)
library(purrr)
library(CTM)
library(stm)
library(corpus)
library(tm)
library(quanteda)
source("../libs/multiplot.R")
```