

Data 115 Final Project by Jaehong Lee

Jaehong Lee

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```
library(tidyverse) library(rmarkdown)
```

```
superbowl_ads_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester  
CPTS 121/Csv data to use for a data final project/superbowl-ads.csv", header = T)  
View(superbowl_ads_dataframe) head(superbowl_ads_dataframe)  
summary(superbowl_ads_dataframe)
```

```
predictor1 <- superbowl_ads_dataframe[,5] predictor2 <- superbowl_ads_dataframe[,6]  
predictor3 <- superbowl_ads_dataframe[,7] predictor4 <- superbowl_ads_dataframe[,8]  
predictor5 <- superbowl_ads_dataframe[,9] predictor6 <- superbowl_ads_dataframe[,10]  
predictor7 <- superbowl_ads_dataframe[,11]
```

```
#model <- glm(predictor1 ~ predictor2 + predictor3 + predictor4 + predictor5 + predictor6  
+ predictor7, data = superbowl_ads_dataframe, family = binomial) # Extract Specific  
columns. Alt + - will print out an arrow. #data.frame is a function for extracting specific  
columns. extract1 <-  
data.frame(superbowl_ads_dataframe$year, superbowl_ads_dataframe$brand,  
superbowl_ads_dataframe$youtube_url) print(extract1) view(extract1)
```

```
budlight_sales_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester  
CPTS 121/Csv data to use for a data final project/monthly Budlight sales.csv")  
budweiser_sales_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester  
CPTS 121/Csv data to use for a data final project/monthly sales for Budweiser.csv")  
hyundai_sales_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester  
CPTS 121/Csv data to use for a data final project/monthly sales for Hyundai cars.csv")  
kia_sales_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester CPTS  
121/Csv data to use for a data final project/monthly sales for Kia cars.csv")  
toyota_sales_dataframe <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester CPTS  
121/Csv data to use for a data final project/monthly sales for Toyota cars.csv")
```

```
view(budlight_sales_dataframe) view(budweiser_sales_dataframe)  
view(hyundai_sales_dataframe) view(kia_sales_dataframe) view(toyota_sales_dataframe)
```

```
ggplot(hyundai_sales_dataframe) ggplot(hyundai_sales_dataframe, mapping = aes(x=  
month, y = sales, color = factor(year))) + geom_point() + labs(title = "Changes of Hyundai  
sales in the US from 2015 to 2019")
```

```
ggplot(budlight_sales_dataframe) ggplot(budlight_sales_dataframe, mapping = aes(x=  
month, y = sales, color = factor(year))) + geom_point() + labs(title = "Changes of Budlight  
sales in the US from 2015 to 2019")
```

```
ggplot(budweiser_sales_dataframe) ggplot(budweiser_sales_dataframe, mapping = aes(x=
month, y = sales, color = factor(year))) + geom_point() + labs(y = "sales in millions", title =
"Changes of Budweiser sales in the US from 2015 to 2019")
```

```
#####Budlight#####
# budlight_data2015 <- budlight_sales_dataframe[1:11,] ggplot(budlight_data2015)
ggplot(budlight_data2015, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Budlight sales after 0 times of ads during the Superbowl 2015")
```

```
budlight_data2016 <- budlight_sales_dataframe[12:23,] ggplot(budlight_data2016)
ggplot(budlight_data2016, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Budlight sales after 1 times of ads during the Superbowl 2016")
```

```
budlight_data2017 <- budlight_sales_dataframe[24:35,] ggplot(budlight_data2017)
ggplot(budlight_data2017, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Budlight sales after 0 times of ads during the Superbowl 2017")
```

```
budlight_data2018 <- budlight_sales_dataframe[36:47,] ggplot(budlight_data2018)
ggplot(budlight_data2018, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Budlight sales after 2 times of ads during the Superbowl 2018")
```

```
budlight_data2019 <- budlight_sales_dataframe[48:59,] ggplot(budlight_data2019)
ggplot(budlight_data2019, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Budlight sales after 4 times of ads during the Superbowl 2019")
```

```
#####Budweiser#####
##### budweiser_data2015 <- budweiser_sales_dataframe[1:11,]
ggplot(budweiser_data2015) ggplot(budweiser_data2015, mapping = aes(x= month, y =
sales, group = 1, color = factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.",
"Feb.", "Mar.", "Apr.", "May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line()
+ labs(y = "sales in millions", title = "Budweiser sales after 3 times of ads during the
Superbowl 2015")
```

```
budweiser_data2016 <- budweiser_sales_dataframe[12:23,] ggplot(budweiser_data2016)
ggplot(budweiser_data2016, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
```

```
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.")] + geom_line() + labs(y="sales in millions", title = "Budweiser sales after 2 times of ads during the Superbowl 2016")
```

```
budweiser_data2017 <- budweiser_sales_dataframe[24:35,] ggplot(budweiser_data2017)
ggplot(budweiser_data2017, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(y="sales in millions", title = "Budweiser sales after 1 times of ads during the Superbowl 2017")
```

```
budweiser_data2018 <- budweiser_sales_dataframe[36:47,] ggplot(budweiser_data2018)
ggplot(budweiser_data2018, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(y="sales in millions", title = "Budweiser sales after 1 times of ads during the Superbowl 2018")
```

```
budweiser_data2019 <- budweiser_sales_dataframe[48:59,] ggplot(budweiser_data2019)
ggplot(budweiser_data2019, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(y="sales in millions", title = "Budweiser sales after 1 times of ads during the Superbowl 2019")
```

```
#####Hyundai#####
##### hyundai_data2015 <- hyundai_sales_dataframe[1:11,] ggplot(hyundai_data2015)
ggplot(hyundai_data2015, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(title =
"Hyundai sales after 0 times of ads during the Superbowl 2015")
```

```
hyundai_data2016 <- hyundai_sales_dataframe[12:23,] ggplot(hyundai_data2016)
ggplot(hyundai_data2016, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(title =
"Hyundai sales after 2 times of ads during the Superbowl 2016")
```

```
hyundai_data2017 <- hyundai_sales_dataframe[24:35,] ggplot(hyundai_data2017)
ggplot(hyundai_data2017, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(title =
"Hyundai sales after 1 times of ads during the Superbowl 2017")
```

```
hyundai_data2018 <- hyundai_sales_dataframe[36:47,] ggplot(hyundai_data2018)
ggplot(hyundai_data2018, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))] + geom_line() + labs(title =
"Hyundai sales after 0 times of ads during the Superbowl 2018")
```

```
hyundai_data2019 <- hyundai_sales_dataframe[48:59,] ggplot(hyundai_data2019)
ggplot(hyundai_data2019, mapping = aes(x= month, y = sales, group = 1, color =
```

```
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title =
"Hundai sales after 1 times of ads during the Superbowl 2019")
```

```
#####Hyndai#####
#####
```

```
#####kia#####
##### kia_data2015 <- hyundai_sales_dataframe[1:11,] ggplot(kia_data2015)
ggplot(kia_data2015, mapping = aes(x= month, y = sales, group = 1, color = factor(year))) +
geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.", "May.", "Jun.", "Jul.",
"Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Kia sales after 1 times of
ads during the Superbowl 2015")
```

```
hyundai_data2016 <- hyundai_sales_dataframe[12:23,] ggplot(hyundai_data2016)
ggplot(hyundai_data2016, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Kia
sales after 1 times of ads during the Superbowl 2016")
```

```
hyundai_data2017 <- hyundai_sales_dataframe[24:35,] ggplot(hyundai_data2017)
ggplot(hyundai_data2017, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Kia
sales after 1 times of ads during the Superbowl 2017")
```

```
hyundai_data2018 <- hyundai_sales_dataframe[36:47,] ggplot(hyundai_data2018)
ggplot(hyundai_data2018, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Kia
sales after 1 times of ads during the Superbowl 2018")
```

```
hyundai_data2019 <- hyundai_sales_dataframe[48:59,] ggplot(hyundai_data2019)
ggplot(hyundai_data2019, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Kia
sales after 2 times of ads during the Superbowl 2019")
```

```
#####kia#####
#####
```

```
#####toyota#####
##### toyota_data2015 <- toyota_sales_dataframe[1:11,] ggplot(toyota_data2015)
ggplot(toyota_data2015, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Toyota
sales after 1 times of ads during the Superbowl 2015")
```

```
toyota_data2016 <- toyota_sales_dataframe[12:23,] ggplot(toyota_data2016)
ggplot(toyota_data2016, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Toyota
sales after 1 times of ads during the Superbowl 2016")
```

```
toyota_data2017 <- toyota_sales_dataframe[24:35,] ggplot(toyota_data2017)
ggplot(toyota_data2017, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Toyota
sales after 0 times of ads during the Superbowl 2017")
```

```
toyota_data2018 <- toyota_sales_dataframe[36:47,] ggplot(toyota_data2018)
ggplot(toyota_data2018, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Toyota
sales after 1 times of ads during the Superbowl 2018")
```

```
toyota_data2019 <- toyota_sales_dataframe[48:59,] ggplot(toyota_data2019)
ggplot(toyota_data2019, mapping = aes(x= month, y = sales, group = 1, color =
factor(year))) + geom_point() + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.",
"May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.)) + geom_line() + labs(title = "Toyota
sales after 2 times of ads during the Superbowl 2019")
```

```
#####toyota#####
#####
```

```
influencers_in_ads_survey <- read.csv("C:/Users/USER/Desktop/2023 Spring Semester
CPTS 121/Csv data to use for a data final project/Whatsgoodly - Thought Catalog
Influencers (1).csv") view(influencers_in_ads_survey)
```

```
ads_survey_result <- influencers_in_ads_survey[,c(1, 4, 5)] view(ads_survey_result)
summary(ads_survey_result) survey_responses_when <-
influencers_in_ads_survey[c(4004:4774),c(1, 4, 5)] survey_responses_influencer <-
influencers_in_ads_survey[c(1:2915),c(1, 4, 5)] survey_responses_platform <-
influencers_in_ads_survey[c(609:1863),c(1, 4, 5)]
```

```
view(survey_responses_when) view(survey_responses_influencer)
view(survey_responses_platform)
```

```
survey_responses_platform <- data.frame(Count = 1:251) # facebook 31626
sum(survey_responses_platform$Count) survey_responses_platform <- data.frame(Count =
252:502) # instagram 94627 sum(survey_responses_platform$Count)
survey_responses_platform <- data.frame(Count = 503:753) # none 157628
sum(survey_responses_platform$Count) survey_responses_platform <- data.frame(Count =
754:1004) # snapchat 220629 sum(survey_responses_platform$Count)
survey_responses_platform <- data.frame(Count = 1005:1255) # twitter 283630
sum(survey_responses_platform$Count)
```

```

survey_responses_when <- data.frame(Count = 1:247) # Yes very much so. 30628
sum(survey_responses_when$Count) survey_responses_when <- data.frame(Count =
248:494) # somewhat 91637 sum(survey_responses_when$Count)
survey_responses_when <- data.frame(Count = 510:756) # No, its whatever. 156351
sum(survey_responses_when$Count)

```

```

survey_responses_influencer <- data.frame(Count = 1:251) # twitter 31626
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 252:402) # This is lame 49377
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 1444:1706) # snapchat 414225
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 1707:1858) # other (comment) when an influencer 270940
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 1859:2109) # None (social media) 497984
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 2110:2261) # Is the product cool? 332196
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 2262:2512) # instagram 599137
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 2513:2664) # Get that money! 393452
sum(survey_responses_influencer$Count) survey_responses_influencer <-
data.frame(Count = 2665:2915) # facebook 700290
sum(survey_responses_influencer$Count)

```

```

which_platform_responses <- c(731916, 693764, 655612, 634854, 315256) options(scipen
= 999) platform_responses_names <- c("Facebook", "Instagram", "None", "Snapchat",
"Twitter") barplot(which_platform_responses) barplot(which_platform_responses,
names.arg = platform_responses_names, xlab = "Social media platform", ylab = "Number of
responses", main = "What social media has influenced your online shopping most?", col =
'orange') #(A total of 3031402 responses)

```

```

#####
#####

```

```

which_responses_when <- c(30628, 91637, 156351) options(scipen = 999)
which_responses_when_labels <- c("Yes, very much so", "somewhat", "No, it's whatever")
barplot(which_responses_when) barplot(which_responses_when, names.arg =
which_responses_when_labels, xlab = "Types of responses", ylab = "Number of responses",
main = "Does it annoy you when popular social media accounts endorse products or
services?", col = 'yellow') #(A total of 278616 responses)

```

```

#####
#####

```

```

which_influencer_responses <- c(49377, 393452, 332196, 270940) options(scipen = 999)
influencer_responses_labels <- c("This is lame", "Get that money!", "Is the product cool?",
"other (comments)") barplot(which_influencer_responses)
barplot(which_influencer_responses, names.arg = influencer_responses_labels, xlab =
"Types of responses", ylab = "Number of responses", main = "What do you think when an
influencer is obviously selling a product?", col = 'green') #(A total of 1045965 responses)

```

```

##Create a new dataframe budlight_linear_regression_data <- data.frame(
how_many_times_aired = c(0:4), average_annual_revenue = c(50024, 42282, 43188, 41680,
52329), average_first_quarter_revenue = c(11688, 9202, 10303, 10264, 12224),
stringsAsFactors = FALSE )

```

```

view(budlight_linear_regression_data)

```

```

plot(budlight_linear_regression_data$how_many_times_aired, budlight_linear_regression_data$average_annual_revenue, main = "Effects on how many ads aired during Super Bowl on Budlight company's revenue", xlab = "Number of times ads aired during Super Bowl", ylab = "Average revenue from that year (Millions of US $)", pch = 19, col = 'brown', cex = 3)

```

```

lm_result_budlight_annual <- lm(formula = how_many_times_aired ~
average_annual_revenue, data = budlight_linear_regression_data)
summary(lm_result_budlight_annual) abline(lm_result_budlight_annual)
#####
#####

```

```

ggplot(budlight_linear_regression_data, mapping = aes(x=how_many_times_aired, y =
average_annual_revenue)) + geom_point(size = 10, color = 'brown') +
geom_smooth(method = "lm", se = FALSE) + labs(x = "Number of times ads aired during
Super Bowl", y = "Average revenue from that year (Millions of US $)", title = "Effects on how
many ads aired during Super Bowl on Budlight company's annual revenue")

```

```

lm_result_budlight_annual <- lm(formula = how_many_times_aired ~
average_annual_revenue, data = budlight_linear_regression_data)
summary(lm_result_budlight_annual)

```

```

ggplot(budlight_linear_regression_data, mapping = aes(x=how_many_times_aired, y =
average_first_quarter_revenue)) + geom_point(size = 10, color = 'yellow') +
geom_smooth(method = "lm", se = FALSE) + labs(x = "Number of times ads aired during
Super Bowl", y = "Average first quarterly revenue from that year (Millions of US $)", title =
"Effects on how many ads aired during Super Bowl on Budlight company's first quarterly
revenue") lm_result_budlight_quaterly <- lm(formula = how_many_times_aired ~
average_first_quarter_revenue, data = budlight_linear_regression_data)
summary(lm_result_budlight_quaterly)

```

```
#####
#####
```

```
#dt <- survey_responses_when(x = c("No, it's whatever", "Somewhat", "", "C", "C", "B"))

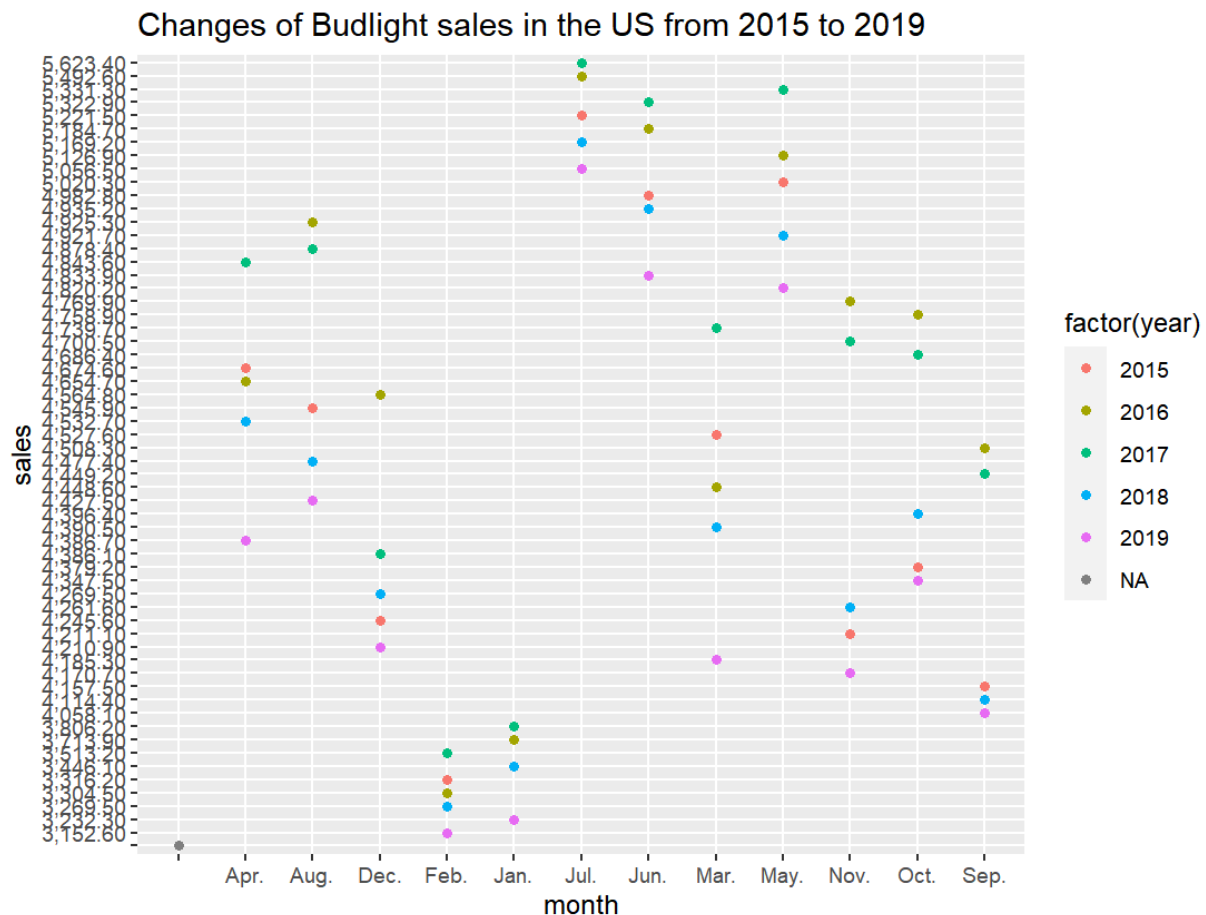
#ggplot(data = hyundai_sales_dataframe)

#ggplot(data = hyundai_sales_dataframe) + #geom_point(mapping = aes(x = month, y =
sales, color = year)) + scale_x_discrete(limits = c("Jan.", "Feb.", "Mar.", "Apr.", "May.", "Jun.",
"Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))

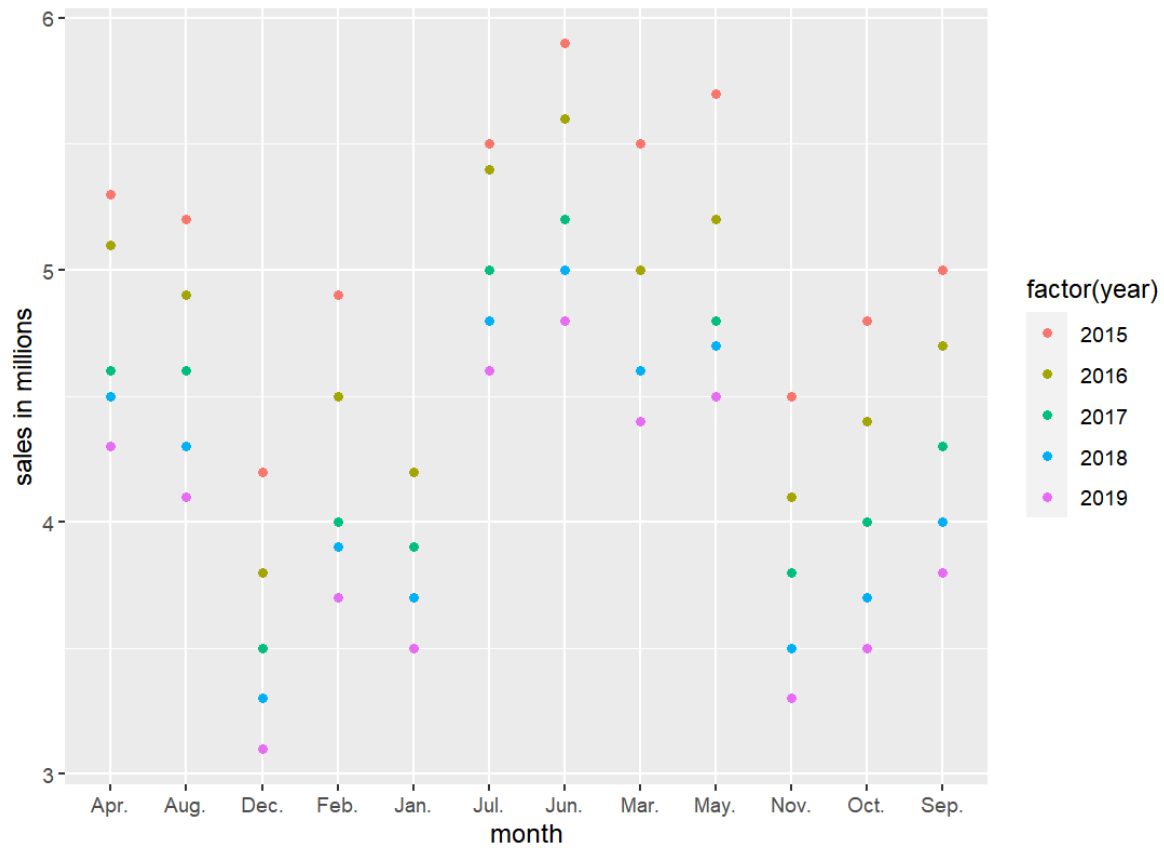
#hyundai_sales_dataframe$month <- factor(hyundai_sales_dataframe$month, levels =
c("Jan.", "Feb.", "Mar.", "Apr.", "May.", "Jun.", "Jul.", "Aug.", "Sep.", "Oct.", "Nov.", "Dec.))

#ggplot(data = hyundai_sales_dataframe) + # geom_point(mapping = aes(x = month, y =
sales, color = year)) + # scale_color_manual(values = c("2015" = "green", "2016" = "yellow",
"2017" = "orange", "2018" = "blue", "2019" = "brown"))
```

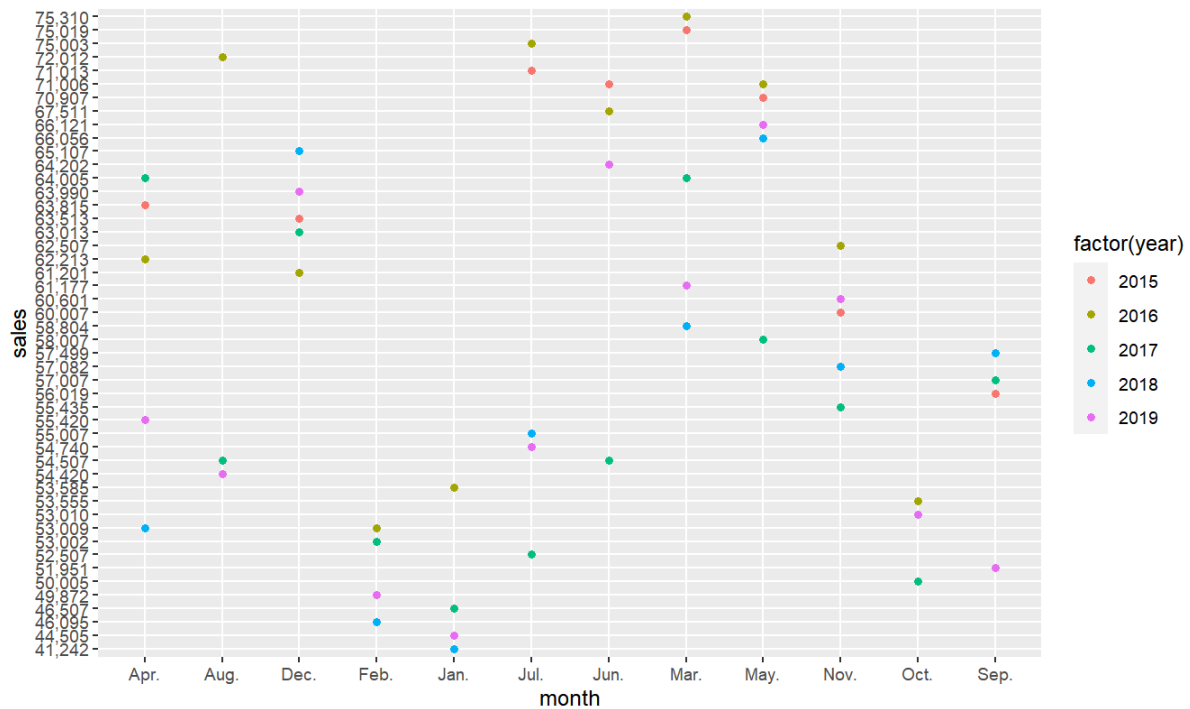
Including Plots

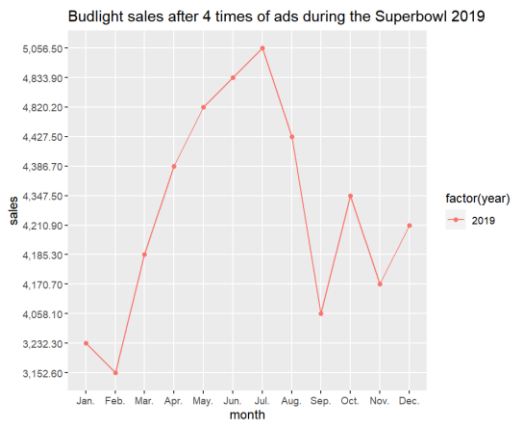
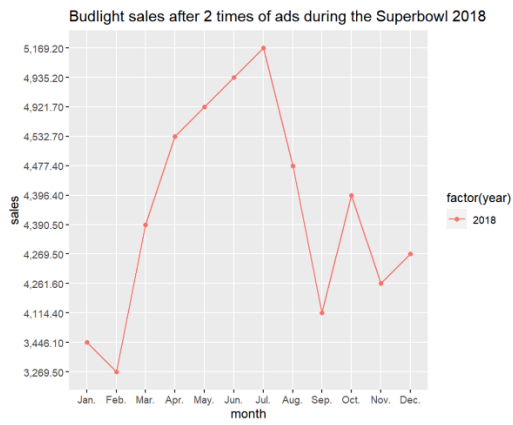
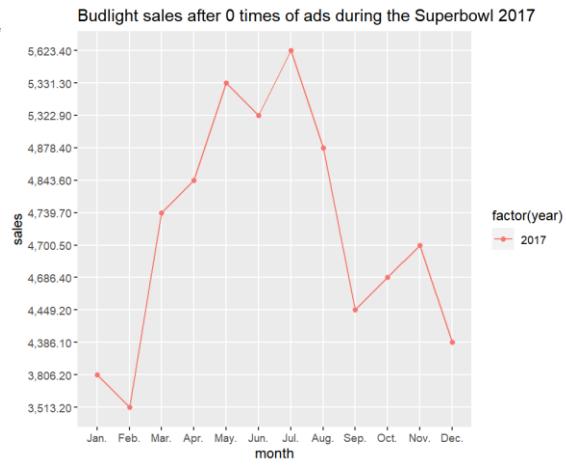
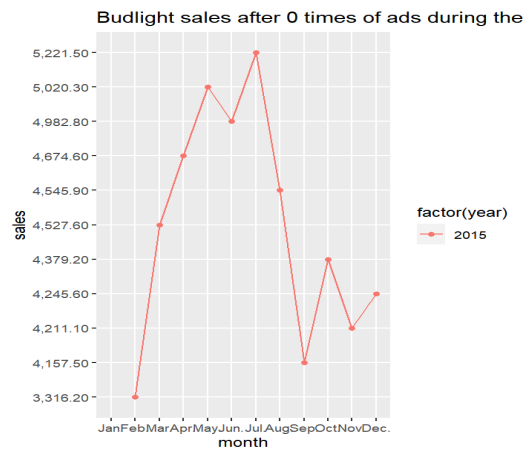


Changes of Budweiser sales in the US from 2015 to 2019

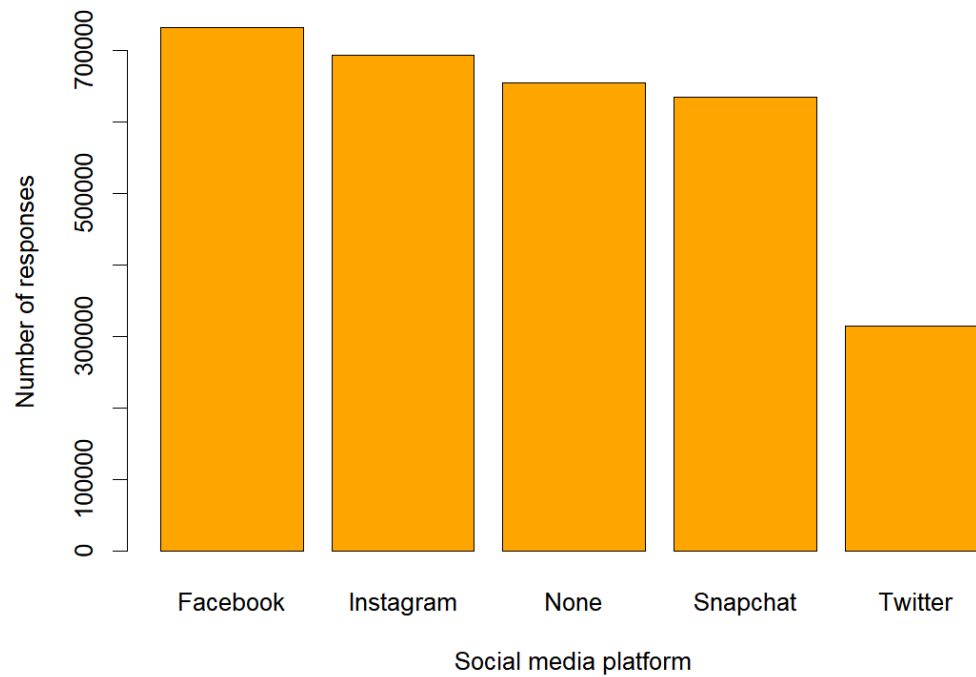


Changes of Hyundai sales in the US from 2015 to 2019

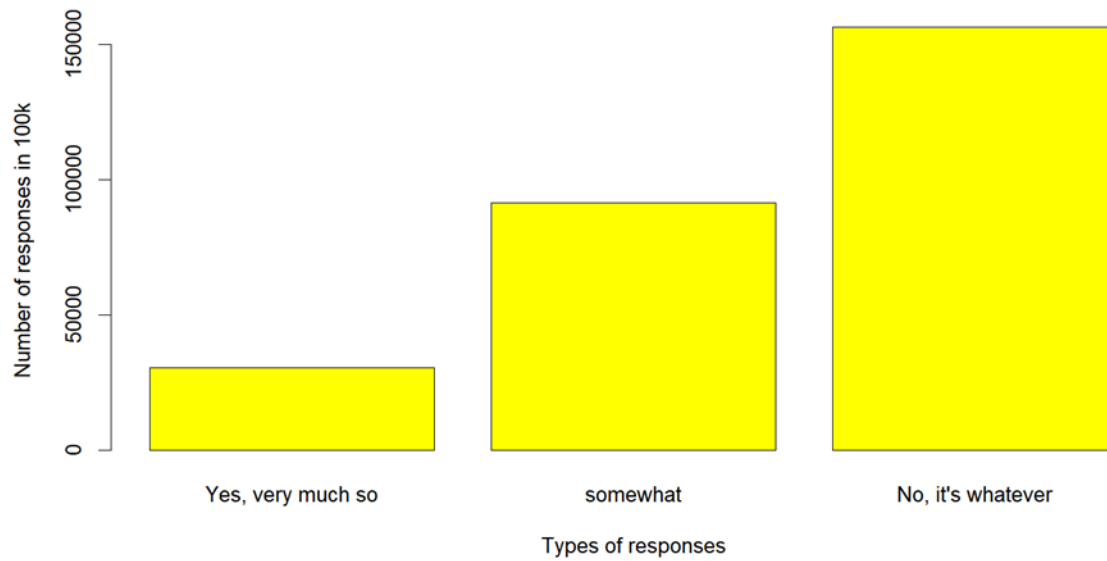




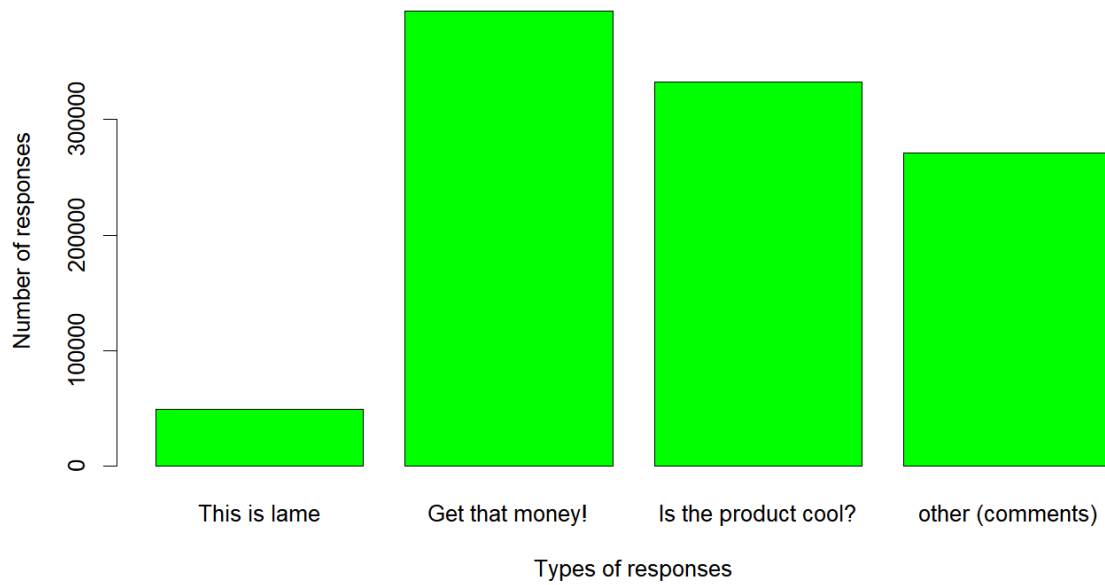
What social media has influenced your online shopping most?



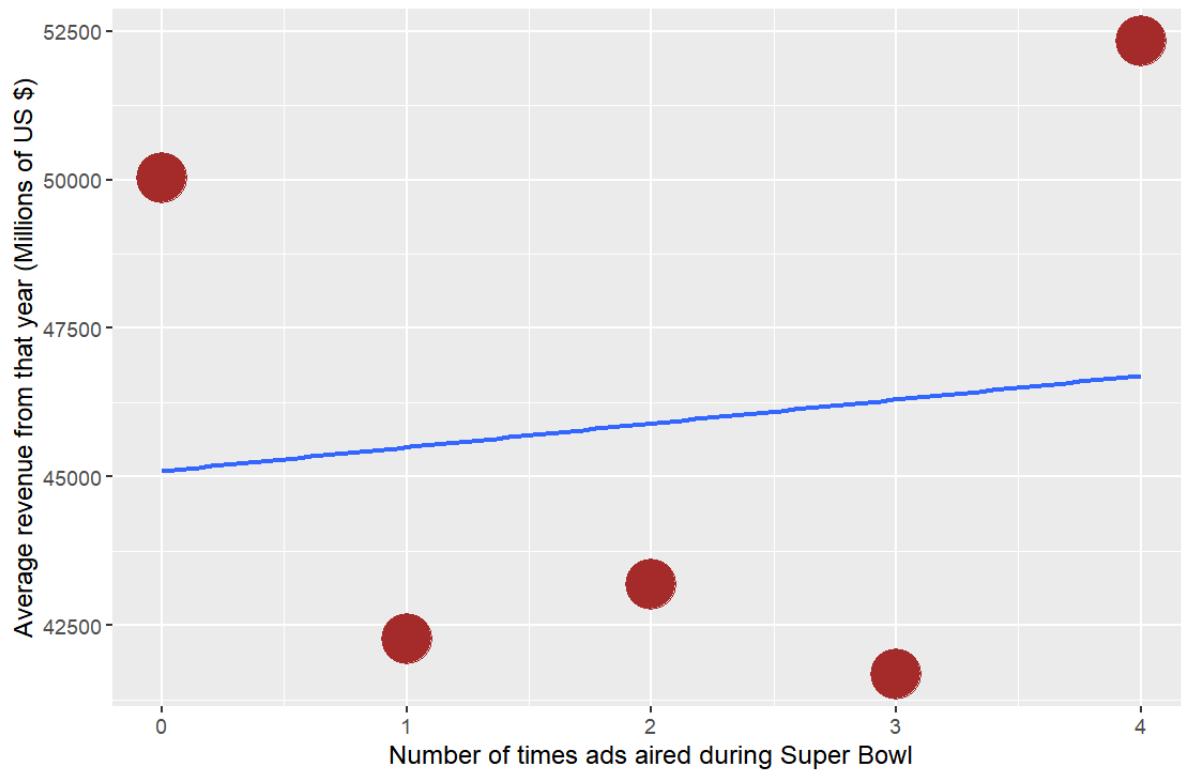
Does it annoy you when popular social media accounts endorse products or services?



What do you think when an influencer is obviously selling a product?



Effects on how many ads aired during Super Bowl on Budlight company's annual revenue



Effects on how many ads aired during Super Bowl
on Budlight company's first quaterly revenue

