

# STA 210: Lab 2

*Your Name*

## Question 1

a

b

## Question 2

```
bikeshare <- bikeshare %>%  
  mutate(holiday.new = as.factor(  
    case_when (  
      holiday==0 ~ "non-holiday",  
      holiday==1 ~ "holiday",  
    )  
  )  
)
```

*# Use the glimpse() function to confirm that bikeshare contains the variable holiday.new*

## Question 3

a

*# Graph the distributions of cnt for holidays versus non-holidays.*

b

*# Calculate separate summary statistics to describe the distribution of cnt for holidays versus non-holidays.*

c

## Question 4

a

```
holiday <- bikeshare %>% filter(holiday.new=="holiday")
```

*#Create an object called non.holiday that includes only the days in the data set that*

b

*#Conduct a two-sample t ypothesis test to determine whether there is a significant dif*

c

*#Use the t.test() function to calculate a 99% confidence interval to estimate the mean*

d

## Question 5

a

*# Conduct an ANOVA test to determine whether there is a significant difference between*

b

c

## Question 6