
title: "graphs"

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date: "11/11/2021"

output:

word_document: default

html_document: default

pdf_document: default

```
```${r setup}
```

```
data(airquality)
```

```
str(airquality)
```

```
```\n
```

```
## R Markdown
```

```
```${r cars}
```

```
str(airquality)
```

```
```\n
```

```
## Including Plots
```

You can also embed plots, for example:

```
```${r plot1}
```

```
plot(airquality$Ozone)
```

```
```
```

```
```${r pressure }
```

```
summary(airquality)
```

```
```
```

```
```${r girdchart12}
```

```
par(mfrow=c(3,3), mar=c(2,5,2,1), las=1, bty="n")
```

```
plot(airquality$Ozone)
```

```
plot(airquality$Ozone, airquality$Wind)
```

```
plot(airquality$Ozone, type="c")
```

```
plot(airquality$Ozone, type="s")
```

```
plot(airquality$Ozone, type="h")
```

```
barplot(airquality$Ozone, main = 'Ozone Concentration in air', xlab = 'ozone levels', col='green', horiz = TRUE)
```

```
hist(airquality$Solar.R)
```

```
boxplot(airquality$Solar.R)
```

```
```
```

```
```${r girdchart2}
```

```
library(lattice)
```

```
#Loading the dataset
```

```
attach(mtcars)
```

```

gear_factor<-factor(gear,levels=c(3,4,5),
labels=c("3gears","4gears","5gears"))

cyl_factor <-factor(cyl,levels=c(4,6,8),
labels=c("4cyl","6cyl","8cyl"))

densityplot(~mpg, main="Density Plot", xlab="Miles per Gallon")

```

```

```{r girdchart4}

xyplot(mpg~wt|cyl_factor*gear_factor,
main="Scatterplots : Cylinders and Gears",
ylab="Miles/Gallon", xlab="Weight of Car")

```

```

```{r ggplot12}

library(ggplot2)

```

```

#Loading the dataset

```

```

attach(mtcars)

```

```

create factors with value labels

```

```

mtcars$gear <- factor(mtcars$gear,levels=c(3,4,5),
labels=c("3gears", "4gears", "5gears"))

mtcars$am <- factor(mtcars$am,levels=c(0,1),
labels=c("Automatic","Manual"))

mtcars$cyl <- factor(mtcars$cyl,levels=c(4,6,8),
labels=c("4cyl","6cyl","8cyl"))

```

```
```
```

```
```{r}
```

```
library(plotly)
```

```
p <- plot_ly(data = mtcars, x = ~hp, y = ~wt)
```

```
p
```

```
```
```

```
```{r}
```

```
p <- plot_ly(data = mtcars, x = ~hp, y = ~wt, marker = list(size = 10, color = 'rgba(255, 182, 193, .9)', line =
list(color = 'rgba(152, 0, 0, .8)', width = 2)))
```

```
p
```

```
```
```

```
```{r}
```

```
data1 <- rnorm(100, mean = 10)
```

```
data2 <- rnorm(100, mean = 0)
```

```
data3 <- rnorm(100, mean = -10)
```

```
x <- c(1:100)
```

```
data <- data.frame(x, data1, data2, data3)
```

```
p <- plot_ly(data, x = ~x)%>%
```

```
add_trace(y = ~data1, name = 'data1', mode = 'lines')%>%
```

```
add_trace(y = ~data2, name = 'data2', mode = 'lines+markers')%>%
```

```
add_trace(y = ~data3, name = 'data3', mode = 'markers')
```

```
p
```

```
```
```

```
```{r}
```

```
p <- plot_ly(data = mtcars, x = ~hp, y = ~wt, color = ~hp, size = ~hp)
```

p

...

```{r}

library(maps)

map(database='state')

data <- read.csv('ABC_locations.csv', sep=",")

head(data)

...

```{r}

data <- read.csv('ABC\_locations.csv', sep=",")

head(data)

...

```{r}

plot(data\$Longitude,data\$Latitude)

...

```{r}

# library(plotly)

# library(maps)

...

```{r ggplot2}

ggplot(data = mtcars, mapping = aes(x = wt, y = mpg, size = qsec)) + geom_point()

```
...
```

```
```{r ggplot1}
```

```
ggplot(data = mtcars, mapping = aes(x = wt, y = mpg)) + geom_point()
```

```
...
```

```
```{r girdchart3}
```

```
splo(mtcars[c(1,3,4,5,6)], main="MTCARS Data")
```

```
...
```

```
```{r girdchart}
```

```
boxplot(airquality[,0:4], main='Multiple Box plots')
```

```
...
```

```
```{r barplot6}
```

```
boxplot(airquality[,0:4], main='Multiple Box plots')
```

```
...
```

```
```{r barplot5}
```

```
boxplot(airquality$Solar.R)
```

```
...
```

```
```{r barplot4}
```

```
hist(airquality$Solar.R, main = 'Solar Radiation values in air',xlab = 'Solar rad.', col='red')
```

```
```
```

```
```{r barplot3}
```

```
hist(airquality$Solar.R)
```

```
```
```

```
```{r barplot2}
```

```
barplot(airquality$Ozone, main = 'Ozone Concentration in air', xlab = 'ozone levels', col='red', horiz = FALSE)
```

```
```
```

```
```{r barplot}
```

```
barplot(airquality$Ozone, main = 'Ozone Concentration in air', xlab = 'ozone levels', col = 'green', horiz = TRUE)
```

```
```
```

```
```{r plot4lines3}
```

```
plot(airquality$Ozone, xlab = 'ozone Concentration', ylab = 'No of Instances', main = 'Ozone levels in NY city', col = 'green')
```

```
```
```

```
```{r plot4lines2}
```

```
plot(airquality$Ozone, type="h")
```

```
```
```

```
```{r plot4lines}  
plot(airquality$Ozone, type= "b")
```

```
```
```

```
```{r plot2}  
plot(airquality)
```

```
```
```

```
```{r plot3}  
plot(airquality$Ozone, airquality$Wind)  
```
```

Note that the ``echo = FALSE`` parameter was added to the code chunk to prevent printing of the R code that generated the plot.