qplot

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Visualizing the mtcars dataset using ggplot's qplot function

Importing necessary libraries

```
invisible(library(ggplot2))
invisible(library(datasets))
```

Modifying dataset before plotting

```
str(mtcars)
```

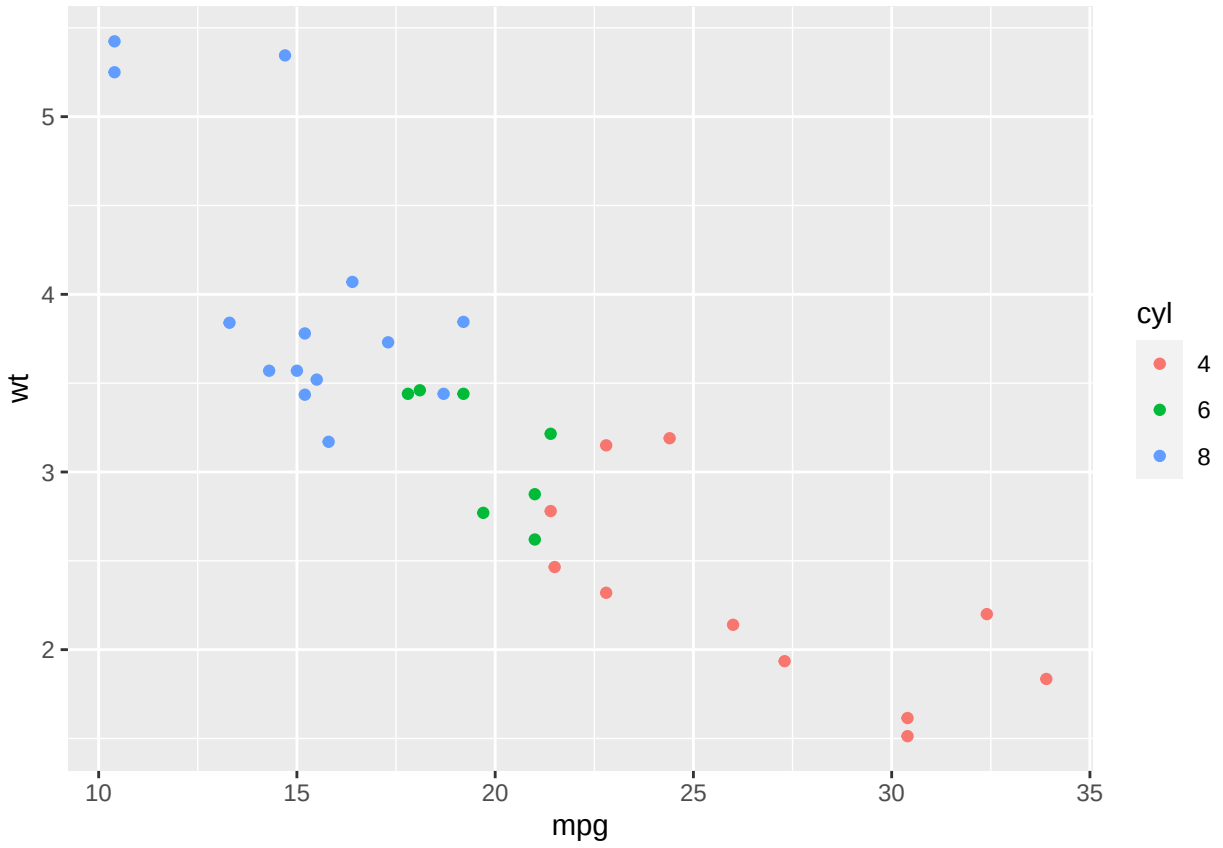
```
## 'data.frame':    32 obs. of  12 variables:
##  $ mpg    : num  21 21 22.8 21.4 18.7 18.1 14.3 24.4 22.8 19.2 ...
##  $ cyl    : Factor w/ 3 levels "4","6","8": 2 2 1 2 3 2 3 1 1 2 ...
##  $ disp   : num  160 160 108 258 360 ...
##  $ hp     : num  110 110 93 110 175 105 245 62 95 123 ...
##  $ drat   : num  3.9 3.9 3.85 3.08 3.15 2.76 3.21 3.69 3.92 3.92 ...
##  $ wt     : num  2.62 2.88 2.32 3.21 3.44 ...
##  $ qsec   : num  16.5 17 18.6 19.4 17 ...
##  $ vs     : num  0 0 1 1 0 1 0 1 1 1 ...
##  $ am     : num  1 1 1 0 0 0 0 0 0 0 ...
##  $ gear   : num  4 4 4 3 3 3 3 4 4 4 ...
##  $ carb   : num  4 4 1 1 2 1 4 2 2 4 ...
##  $ carname: chr  "Mazda RX4" "Mazda RX4 Wag" "Datsun 710" "Hornet 4 Drive" ...
```

Converting cyl variable to factor

```
mtcars$cyl = factor(mtcars$cyl)
```

Plotting the mpg (Miles per gallon) against weight, subsetting by number of cylinders

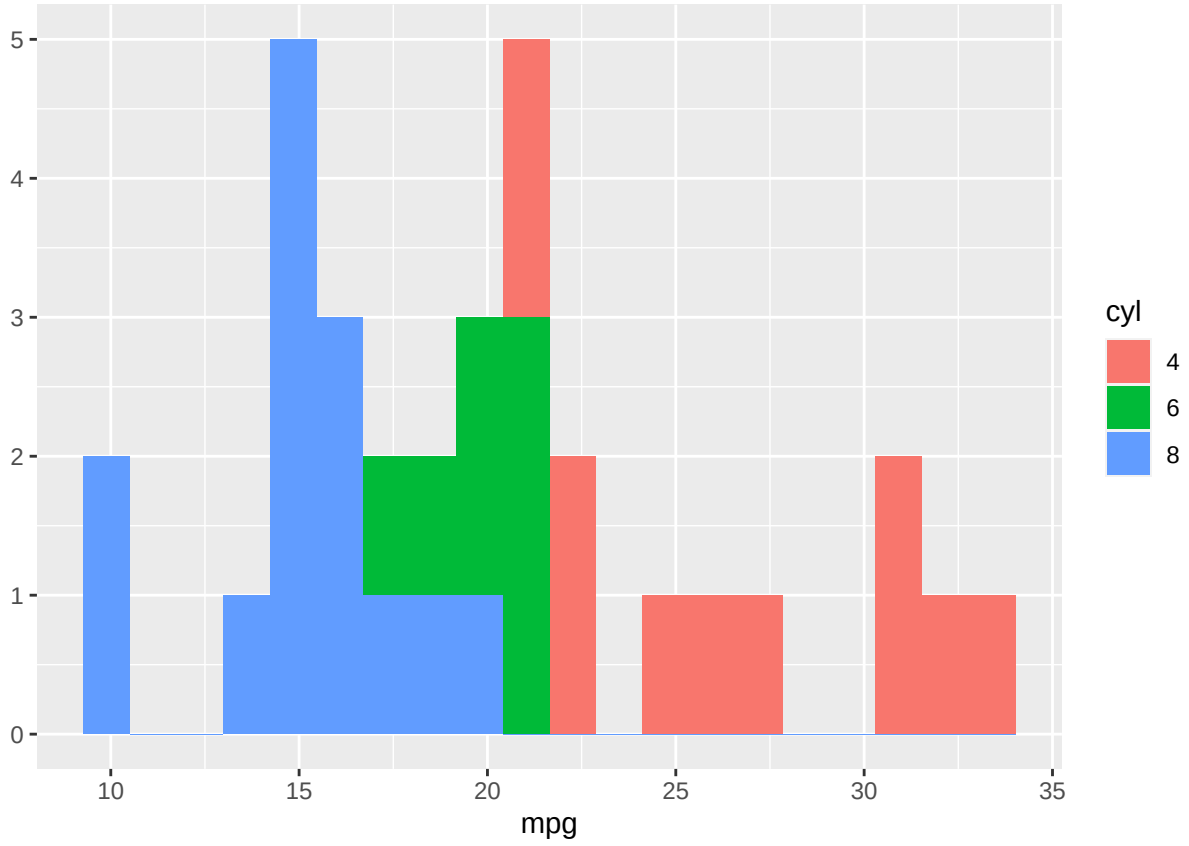
```
qplot(mpg,wt,data = mtcars,color = cyl)
```



Histograms

Plotting a histogram to analyse the mpg (miles per gallon)

```
qplot(mpg,data= mtcars,fill = cyl,bins = 20)
```

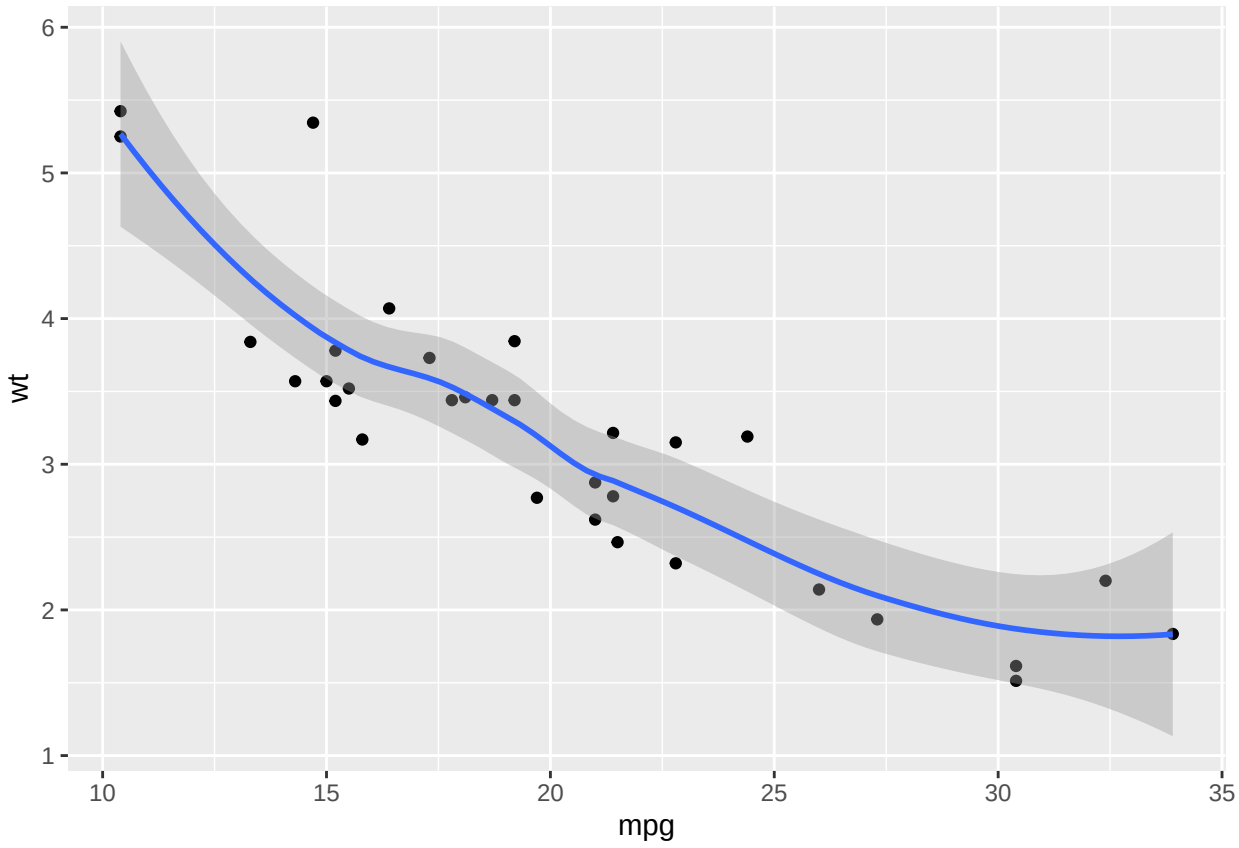


geom loess function

Adding a geom to the plot

```
qplot(mpg,wt,data = mtcars,geom = c("point","smooth"))
```

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



Facets

Creating facets, which are essentially panels in ggplot, where plots are put in panels based on a factor variable