mtcars.R

91939

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```
carsdata=mtcars
summary(carsdata)
```

```
##
                       cyl
                                       disp
                                                       hp
        mpg
  Min. :10.40
                   Min. :4.000
                                  Min. : 71.1
                                                 Min. : 52.0
  1st Qu.:15.43
                   1st Qu.:4.000
                                  1st Qu.:120.8
                                                 1st Qu.: 96.5
## Median :19.20
                  Median :6.000
                                  Median :196.3
                                                 Median :123.0
  Mean
         :20.09
                  Mean
                         :6.188
                                  Mean
                                       :230.7
                                                 Mean
                                                       :146.7
   3rd Qu.:22.80
                   3rd Qu.:8.000
                                  3rd Qu.:326.0
                                                 3rd Qu.:180.0
                                        :472.0
##
   Max.
          :33.90
                  Max.
                         :8.000
                                  Max.
                                                 Max.
                                                        :335.0
##
        drat
                        wt
                                       qsec
                                                       ٧s
   Min. :2.760
##
                  Min. :1.513
                                  Min. :14.50
                                                 Min.
                                                       :0.0000
   1st Qu.:3.080
                  1st Qu.:2.581
                                  1st Qu.:16.89
                                                 1st Qu.:0.0000
  Median :3.695
                  Median :3.325
                                  Median :17.71
                                                 Median :0.0000
##
   Mean :3.597
                  Mean :3.217
                                  Mean :17.85
                                                 Mean :0.4375
##
   3rd Qu.:3.920
                  3rd Qu.:3.610
                                  3rd Qu.:18.90
                                                 3rd Qu.:1.0000
   Max.
         :4.930
                  Max. :5.424
                                  Max. :22.90
                                                 Max. :1.0000
##
                                        carb
         am
                        gear
                   Min. :3.000
        :0.0000
## Min.
                                  Min. :1.000
  1st Qu.:0.0000
                   1st Qu.:3.000
                                   1st Qu.:2.000
## Median :0.0000
                   Median :4.000
                                   Median :2.000
## Mean :0.4062
                    Mean :3.688
                                   Mean :2.812
                    3rd Qu.:4.000
   3rd Qu.:1.0000
                                   3rd Qu.:4.000
## Max. :1.0000
                    Max. :5.000
                                   Max. :8.000
```

str(carsdata)

```
## 'data.frame':     32 obs. of 11 variables:
## $ mpg : num     21 21 22.8 21.4 18.7 18.1 14.3 24.4 22.8 19.2 ...
## $ cyl : num     6 6 4 6 8 6 8 4 4 6 ...
## $ 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 3 4 4 4 ...
## $ carb: num     4 4 1 1 2 1 4 2 2 4 ...
```

```
class(carsdata)

## [1] "data.frame"

hist(carsdata$hp,prob=T)

lines(density(carsdata$hp),col=6,lwd=2)
```

Histogram of carsdata\$hp

