Gergely Daróczi

Looong report

Fri Jul 20 12:17:28 2012

I have written the below report in 10 mins :)

# Dataset

Here I will do a pretty fast report on mtcars which is:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | mpg | cyl | disp | hp | drat |
| **Mazda RX4** | 21.0 | 6 | 160.0 | 110 | 3.90 |
| **Mazda RX4 Wag** | 21.0 | 6 | 160.0 | 110 | 3.90 |
| **Datsun 710** | 22.8 | 4 | 108.0 | 93 | 3.85 |
| **Hornet 4 Drive** | 21.4 | 6 | 258.0 | 110 | 3.08 |
| **Hornet Sportabout** | 18.7 | 8 | 360.0 | 175 | 3.15 |
| **Valiant** | 18.1 | 6 | 225.0 | 105 | 2.76 |
| **Duster 360** | 14.3 | 8 | 360.0 | 245 | 3.21 |
| **Merc 240D** | 24.4 | 4 | 146.7 | 62 | 3.69 |
| **Merc 230** | 22.8 | 4 | 140.8 | 95 | 3.92 |
| **Merc 280** | 19.2 | 6 | 167.6 | 123 | 3.92 |
| **Merc 280C** | 17.8 | 6 | 167.6 | 123 | 3.92 |
| **Merc 450SE** | 16.4 | 8 | 275.8 | 180 | 3.07 |
| **Merc 450SL** | 17.3 | 8 | 275.8 | 180 | 3.07 |
| **Merc 450SLC** | 15.2 | 8 | 275.8 | 180 | 3.07 |
| **Cadillac Fleetwood** | 10.4 | 8 | 472.0 | 205 | 2.93 |
| **Lincoln Continental** | 10.4 | 8 | 460.0 | 215 | 3.00 |
| **Chrysler Imperial** | 14.7 | 8 | 440.0 | 230 | 3.23 |
| **Fiat 128** | 32.4 | 4 | 78.7 | 66 | 4.08 |
| **Honda Civic** | 30.4 | 4 | 75.7 | 52 | 4.93 |
| **Toyota Corolla** | 33.9 | 4 | 71.1 | 65 | 4.22 |
| **Toyota Corona** | 21.5 | 4 | 120.1 | 97 | 3.70 |
| **Dodge Challenger** | 15.5 | 8 | 318.0 | 150 | 2.76 |
| **AMC Javelin** | 15.2 | 8 | 304.0 | 150 | 3.15 |
| **Camaro Z28** | 13.3 | 8 | 350.0 | 245 | 3.73 |
| **Pontiac Firebird** | 19.2 | 8 | 400.0 | 175 | 3.08 |
| **Fiat X1-9** | 27.3 | 4 | 79.0 | 66 | 4.08 |
| **Porsche 914-2** | 26.0 | 4 | 120.3 | 91 | 4.43 |
| **Lotus Europa** | 30.4 | 4 | 95.1 | 113 | 3.77 |
| **Ford Pantera L** | 15.8 | 8 | 351.0 | 264 | 4.22 |
| **Ferrari Dino** | 19.7 | 6 | 145.0 | 175 | 3.62 |
| **Maserati Bora** | 15.0 | 8 | 301.0 | 335 | 3.54 |
| **Volvo 142E** | 21.4 | 4 | 121.0 | 109 | 4.11 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | wt | qsec | vs | am |
| **Mazda RX4** | 2.620 | 16.46 | 0 | 1 |
| **Mazda RX4 Wag** | 2.875 | 17.02 | 0 | 1 |
| **Datsun 710** | 2.320 | 18.61 | 1 | 1 |
| **Hornet 4 Drive** | 3.215 | 19.44 | 1 | 0 |
| **Hornet Sportabout** | 3.440 | 17.02 | 0 | 0 |
| **Valiant** | 3.460 | 20.22 | 1 | 0 |
| **Duster 360** | 3.570 | 15.84 | 0 | 0 |
| **Merc 240D** | 3.190 | 20.00 | 1 | 0 |
| **Merc 230** | 3.150 | 22.90 | 1 | 0 |
| **Merc 280** | 3.440 | 18.30 | 1 | 0 |
| **Merc 280C** | 3.440 | 18.90 | 1 | 0 |
| **Merc 450SE** | 4.070 | 17.40 | 0 | 0 |
| **Merc 450SL** | 3.730 | 17.60 | 0 | 0 |
| **Merc 450SLC** | 3.780 | 18.00 | 0 | 0 |
| **Cadillac Fleetwood** | 5.250 | 17.98 | 0 | 0 |
| **Lincoln Continental** | 5.424 | 17.82 | 0 | 0 |
| **Chrysler Imperial** | 5.345 | 17.42 | 0 | 0 |
| **Fiat 128** | 2.200 | 19.47 | 1 | 1 |
| **Honda Civic** | 1.615 | 18.52 | 1 | 1 |
| **Toyota Corolla** | 1.835 | 19.90 | 1 | 1 |
| **Toyota Corona** | 2.465 | 20.01 | 1 | 0 |
| **Dodge Challenger** | 3.520 | 16.87 | 0 | 0 |
| **AMC Javelin** | 3.435 | 17.30 | 0 | 0 |
| **Camaro Z28** | 3.840 | 15.41 | 0 | 0 |
| **Pontiac Firebird** | 3.845 | 17.05 | 0 | 0 |
| **Fiat X1-9** | 1.935 | 18.90 | 1 | 1 |
| **Porsche 914-2** | 2.140 | 16.70 | 0 | 1 |
| **Lotus Europa** | 1.513 | 16.90 | 1 | 1 |
| **Ford Pantera L** | 3.170 | 14.50 | 0 | 1 |
| **Ferrari Dino** | 2.770 | 15.50 | 0 | 1 |
| **Maserati Bora** | 3.570 | 14.60 | 0 | 1 |
| **Volvo 142E** | 2.780 | 18.60 | 1 | 1 |

|  |  |  |
| --- | --- | --- |
|  | gear | carb |
| **Mazda RX4** | 4 | 4 |
| **Mazda RX4 Wag** | 4 | 4 |
| **Datsun 710** | 4 | 1 |
| **Hornet 4 Drive** | 3 | 1 |
| **Hornet Sportabout** | 3 | 2 |
| **Valiant** | 3 | 1 |
| **Duster 360** | 3 | 4 |
| **Merc 240D** | 4 | 2 |
| **Merc 230** | 4 | 2 |
| **Merc 280** | 4 | 4 |
| **Merc 280C** | 4 | 4 |
| **Merc 450SE** | 3 | 3 |
| **Merc 450SL** | 3 | 3 |
| **Merc 450SLC** | 3 | 3 |
| **Cadillac Fleetwood** | 3 | 4 |
| **Lincoln Continental** | 3 | 4 |
| **Chrysler Imperial** | 3 | 4 |
| **Fiat 128** | 4 | 1 |
| **Honda Civic** | 4 | 2 |
| **Toyota Corolla** | 4 | 1 |
| **Toyota Corona** | 3 | 1 |
| **Dodge Challenger** | 3 | 2 |
| **AMC Javelin** | 3 | 2 |
| **Camaro Z28** | 3 | 4 |
| **Pontiac Firebird** | 3 | 2 |
| **Fiat X1-9** | 4 | 1 |
| **Porsche 914-2** | 5 | 2 |
| **Lotus Europa** | 5 | 2 |
| **Ford Pantera L** | 5 | 4 |
| **Ferrari Dino** | 5 | 6 |
| **Maserati Bora** | 5 | 8 |
| **Volvo 142E** | 4 | 2 |

# Descriptives

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Average | Median | Standard.deviation | Variance |
| **mpg** | 20.0906 | 19.200 | 6.0269 | 3.632e+01 |
| **cyl** | 6.1875 | 6.000 | 1.7859 | 3.190e+00 |
| **disp** | 230.7219 | 196.300 | 123.9387 | 1.536e+04 |
| **hp** | 146.6875 | 123.000 | 68.5629 | 4.701e+03 |
| **drat** | 3.5966 | 3.695 | 0.5347 | 2.859e-01 |
| **wt** | 3.2172 | 3.325 | 0.9785 | 9.574e-01 |
| **qsec** | 17.8487 | 17.710 | 1.7869 | 3.193e+00 |
| **vs** | 0.4375 | 0.000 | 0.5040 | 2.540e-01 |
| **am** | 0.4062 | 0.000 | 0.4990 | 2.490e-01 |
| **gear** | 3.6875 | 4.000 | 0.7378 | 5.444e-01 |
| **carb** | 2.8125 | 2.000 | 1.6152 | 2.609e+00 |

## In details

### mpg

We found the folloing values here:

*21.0*, *21.0*, *22.8*, *21.4*, *18.7*, *18.1*, *14.3*, *24.4*, *22.8*, *19.2*, *17.8*, *16.4*, *17.3*, *15.2*, *10.4*, *10.4*, *14.7*, *32.4*, *30.4*, *33.9*, *21.5*, *15.5*, *15.2*, *13.3*, *19.2*, *27.3*, *26.0*, *30.4*, *15.8*, *19.7*, *15.0* and *21.4*

The mean of mpg is *20.09* while the standard deviation is: *6.027*. The most frequent value in mpg is 10.4, but let us check out the frequency table too:

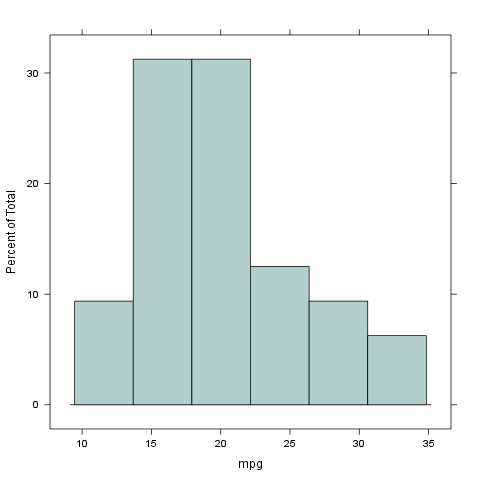
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 10.4 | 13.3 | 14.3 | 14.7 | 15 | 15.2 | 15.5 | 15.8 |
| 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 16.4 | 17.3 | 17.8 | 18.1 | 18.7 | 19.2 | 19.7 | 21 |
| 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 21.4 | 21.5 | 22.8 | 24.4 | 26 | 27.3 | 30.4 |
| 2 | 1 | 2 | 1 | 1 | 1 | 2 |

|  |  |
| --- | --- |
| 32.4 | 33.9 |
| 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-1-hires.png)

### cyl

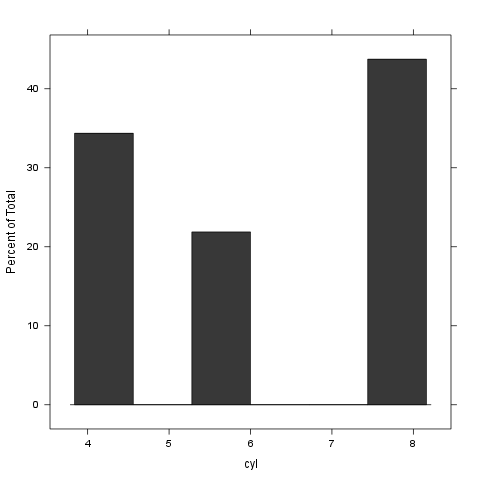
We found the folloing values here:

*6*, *6*, *4*, *6*, *8*, *6*, *8*, *4*, *4*, *6*, *6*, *8*, *8*, *8*, *8*, *8*, *8*, *4*, *4*, *4*, *4*, *8*, *8*, *8*, *8*, *4*, *4*, *4*, *8*, *6*, *8* and *4*

The mean of cyl is *6.188* while the standard deviation is: *1.786*. The most frequent value in cyl is 8, but let us check out the frequency table too:

|  |  |  |
| --- | --- | --- |
| 4 | 6 | 8 |
| 11 | 7 | 14 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-2-hires.png)

### disp

We found the folloing values here:

*160.0*, *160.0*, *108.0*, *258.0*, *360.0*, *225.0*, *360.0*, *146.7*, *140.8*, *167.6*, *167.6*, *275.8*, *275.8*, *275.8*, *472.0*, *460.0*, *440.0*, *78.7*, *75.7*, *71.1*, *120.1*, *318.0*, *304.0*, *350.0*, *400.0*, *79.0*, *120.3*, *95.1*, *351.0*, *145.0*, *301.0* and *121.0*

The mean of disp is *230.7* while the standard deviation is: *123.9*. The most frequent value in disp is 275.8, but let us check out the frequency table too:

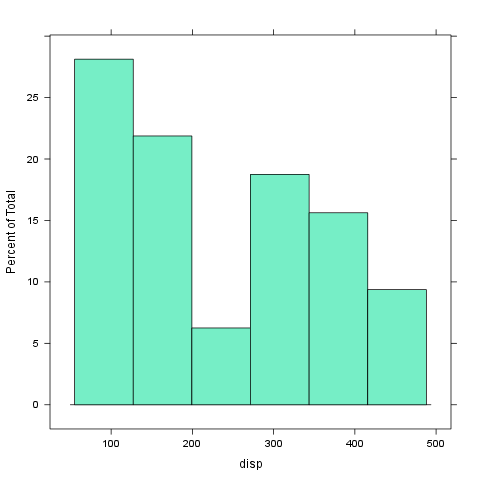
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 71.1 | 75.7 | 78.7 | 79 | 95.1 | 108 | 120.1 | 120.3 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 121 | 140.8 | 145 | 146.7 | 160 | 167.6 | 225 | 258 |
| 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 275.8 | 301 | 304 | 318 | 350 | 351 | 360 | 400 |
| 3 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |

|  |  |  |
| --- | --- | --- |
| 440 | 460 | 472 |
| 1 | 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-3-hires.png)

### hp

We found the folloing values here:

*110*, *110*, *93*, *110*, *175*, *105*, *245*, *62*, *95*, *123*, *123*, *180*, *180*, *180*, *205*, *215*, *230*, *66*, *52*, *65*, *97*, *150*, *150*, *245*, *175*, *66*, *91*, *113*, *264*, *175*, *335* and *109*

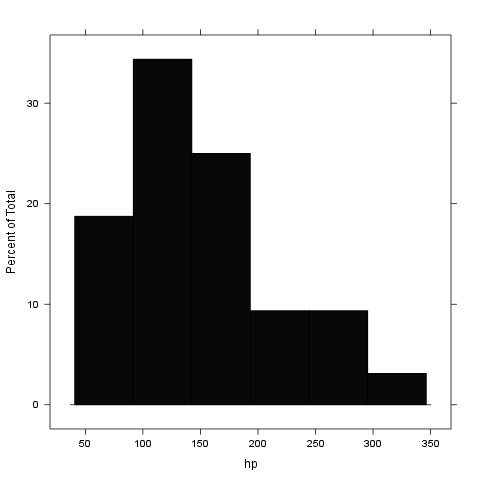
The mean of hp is *146.7* while the standard deviation is: *68.56*. The most frequent value in hp is 110, but let us check out the frequency table too:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 52 | 62 | 65 | 66 | 91 | 93 | 95 | 97 | 105 |
| 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 109 | 110 | 113 | 123 | 150 | 175 | 180 | 205 |
| 1 | 3 | 1 | 2 | 2 | 3 | 3 | 1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 215 | 230 | 245 | 264 | 335 |
| 1 | 1 | 2 | 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-4-hires.png)

### drat

We found the folloing values here:

*3.90*, *3.90*, *3.85*, *3.08*, *3.15*, *2.76*, *3.21*, *3.69*, *3.92*, *3.92*, *3.92*, *3.07*, *3.07*, *3.07*, *2.93*, *3.00*, *3.23*, *4.08*, *4.93*, *4.22*, *3.70*, *2.76*, *3.15*, *3.73*, *3.08*, *4.08*, *4.43*, *3.77*, *4.22*, *3.62*, *3.54* and *4.11*

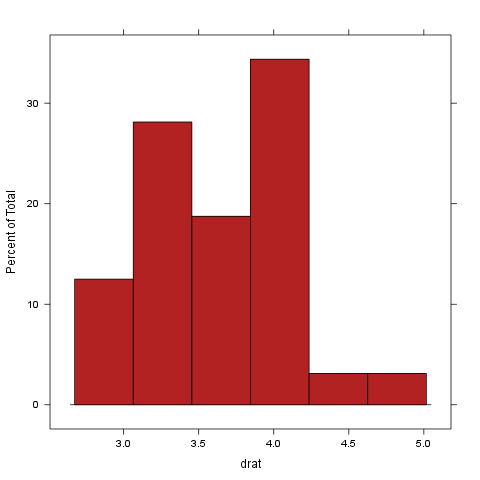
The mean of drat is *3.597* while the standard deviation is: *0.5347*. The most frequent value in drat is 3.07, but let us check out the frequency table too:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2.76 | 2.93 | 3 | 3.07 | 3.08 | 3.15 | 3.21 | 3.23 |
| 2 | 1 | 1 | 3 | 2 | 2 | 1 | 1 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3.54 | 3.62 | 3.69 | 3.7 | 3.73 | 3.77 | 3.85 | 3.9 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3.92 | 4.08 | 4.11 | 4.22 | 4.43 | 4.93 |
| 3 | 2 | 1 | 2 | 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-5-hires.png)

### wt

We found the folloing values here:

*2.620*, *2.875*, *2.320*, *3.215*, *3.440*, *3.460*, *3.570*, *3.190*, *3.150*, *3.440*, *3.440*, *4.070*, *3.730*, *3.780*, *5.250*, *5.424*, *5.345*, *2.200*, *1.615*, *1.835*, *2.465*, *3.520*, *3.435*, *3.840*, *3.845*, *1.935*, *2.140*, *1.513*, *3.170*, *2.770*, *3.570* and *2.780*

The mean of wt is *3.217* while the standard deviation is: *0.9785*. The most frequent value in wt is 3.44, but let us check out the frequency table too:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1.513 | 1.615 | 1.835 | 1.935 | 2.14 | 2.2 | 2.32 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |

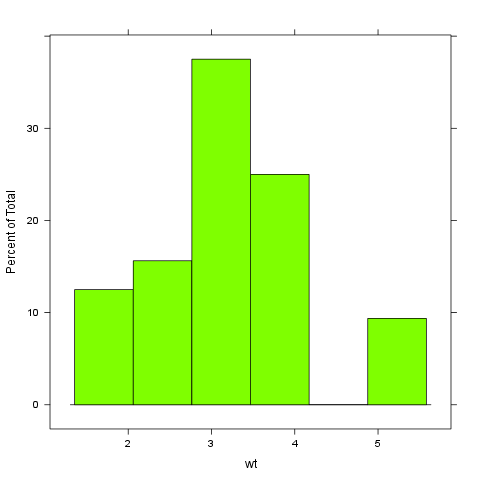
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2.465 | 2.62 | 2.77 | 2.78 | 2.875 | 3.15 | 3.17 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 3.19 | 3.215 | 3.435 | 3.44 | 3.46 | 3.52 | 3.57 |
| 1 | 1 | 1 | 3 | 1 | 1 | 2 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3.73 | 3.78 | 3.84 | 3.845 | 4.07 | 5.25 |
| 1 | 1 | 1 | 1 | 1 | 1 |

|  |  |
| --- | --- |
| 5.345 | 5.424 |
| 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-6-hires.png)

### qsec

We found the folloing values here:

*16.46*, *17.02*, *18.61*, *19.44*, *17.02*, *20.22*, *15.84*, *20.00*, *22.90*, *18.30*, *18.90*, *17.40*, *17.60*, *18.00*, *17.98*, *17.82*, *17.42*, *19.47*, *18.52*, *19.90*, *20.01*, *16.87*, *17.30*, *15.41*, *17.05*, *18.90*, *16.70*, *16.90*, *14.50*, *15.50*, *14.60* and *18.60*

The mean of qsec is *17.85* while the standard deviation is: *1.787*. The most frequent value in qsec is 17.02, but let us check out the frequency table too:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 14.5 | 14.6 | 15.41 | 15.5 | 15.84 | 16.46 | 16.7 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |

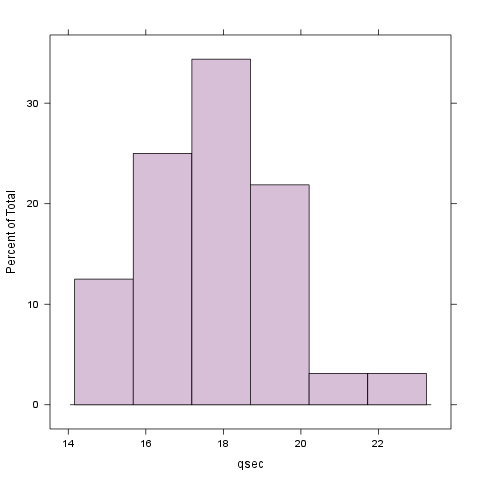
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 16.87 | 16.9 | 17.02 | 17.05 | 17.3 | 17.4 | 17.42 |
| 1 | 1 | 2 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 17.6 | 17.82 | 17.98 | 18 | 18.3 | 18.52 | 18.6 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 18.61 | 18.9 | 19.44 | 19.47 | 19.9 | 20 | 20.01 |
| 1 | 2 | 1 | 1 | 1 | 1 | 1 |

|  |  |
| --- | --- |
| 20.22 | 22.9 |
| 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-7-hires.png)

### vs

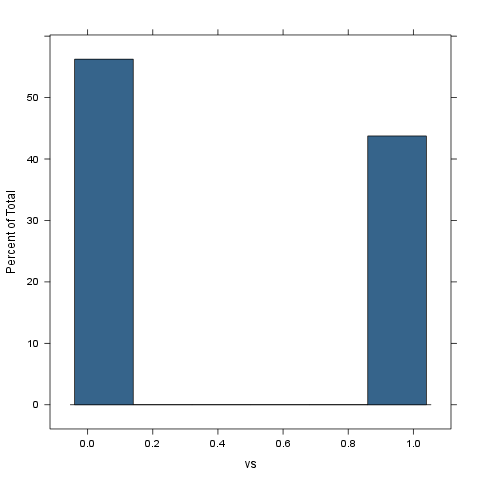
We found the folloing values here:

*0*, *0*, *1*, *1*, *0*, *1*, *0*, *1*, *1*, *1*, *1*, *0*, *0*, *0*, *0*, *0*, *0*, *1*, *1*, *1*, *1*, *0*, *0*, *0*, *0*, *1*, *0*, *1*, *0*, *0*, *0* and *1*

The mean of vs is *0.4375* while the standard deviation is: *0.504*. The most frequent value in vs is 0, but let us check out the frequency table too:

|  |  |
| --- | --- |
| 0 | 1 |
| 18 | 14 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-8-hires.png)

### am

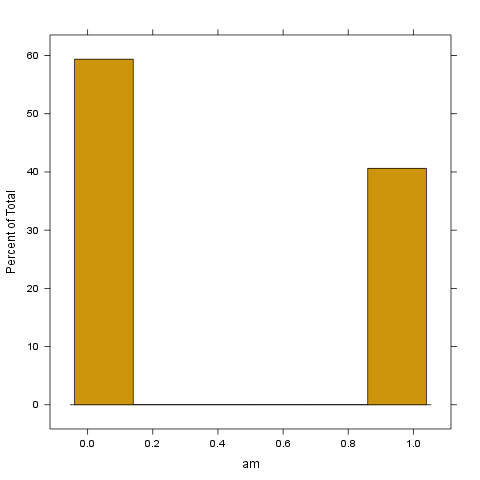
We found the folloing values here:

*1*, *1*, *1*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *0*, *1*, *1*, *1*, *0*, *0*, *0*, *0*, *0*, *1*, *1*, *1*, *1*, *1*, *1* and *1*

The mean of am is *0.4062* while the standard deviation is: *0.499*. The most frequent value in am is 0, but let us check out the frequency table too:

|  |  |
| --- | --- |
| 0 | 1 |
| 19 | 13 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-9-hires.png)

### gear

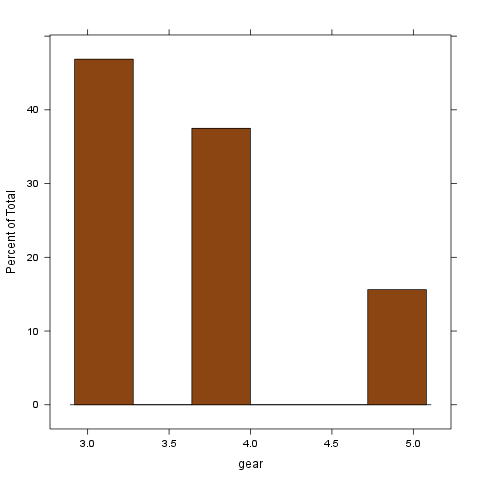
We found the folloing values here:

*4*, *4*, *4*, *3*, *3*, *3*, *3*, *4*, *4*, *4*, *4*, *3*, *3*, *3*, *3*, *3*, *3*, *4*, *4*, *4*, *3*, *3*, *3*, *3*, *3*, *4*, *5*, *5*, *5*, *5*, *5* and *4*

The mean of gear is *3.688* while the standard deviation is: *0.7378*. The most frequent value in gear is 3, but let us check out the frequency table too:

|  |  |  |
| --- | --- | --- |
| 3 | 4 | 5 |
| 15 | 12 | 5 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-10-hires.png)

### carb

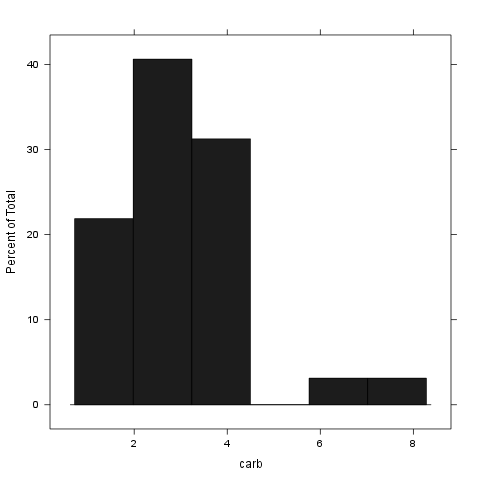
We found the folloing values here:

*4*, *4*, *1*, *1*, *2*, *1*, *4*, *2*, *2*, *4*, *4*, *3*, *3*, *3*, *4*, *4*, *4*, *1*, *2*, *1*, *1*, *2*, *2*, *4*, *2*, *1*, *2*, *2*, *4*, *6*, *8* and *2*

The mean of carb is *2.812* while the standard deviation is: *1.615*. The most frequent value in carb is 2, but let us check out the frequency table too:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 6 | 8 |
| 7 | 10 | 3 | 10 | 1 | 1 |

Tables are boring, let us show the same with a histogram:

[](plots/short-code-long-report-11-hires.png)

# Correlation

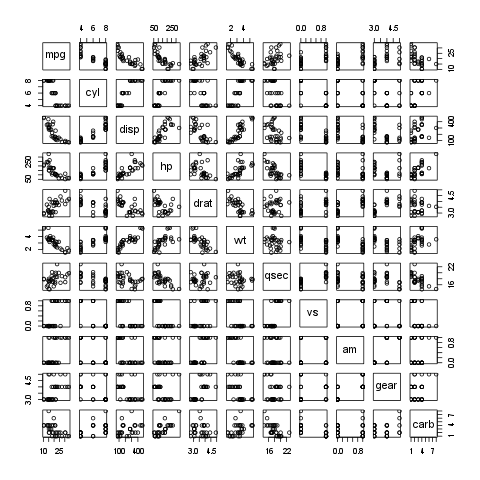
And here goes a correlation table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | mpg | cyl | disp | hp | drat |
| **mpg** | 1.00000 | -0.85216 | -0.84755 | -0.77617 | 0.68117 |
| **cyl** | -0.85216 | 1.00000 | 0.90203 | 0.83245 | -0.69994 |
| **disp** | -0.84755 | 0.90203 | 1.00000 | 0.79095 | -0.71021 |
| **hp** | -0.77617 | 0.83245 | 0.79095 | 1.00000 | -0.44876 |
| **drat** | 0.68117 | -0.69994 | -0.71021 | -0.44876 | 1.00000 |
| **wt** | -0.86766 | 0.78250 | 0.88798 | 0.65875 | -0.71244 |
| **qsec** | 0.41868 | -0.59124 | -0.43370 | -0.70822 | 0.09120 |
| **vs** | 0.66404 | -0.81081 | -0.71042 | -0.72310 | 0.44028 |
| **am** | 0.59983 | -0.52261 | -0.59123 | -0.24320 | 0.71271 |
| **gear** | 0.48028 | -0.49269 | -0.55557 | -0.12570 | 0.69961 |
| **carb** | -0.55093 | 0.52699 | 0.39498 | 0.74981 | -0.09079 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | wt | qsec | vs | am |
| **mpg** | -0.86766 | 0.41868 | 0.66404 | 0.59983 |
| **cyl** | 0.78250 | -0.59124 | -0.81081 | -0.52261 |
| **disp** | 0.88798 | -0.43370 | -0.71042 | -0.59123 |
| **hp** | 0.65875 | -0.70822 | -0.72310 | -0.24320 |
| **drat** | -0.71244 | 0.09120 | 0.44028 | 0.71271 |
| **wt** | 1.00000 | -0.17472 | -0.55492 | -0.69250 |
| **qsec** | -0.17472 | 1.00000 | 0.74454 | -0.22986 |
| **vs** | -0.55492 | 0.74454 | 1.00000 | 0.16835 |
| **am** | -0.69250 | -0.22986 | 0.16835 | 1.00000 |
| **gear** | -0.58329 | -0.21268 | 0.20602 | 0.79406 |
| **carb** | 0.42761 | -0.65625 | -0.56961 | 0.05753 |

|  |  |  |
| --- | --- | --- |
|  | gear | carb |
| **mpg** | 0.48028 | -0.55093 |
| **cyl** | -0.49269 | 0.52699 |
| **disp** | -0.55557 | 0.39498 |
| **hp** | -0.12570 | 0.74981 |
| **drat** | 0.69961 | -0.09079 |
| **wt** | -0.58329 | 0.42761 |
| **qsec** | -0.21268 | -0.65625 |
| **vs** | 0.20602 | -0.56961 |
| **am** | 0.79406 | 0.05753 |
| **gear** | 1.00000 | 0.27407 |
| **carb** | 0.27407 | 1.00000 |

And the same on a graph:

[](plots/short-code-long-report-12-hires.png)

Yeah, that latter took a while to render in an image file :)

That's not a pander issue.

# Some models

Okay, let us find out how weight affects other variables:

### mpg

A simple linear model: mtcars$wt ~ mtcars$mpg

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 6.047e+00 | 3.087e-01 | 1.959e+01 | 1.204e-18 |
| **Independent** | -1.409e-01 | 1.474e-02 | -9.559e+00 | 1.294e-10 |

Fitting linear model: mtcars$wt ~ Independent

### cyl

A simple linear model: mtcars$wt ~ mtcars$cyl

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 5.646e-01 | 4.006e-01 | 1.409e+00 | 1.690e-01 |
| **Independent** | 4.287e-01 | 6.228e-02 | 6.883e+00 | 1.218e-07 |

Fitting linear model: mtcars$wt ~ Independent

### disp

A simple linear model: mtcars$wt ~ mtcars$disp

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 1.600e+00 | 1.730e-01 | 9.248e+00 | 2.738e-10 |
| **Independent** | 7.010e-03 | 6.629e-04 | 1.058e+01 | 1.222e-11 |

Fitting linear model: mtcars$wt ~ Independent

### hp

A simple linear model: mtcars$wt ~ mtcars$hp

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 1.838e+00 | 3.165e-01 | 5.808e+00 | 2.389e-06 |
| **Independent** | 9.401e-03 | 1.960e-03 | 4.796e+00 | 4.146e-05 |

Fitting linear model: mtcars$wt ~ Independent

### drat

A simple linear model: mtcars$wt ~ mtcars$drat

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 7.906e+00 | 8.522e-01 | 9.277e+00 | 2.547e-10 |
| **Independent** | -1.304e+00 | 2.345e-01 | -5.561e+00 | 4.784e-06 |

Fitting linear model: mtcars$wt ~ Independent

### qsec

A simple linear model: mtcars$wt ~ mtcars$qsec

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 4.924792 | 1.765407 | 2.789607 | 0.009081 |
| **Independent** | -0.095667 | 0.098433 | -0.971907 | 0.338868 |

Fitting linear model: mtcars$wt ~ Independent

### vs

A simple linear model: mtcars$wt ~ mtcars$vs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 3.689e+00 | 1.950e-01 | 1.891e+01 | 3.203e-18 |
| **Independent** | -1.077e+00 | 2.949e-01 | -3.654e+00 | 9.798e-04 |

Fitting linear model: mtcars$wt ~ Independent

### am

A simple linear model: mtcars$wt ~ mtcars$am

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 3.769e+00 | 1.646e-01 | 2.289e+01 | 1.490e-20 |
| **Independent** | -1.358e+00 | 2.583e-01 | -5.258e+00 | 1.125e-05 |

Fitting linear model: mtcars$wt ~ Independent

### gear

A simple linear model: mtcars$wt ~ mtcars$gear

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 6.070e+00 | 7.392e-01 | 8.212e+00 | 3.632e-09 |
| **Independent** | -7.735e-01 | 1.967e-01 | -3.933e+00 | 4.587e-04 |

Fitting linear model: mtcars$wt ~ Independent

### carb

A simple linear model: mtcars$wt ~ mtcars$carb

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | t value | Pr(>|t|) |
| **(Intercept)** | 2.489e+00 | 3.230e-01 | 7.705e+00 | 1.353e-08 |
| **Independent** | 2.590e-01 | 9.998e-02 | 2.591e+00 | 1.464e-02 |

Fitting linear model: mtcars$wt ~ Independent

This report was generated with [R](http://www.r-project.org/) (2.15.1) and [pander](https://github.com/daroczig/pander) (0.1) on x86\_64-unknown-linux-gnu platform.