Table Demo

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6/11/2020

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Merc 230

Merc 280

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1	Get Data	
da	ta("mtcars")	

2 Replay The Data Set (May Not Look So Great)

22.8

19.2

```
mtcars
##
                        mpg cyl disp hp drat
                                                  wt qsec vs am gear carb
## Mazda RX4
                       21.0
                              6 160.0 110 3.90 2.620 16.46
## Mazda RX4 Wag
                       21.0
                              6 160.0 110 3.90 2.875 17.02
                                                                          4
## Datsun 710
                       22.8
                              4 108.0 93 3.85 2.320 18.61
                                                                          1
## Hornet 4 Drive
                       21.4
                              6 258.0 110 3.08 3.215 19.44
                                                                         1
## Hornet Sportabout
                       18.7
                              8 360.0 175 3.15 3.440 17.02
                                                                          2
## Valiant
                       18.1
                              6 225.0 105 2.76 3.460 20.22
                                                                         1
## Duster 360
                       14.3
                              8 360.0 245 3.21 3.570 15.84
                                                                         4
                                                                         2
                       24.4
                              4 146.7 62 3.69 3.190 20.00
## Merc 240D
```

4 140.8 95 3.92 3.150 22.90 1 0

6 167.6 123 3.92 3.440 18.30 1 0

2

```
## Merc 280C
                       17.8
                               6 167.6 123 3.92 3.440 18.90
## Merc 450SE
                               8 275.8 180 3.07 4.070 17.40
                                                                      3
                                                                           3
                       16.4
                                                                           3
## Merc 450SL
                       17.3
                               8 275.8 180 3.07 3.730 17.60
                               8 275.8 180 3.07 3.780 18.00
## Merc 450SLC
                       15.2
                                                                           3
## Cadillac Fleetwood 10.4
                               8 472.0 205 2.93 5.250 17.98
                                                                           4
                               8 460.0 215 3.00 5.424 17.82
                                                                      3
                                                                           4
## Lincoln Continental 10.4
## Chrysler Imperial
                               8 440.0 230 3.23 5.345 17.42
                       14.7
## Fiat 128
                                 78.7
                                        66 4.08 2.200 19.47
                       32.4
                               4
                                                              1
                                                                 1
                                                                      4
                                                                           1
## Honda Civic
                       30.4
                                  75.7
                                        52 4.93 1.615 18.52
                                                                           2
                               4 71.1
## Toyota Corolla
                       33.9
                                       65 4.22 1.835 19.90
                                                                           1
## Toyota Corona
                       21.5
                               4 120.1 97 3.70 2.465 20.01
                                                                           1
                                                                           2
## Dodge Challenger
                               8 318.0 150 2.76 3.520 16.87
                                                                      3
                       15.5
                                                                      3
                                                                           2
## AMC Javelin
                       15.2
                               8 304.0 150 3.15 3.435 17.30
                                                              0
                                                                 0
                       13.3
                               8 350.0 245 3.73 3.840 15.41
                                                                      3
## Camaro Z28
                                                                           4
## Pontiac Firebird
                       19.2
                               8 400.0 175 3.08 3.845 17.05
                                                                      3
                                                                           2
                                                              0
## Fiat X1-9
                       27.3
                               4 79.0 66 4.08 1.935 18.90
                                                                      4
                                                                           1
                       26.0
                               4 120.3 91 4.43 2.140 16.70
                                                                      5
                                                                           2
## Porsche 914-2
                                                                 1
## Lotus Europa
                       30.4
                               4 95.1 113 3.77 1.513 16.90
## Ford Pantera L
                               8 351.0 264 4.22 3.170 14.50
                                                                           4
                       15.8
                                                                      5
                               6 145.0 175 3.62 2.770 15.50
## Ferrari Dino
                       19.7
                                                                      5
                                                                           6
## Maserati Bora
                       15.0
                               8 301.0 335 3.54 3.570 14.60
                                                              0
                                                                      5
                                                                           8
## Volvo 142E
                       21.4
                               4 121.0 109 4.11 2.780 18.60
                                                                           2
```

3 Descriptive Statistics

```
# summary(mtcars)
psych::describe(mtcars)
```

```
sd median trimmed
##
        vars n
                  mean
                                                  mad
                                                        min
                                                               max
                                                                     range
                                                                            skew
           1 32
                 20.09
                          6.03
                               19.20
                                         19.70
                                                 5.41 10.40
                                                             33.90
                                                                     23.50
## mpg
                                 6.00
           2 32
                          1.79
                                                 2.97 4.00
                                                               8.00
## cyl
                   6.19
                                          6.23
                                                                      4.00 - 0.17
## disp
           3 32 230.72 123.94 196.30
                                       222.52 140.48 71.10 472.00 400.90
                                                                            0.38
           4 32 146.69
                         68.56 123.00
                                       141.19
                                                77.10 52.00 335.00 283.00
                                                                            0.73
## hp
           5 32
                   3.60
                          0.53
                                 3.70
                                          3.58
                                                 0.70
                                                      2.76
                                                               4.93
                                                                      2.17
## drat
           6 32
                                                      1.51
## wt
                  3.22
                          0.98
                                 3.33
                                         3.15
                                                 0.77
                                                               5.42
                                                                      3.91
                                                                            0.42
           7 32
                 17.85
                          1.79
                               17.71
                                        17.83
                                                 1.42 14.50
                                                             22.90
## qsec
                                                                      8.40
                                                                            0.37
           8 32
## vs
                  0.44
                          0.50
                                 0.00
                                         0.42
                                                 0.00 0.00
                                                               1.00
                                                                      1.00 0.24
## am
           9 32
                  0.41
                          0.50
                                 0.00
                                         0.38
                                                 0.00 0.00
                                                               1.00
                                                                      1.00 0.36
          10 32
                  3.69
                          0.74
                                 4.00
                                          3.62
                                                 1.48
                                                       3.00
                                                               5.00
                                                                      2.00
## gear
                                                                            0.53
                   2.81
## carb
          11 32
                          1.62
                                 2.00
                                          2.65
                                                 1.48
                                                      1.00
                                                               8.00
                                                                      7.00 1.05
##
        kurtosis
                    se
           -0.37
                  1.07
## mpg
## cyl
           -1.76
                  0.32
## disp
           -1.21 21.91
## hp
           -0.1412.12
           -0.71 0.09
## drat
## wt
           -0.02
                  0.17
            0.34
## qsec
                  0.32
## vs
           -2.00
                  0.09
## am
           -1.92 0.09
```

```
## gear -1.07 0.13
## carb 1.26 0.29
```

4 Use Pander To Format Our Summary Results

```
library(pander)
pander(psych::describe(mtcars))
```

Table 1: Table continues below

	vars	n	mean	sd	median	trimmed	mad	min
mpg	1	32	20.09	6.027	19.2	19.7	5.411	10.4
\mathbf{cyl}	2	32	6.188	1.786	6	6.231	2.965	4
${f disp}$	3	32	230.7	123.9	196.3	222.5	140.5	71.1
$\mathbf{h}\mathbf{p}$	4	32	146.7	68.56	123	141.2	77.1	52
drat	5	32	3.597	0.5347	3.695	3.579	0.7042	2.76
\mathbf{wt}	6	32	3.217	0.9785	3.325	3.153	0.7672	1.513
\mathbf{qsec}	7	32	17.85	1.787	17.71	17.83	1.416	14.5
$\mathbf{v}\mathbf{s}$	8	32	0.4375	0.504	0	0.4231	0	0
am	9	32	0.4062	0.499	0	0.3846	0	0
gear	10	32	3.688	0.7378	4	3.615	1.483	3
carb	11	32	2.812	1.615	2	2.654	1.483	1

	max	range	skew	kurtosis	se
mpg	33.9	23.5	0.6107	-0.3728	1.065
cyl	8	4	-0.1746	-1.762	0.3157
${f disp}$	472	400.9	0.3817	-1.207	21.91
${f hp}$	335	283	0.726	-0.1356	12.12
drat	4.93	2.17	0.2659	-0.7147	0.09452
\mathbf{wt}	5.424	3.911	0.4231	-0.02271	0.173
\mathbf{qsec}	22.9	8.4	0.369	0.3351	0.3159
$\mathbf{v}\mathbf{s}$	1	1	0.2403	-2.002	0.0891
am	1	1	0.364	-1.925	0.08821
gear	5	2	0.5289	-1.07	0.1304
carb	8	7	1.051	1.257	0.2855

5 Only Look At A Subset of Variables

```
mynewdata <- subset(mtcars, select = c(mpg, hp))
pander(psych::describe(mynewdata))</pre>
```

Table 3: Table continues below

	vars	n	mean	sd	median	trimmed	mad	min	max
mpg	1	32	20.09	6.027	19.2	19.7	5.411	10.4	33.9
$\mathbf{h}\mathbf{p}$	2	32	146.7	68.56	123	141.2	77.1	52	335

	range	skew	kurtosis	se
mpg hp	$23.5 \\ 283$	$0.6107 \\ 0.726$	-0.3728 -0.1356	1.065 12.12

6 "Hand Built" Table

Things	Outcome
Thing 1 Thing 2	A B