

Most_Frequently_Used_R_Objects.R

015004

Tue Jan 22 10:33:12 2019

```
#####  
# Load packages #  
#####  
  
library(JM)  
  
## Loading required package: MASS  
## Loading required package: nlme  
## Loading required package: splines  
## Loading required package: survival  
#####  
# Most Frequently Used Objects #  
#####  
  
## Create matrices  
weight_columns <- cbind(pbc2.id$age, pbc2.id$years)  
weight_rows <- rbind(pbc2.id$age, pbc2.id$years)  
matrix(weight_columns, , 2)
```

```
##      [,1]      [,2]  
## [1,] 58.76684  1.0951703  
## [2,] 56.44782  14.1523382  
## [3,] 70.07447  2.7707809  
## [4,] 54.74209  5.2705071  
## [5,] 38.10645  4.1205782  
## [6,] 66.26054  6.8530281  
## [7,] 55.53609  6.8475523  
## [8,] 53.05826  6.7517249  
## [9,] 42.50904  6.5710218  
## [10,] 70.56182  0.1396342  
## [11,] 53.71537  10.3000767  
## [12,] 59.13920  0.8323294  
## [13,] 45.69050  11.6279706  
## [14,] 56.22331  3.3320556  
## [15,] 64.64790  9.8127259  
## [16,] 40.44464  11.8962874  
## [17,] 52.18486  2.1054649  
## [18,] 53.93166  0.3614062  
## [19,] 49.56193  13.4185741  
## [20,] 59.95510  3.7126273  
## [21,] 64.19067  10.0125945  
## [22,] 56.27806  1.8426240  
## [23,] 55.96868  0.7228124  
## [24,] 44.52141  11.1679991  
## [25,] 45.07447  13.1310919  
## [26,] 52.02607  3.9535648
```

```

## [27,] 54.44092 0.2108203
## [28,] 44.94853 1.5031212
## [29,] 63.87855 13.8922352
## [30,] 41.38649 0.8788742
## [31,] 41.55350 10.5108969
## [32,] 53.99737 14.2153105
## [33,] 51.28409 8.6792246
## [34,] 52.06166 12.5999343
## [35,] 48.62009 7.7948746
## [36,] 56.41222 11.7210601
## [37,] 61.72927 0.6105574
## [38,] 36.62797 8.8818311
## [39,] 55.39371 6.2890154
## [40,] 46.67068 14.0619866
## [41,] 33.63542 3.6961998
## [42,] 33.69565 14.0236557
## [43,] 48.87197 14.3056620
## [44,] 37.58351 9.3856095
## [45,] 41.79444 12.8518235
## [46,] 45.80002 6.1767605
## [47,] 47.42909 8.8845691
## [48,] 49.13755 13.9524696
## [49,] 61.15431 1.9384514
## [50,] 53.51002 7.1131311
## [51,] 52.08904 10.5492279
## [52,] 50.54211 6.5326908
## [53,] 67.41047 2.7379257
## [54,] 39.19888 3.9261855
## [55,] 65.76498 3.7235790
## [56,] 33.61899 5.0569489
## [57,] 53.57299 8.9858723
## [58,] 44.57069 14.0400832
## [59,] 40.39536 6.0891469
## [60,] 58.38353 13.7827182
## [61,] 43.89990 13.4842843
## [62,] 60.70803 8.4601906
## [63,] 46.62961 2.3518782
## [64,] 62.90932 4.0712956
## [65,] 40.20370 13.2570365
## [66,] 46.45439 11.4746468
## [67,] 51.28956 7.5813164
## [68,] 32.61417 12.8901544
## [69,] 49.34016 3.2033731
## [70,] 56.40127 10.0837805
## [71,] 48.84733 13.3200088
## [72,] 32.49370 13.2871537
## [73,] 38.49524 13.3035812
## [74,] 51.92202 5.0021903
## [75,] 43.51933 3.2608696
## [76,] 51.94393 0.1943927
## [77,] 49.82751 0.8925638
## [78,] 47.94656 4.6270945
## [79,] 46.51736 11.9811631
## [80,] 67.41321 2.4367539

```

```

## [81,] 63.26525 6.9543314
## [82,] 67.31190 9.7853466
## [83,] 56.01522 12.9202716
## [84,] 55.83178 12.8709889
## [85,] 47.21827 9.1939547
## [86,] 52.75983 4.5367430
## [87,] 37.27960 0.5421093
## [88,] 41.39470 8.4218596
## [89,] 52.44497 4.7667287
## [90,] 33.47662 7.3622823
## [91,] 45.60837 1.2594458
## [92,] 76.71120 1.0650531
## [93,] 36.53488 12.5479137
## [94,] 53.91797 2.0534443
## [95,] 46.39141 0.3750958
## [96,] 48.84733 12.3754244
## [97,] 71.89519 1.6975140
## [98,] 28.88512 12.2987625
## [99,] 48.46950 12.2905487
## [100,] 51.47027 1.5113350
## [101,] 44.95126 11.6361844
## [102,] 56.57102 10.3219801
## [103,] 48.96506 0.3011718
## [104,] 43.01829 8.4492389
## [105,] 34.04063 8.4656664
## [106,] 68.51112 8.8215968
## [107,] 62.52327 11.1105027
## [108,] 50.35867 7.0720622
## [109,] 44.06418 8.6874384
## [110,] 38.91140 5.5963202
## [111,] 41.15376 6.4341255
## [112,] 55.45942 9.4321542
## [113,] 51.23480 2.6037674
## [114,] 52.82828 9.2952579
## [115,] 42.64046 11.2008542
## [116,] 61.07217 10.9927719
## [117,] 49.65776 2.9651736
## [118,] 48.85555 6.2643741
## [119,] 54.25747 1.4100318
## [120,] 35.15223 5.5662030
## [121,] 67.90877 0.5229438
## [122,] 55.43752 10.8586135
## [123,] 45.82193 2.6585259
## [124,] 52.89125 10.6861242
## [125,] 47.18267 6.7572007
## [126,] 53.60037 2.2560508
## [127,] 44.10525 10.7436206
## [128,] 41.95050 2.8392290
## [129,] 63.61570 10.6998138
## [130,] 44.22845 3.8632132
## [131,] 62.00307 2.3272369
## [132,] 40.55416 9.8921257
## [133,] 62.64648 7.6552404
## [134,] 42.33655 10.4534005

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```

## [135,] 42.96901 10.4561384
## [136,] 55.96320 10.3137663
## [137,] 62.86278 10.0180703
## [138,] 51.25123 3.5510897
## [139,] 46.76377 6.4532910
## [140,] 54.07677 10.2069872
## [141,] 47.03756 10.1823459
## [142,] 55.72774 6.6230424
## [143,] 46.10393 2.1520096
## [144,] 52.28891 2.5873398
## [145,] 51.20195 9.9797393
## [146,] 33.86540 8.4492389
## [147,] 75.01369 9.2596649
## [148,] 30.86464 3.9070200
## [149,] 61.80594 2.0862994
## [150,] 34.98795 9.7470157
## [151,] 55.04326 9.6895192
## [152,] 69.94305 3.1540905
## [153,] 49.60574 9.6703537
## [154,] 69.37904 0.3833096
## [155,] 43.55766 9.6265469
## [156,] 59.41025 2.3354507
## [157,] 48.75972 9.5936918
## [158,] 36.49381 6.7763662
## [159,] 45.76169 4.2054539
## [160,] 57.37323 9.4212025
## [161,] 42.74450 9.4896506
## [162,] 58.81886 0.5092542
## [163,] 53.49907 5.6264374
## [164,] 43.41529 0.7556675
## [165,] 53.30741 2.9460081
## [166,] 41.35637 9.2815683
## [167,] 60.95992 4.6106670
## [168,] 47.75490 9.2651407
## [169,] 35.49173 3.3183660
## [170,] 48.66389 9.2021684
## [171,] 52.66948 8.8790932
## [172,] 49.87132 8.1316395
## [173,] 30.27598 9.1063410
## [174,] 55.56894 9.0707480
## [175,] 52.15475 9.0159895
## [176,] 41.61100 4.0849852
## [177,] 55.45395 8.9749206
## [178,] 70.00602 8.8955208
## [179,] 43.94371 8.8763553
## [180,] 42.56927 8.8489760
## [181,] 44.57069 8.8298105
## [182,] 56.94612 8.8270726
## [183,] 40.26120 6.1356916
## [184,] 37.60815 2.6667397
## [185,] 48.36272 7.8907020
## [186,] 70.83835 4.3149710
## [187,] 35.79290 2.0068996
## [188,] 62.62458 7.2144343

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```

## [189,] 50.64889 8.5560180
## [190,] 54.52853 8.6874384
## [191,] 52.69412 0.5913920
## [192,] 52.72150 8.5204249
## [193,] 56.77363 2.1821268
## [194,] 44.39820 8.5368525
## [195,] 29.55591 8.2110393
## [196,] 57.04195 6.9954003
## [197,] 44.62819 8.3068667
## [198,] 35.79838 8.2822254
## [199,] 40.71843 8.1891359
## [200,] 32.23360 8.0275983
## [201,] 41.09353 8.1124740
## [202,] 61.64166 8.0522396
## [203,] 37.05782 7.9126054
## [204,] 62.58077 5.7222648
## [205,] 48.97875 5.6976235
## [206,] 61.99211 8.0056949
## [207,] 72.77407 7.7757091
## [208,] 61.29668 2.4750849
## [209,] 52.62567 7.9071296
## [210,] 49.76454 7.9208192
## [211,] 52.91589 7.8441573
## [212,] 47.26481 7.7893988
## [213,] 50.20534 5.9933195
## [214,] 69.34892 4.8899354
## [215,] 41.17019 2.9569598
## [216,] 59.16658 6.3957945
## [217,] 36.08039 2.1629613
## [218,] 34.59643 7.7729712
## [219,] 42.71438 7.7373782
## [220,] 63.63213 3.3813383
## [221,] 56.63126 7.4444201
## [222,] 46.26547 1.6345417
## [223,] 61.24466 0.9144672
## [224,] 38.62118 7.1569379
## [225,] 38.77177 7.3677582
## [226,] 56.69697 7.2472895
## [227,] 58.95302 2.7351878
## [228,] 36.92367 7.2171723
## [229,] 62.41649 0.9527982
## [230,] 34.61012 7.2500274
## [231,] 58.33698 3.1896835
## [232,] 50.18344 7.1733655
## [233,] 42.68700 7.1213449
## [234,] 34.38013 6.6942285
## [235,] 33.18366 6.3027051
## [236,] 38.38298 7.0556347
## [237,] 59.76344 5.3307414
## [238,] 66.41386 5.1308729
## [239,] 46.79115 1.9001205
## [240,] 56.08093 6.8448144
## [241,] 41.37553 2.2916439
## [242,] 64.57398 5.8263060

```

```

## [243,] 67.48987 2.5462709
## [244,] 44.83080 4.6270945
## [245,] 45.77264 6.7325594
## [246,] 32.95094 3.9289234
## [247,] 41.22221 2.5736502
## [248,] 55.41836 6.7188698
## [249,] 47.98215 6.7133939
## [250,] 40.79236 6.3711532
## [251,] 56.97623 6.3163947
## [252,] 68.46457 6.6778009
## [253,] 78.44157 6.6641113
## [254,] 39.85872 2.0178513
## [255,] 35.31103 6.5847114
## [256,] 31.44508 6.4888840
## [257,] 58.26580 6.2506845
## [258,] 51.48943 6.4916219
## [259,] 59.97153 6.2534224
## [260,] 74.52634 4.5832877
## [261,] 52.36557 6.4286497
## [262,] 42.78830 5.0651626
## [263,] 34.87570 3.5675172
## [264,] 44.14084 4.2218815
## [265,] 46.38320 2.9679115
## [266,] 56.31092 6.2616362
## [267,] 70.90954 0.4900887
## [268,] 55.39645 3.2608696
## [269,] 45.08542 5.1965831
## [270,] 26.27861 5.5032308
## [271,] 50.47366 6.1274778
## [272,] 38.39941 6.0070091
## [273,] 47.42087 4.5148396
## [274,] 47.98215 3.9617786
## [275,] 38.31727 5.5306100
## [276,] 50.10952 5.8783266
## [277,] 35.08926 5.7633337
## [278,] 32.50465 5.4648998
## [279,] 56.15486 5.7551199
## [280,] 46.15595 5.6976235
## [281,] 65.88545 0.1122550
## [282,] 33.94480 4.5805498
## [283,] 62.86278 5.7359544
## [284,] 48.56533 5.7140510
## [285,] 46.35034 5.6675063
## [286,] 38.85390 5.6866718
## [287,] 58.64911 4.2492608
## [288,] 48.93768 2.9213668
## [289,] 67.57475 2.1876027
## [290,] 65.98675 5.5634651
## [291,] 40.90187 2.4668711
## [292,] 50.24641 4.8871975
## [293,] 57.19801 5.4457343
## [294,] 60.53828 5.3964516
## [295,] 35.35210 2.3956850
## [296,] 31.38210 5.4484722

```

```
## [297,] 55.98784 1.4593144
## [298,] 52.72697 5.3909758
## [299,] 38.09276 5.3718103
## [300,] 58.17271 0.5667506
## [301,] 45.21137 5.3909758
## [302,] 37.79980 5.3115760
## [303,] 60.66148 4.3724674
## [304,] 35.53554 5.1993210
## [305,] 43.06757 5.1609900
## [306,] 56.39306 5.1609900
## [307,] 30.57442 4.9775490
## [308,] 61.18443 4.9885007
## [309,] 58.30139 4.5531705
## [310,] 62.33436 4.4025846
## [311,] 37.99967 4.1287920
## [312,] 33.15354 3.9891578
```

```
matrix(weight_Rows, , 2, byrow = T)
```

```
##           [,1]           [,2]
## [1,] 58.76684 1.0951703
## [2,] 56.44782 14.1523382
## [3,] 70.07447 2.7707809
## [4,] 54.74209 5.2705071
## [5,] 38.10645 4.1205782
## [6,] 66.26054 6.8530281
## [7,] 55.53609 6.8475523
## [8,] 53.05826 6.7517249
## [9,] 42.50904 6.5710218
## [10,] 70.56182 0.1396342
## [11,] 53.71537 10.3000767
## [12,] 59.13920 0.8323294
## [13,] 45.69050 11.6279706
## [14,] 56.22331 3.3320556
## [15,] 64.64790 9.8127259
## [16,] 40.44464 11.8962874
## [17,] 52.18486 2.1054649
## [18,] 53.93166 0.3614062
## [19,] 49.56193 13.4185741
## [20,] 59.95510 3.7126273
## [21,] 64.19067 10.0125945
## [22,] 56.27806 1.8426240
## [23,] 55.96868 0.7228124
## [24,] 44.52141 11.1679991
## [25,] 45.07447 13.1310919
## [26,] 52.02607 3.9535648
## [27,] 54.44092 0.2108203
## [28,] 44.94853 1.5031212
## [29,] 63.87855 13.8922352
## [30,] 41.38649 0.8788742
## [31,] 41.55350 10.5108969
## [32,] 53.99737 14.2153105
## [33,] 51.28409 8.6792246
## [34,] 52.06166 12.5999343
## [35,] 48.62009 7.7948746
```

```

## [36,] 56.41222 11.7210601
## [37,] 61.72927 0.6105574
## [38,] 36.62797 8.8818311
## [39,] 55.39371 6.2890154
## [40,] 46.67068 14.0619866
## [41,] 33.63542 3.6961998
## [42,] 33.69565 14.0236557
## [43,] 48.87197 14.3056620
## [44,] 37.58351 9.3856095
## [45,] 41.79444 12.8518235
## [46,] 45.80002 6.1767605
## [47,] 47.42909 8.8845691
## [48,] 49.13755 13.9524696
## [49,] 61.15431 1.9384514
## [50,] 53.51002 7.1131311
## [51,] 52.08904 10.5492279
## [52,] 50.54211 6.5326908
## [53,] 67.41047 2.7379257
## [54,] 39.19888 3.9261855
## [55,] 65.76498 3.7235790
## [56,] 33.61899 5.0569489
## [57,] 53.57299 8.9858723
## [58,] 44.57069 14.0400832
## [59,] 40.39536 6.0891469
## [60,] 58.38353 13.7827182
## [61,] 43.89990 13.4842843
## [62,] 60.70803 8.4601906
## [63,] 46.62961 2.3518782
## [64,] 62.90932 4.0712956
## [65,] 40.20370 13.2570365
## [66,] 46.45439 11.4746468
## [67,] 51.28956 7.5813164
## [68,] 32.61417 12.8901544
## [69,] 49.34016 3.2033731
## [70,] 56.40127 10.0837805
## [71,] 48.84733 13.3200088
## [72,] 32.49370 13.2871537
## [73,] 38.49524 13.3035812
## [74,] 51.92202 5.0021903
## [75,] 43.51933 3.2608696
## [76,] 51.94393 0.1943927
## [77,] 49.82751 0.8925638
## [78,] 47.94656 4.6270945
## [79,] 46.51736 11.9811631
## [80,] 67.41321 2.4367539
## [81,] 63.26525 6.9543314
## [82,] 67.31190 9.7853466
## [83,] 56.01522 12.9202716
## [84,] 55.83178 12.8709889
## [85,] 47.21827 9.1939547
## [86,] 52.75983 4.5367430
## [87,] 37.27960 0.5421093
## [88,] 41.39470 8.4218596
## [89,] 52.44497 4.7667287

```



```

## [90,] 33.47662 7.3622823
## [91,] 45.60837 1.2594458
## [92,] 76.71120 1.0650531
## [93,] 36.53488 12.5479137
## [94,] 53.91797 2.0534443
## [95,] 46.39141 0.3750958
## [96,] 48.84733 12.3754244
## [97,] 71.89519 1.6975140
## [98,] 28.88512 12.2987625
## [99,] 48.46950 12.2905487
## [100,] 51.47027 1.5113350
## [101,] 44.95126 11.6361844
## [102,] 56.57102 10.3219801
## [103,] 48.96506 0.3011718
## [104,] 43.01829 8.4492389
## [105,] 34.04063 8.4656664
## [106,] 68.51112 8.8215968
## [107,] 62.52327 11.1105027
## [108,] 50.35867 7.0720622
## [109,] 44.06418 8.6874384
## [110,] 38.91140 5.5963202
## [111,] 41.15376 6.4341255
## [112,] 55.45942 9.4321542
## [113,] 51.23480 2.6037674
## [114,] 52.82828 9.2952579
## [115,] 42.64046 11.2008542
## [116,] 61.07217 10.9927719
## [117,] 49.65776 2.9651736
## [118,] 48.85555 6.2643741
## [119,] 54.25747 1.4100318
## [120,] 35.15223 5.5662030
## [121,] 67.90877 0.5229438
## [122,] 55.43752 10.8586135
## [123,] 45.82193 2.6585259
## [124,] 52.89125 10.6861242
## [125,] 47.18267 6.7572007
## [126,] 53.60037 2.2560508
## [127,] 44.10525 10.7436206
## [128,] 41.95050 2.8392290
## [129,] 63.61570 10.6998138
## [130,] 44.22845 3.8632132
## [131,] 62.00307 2.3272369
## [132,] 40.55416 9.8921257
## [133,] 62.64648 7.6552404
## [134,] 42.33655 10.4534005
## [135,] 42.96901 10.4561384
## [136,] 55.96320 10.3137663
## [137,] 62.86278 10.0180703
## [138,] 51.25123 3.5510897
## [139,] 46.76377 6.4532910
## [140,] 54.07677 10.2069872
## [141,] 47.03756 10.1823459
## [142,] 55.72774 6.6230424
## [143,] 46.10393 2.1520096

```

```

## [144,] 52.28891 2.5873398
## [145,] 51.20195 9.9797393
## [146,] 33.86540 8.4492389
## [147,] 75.01369 9.2596649
## [148,] 30.86464 3.9070200
## [149,] 61.80594 2.0862994
## [150,] 34.98795 9.7470157
## [151,] 55.04326 9.6895192
## [152,] 69.94305 3.1540905
## [153,] 49.60574 9.6703537
## [154,] 69.37904 0.3833096
## [155,] 43.55766 9.6265469
## [156,] 59.41025 2.3354507
## [157,] 48.75972 9.5936918
## [158,] 36.49381 6.7763662
## [159,] 45.76169 4.2054539
## [160,] 57.37323 9.4212025
## [161,] 42.74450 9.4896506
## [162,] 58.81886 0.5092542
## [163,] 53.49907 5.6264374
## [164,] 43.41529 0.7556675
## [165,] 53.30741 2.9460081
## [166,] 41.35637 9.2815683
## [167,] 60.95992 4.6106670
## [168,] 47.75490 9.2651407
## [169,] 35.49173 3.3183660
## [170,] 48.66389 9.2021684
## [171,] 52.66948 8.8790932
## [172,] 49.87132 8.1316395
## [173,] 30.27598 9.1063410
## [174,] 55.56894 9.0707480
## [175,] 52.15475 9.0159895
## [176,] 41.61100 4.0849852
## [177,] 55.45395 8.9749206
## [178,] 70.00602 8.8955208
## [179,] 43.94371 8.8763553
## [180,] 42.56927 8.8489760
## [181,] 44.57069 8.8298105
## [182,] 56.94612 8.8270726
## [183,] 40.26120 6.1356916
## [184,] 37.60815 2.6667397
## [185,] 48.36272 7.8907020
## [186,] 70.83835 4.3149710
## [187,] 35.79290 2.0068996
## [188,] 62.62458 7.2144343
## [189,] 50.64889 8.5560180
## [190,] 54.52853 8.6874384
## [191,] 52.69412 0.5913920
## [192,] 52.72150 8.5204249
## [193,] 56.77363 2.1821268
## [194,] 44.39820 8.5368525
## [195,] 29.55591 8.2110393
## [196,] 57.04195 6.9954003
## [197,] 44.62819 8.3068667

```

```

## [198,] 35.79838 8.2822254
## [199,] 40.71843 8.1891359
## [200,] 32.23360 8.0275983
## [201,] 41.09353 8.1124740
## [202,] 61.64166 8.0522396
## [203,] 37.05782 7.9126054
## [204,] 62.58077 5.7222648
## [205,] 48.97875 5.6976235
## [206,] 61.99211 8.0056949
## [207,] 72.77407 7.7757091
## [208,] 61.29668 2.4750849
## [209,] 52.62567 7.9071296
## [210,] 49.76454 7.9208192
## [211,] 52.91589 7.8441573
## [212,] 47.26481 7.7893988
## [213,] 50.20534 5.9933195
## [214,] 69.34892 4.8899354
## [215,] 41.17019 2.9569598
## [216,] 59.16658 6.3957945
## [217,] 36.08039 2.1629613
## [218,] 34.59643 7.7729712
## [219,] 42.71438 7.7373782
## [220,] 63.63213 3.3813383
## [221,] 56.63126 7.4444201
## [222,] 46.26547 1.6345417
## [223,] 61.24466 0.9144672
## [224,] 38.62118 7.1569379
## [225,] 38.77177 7.3677582
## [226,] 56.69697 7.2472895
## [227,] 58.95302 2.7351878
## [228,] 36.92367 7.2171723
## [229,] 62.41649 0.9527982
## [230,] 34.61012 7.2500274
## [231,] 58.33698 3.1896835
## [232,] 50.18344 7.1733655
## [233,] 42.68700 7.1213449
## [234,] 34.38013 6.6942285
## [235,] 33.18366 6.3027051
## [236,] 38.38298 7.0556347
## [237,] 59.76344 5.3307414
## [238,] 66.41386 5.1308729
## [239,] 46.79115 1.9001205
## [240,] 56.08093 6.8448144
## [241,] 41.37553 2.2916439
## [242,] 64.57398 5.8263060
## [243,] 67.48987 2.5462709
## [244,] 44.83080 4.6270945
## [245,] 45.77264 6.7325594
## [246,] 32.95094 3.9289234
## [247,] 41.22221 2.5736502
## [248,] 55.41836 6.7188698
## [249,] 47.98215 6.7133939
## [250,] 40.79236 6.3711532
## [251,] 56.97623 6.3163947

```

```

## [252,] 68.46457 6.6778009
## [253,] 78.44157 6.6641113
## [254,] 39.85872 2.0178513
## [255,] 35.31103 6.5847114
## [256,] 31.44508 6.4888840
## [257,] 58.26580 6.2506845
## [258,] 51.48943 6.4916219
## [259,] 59.97153 6.2534224
## [260,] 74.52634 4.5832877
## [261,] 52.36557 6.4286497
## [262,] 42.78830 5.0651626
## [263,] 34.87570 3.5675172
## [264,] 44.14084 4.2218815
## [265,] 46.38320 2.9679115
## [266,] 56.31092 6.2616362
## [267,] 70.90954 0.4900887
## [268,] 55.39645 3.2608696
## [269,] 45.08542 5.1965831
## [270,] 26.27861 5.5032308
## [271,] 50.47366 6.1274778
## [272,] 38.39941 6.0070091
## [273,] 47.42087 4.5148396
## [274,] 47.98215 3.9617786
## [275,] 38.31727 5.5306100
## [276,] 50.10952 5.8783266
## [277,] 35.08926 5.7633337
## [278,] 32.50465 5.4648998
## [279,] 56.15486 5.7551199
## [280,] 46.15595 5.6976235
## [281,] 65.88545 0.1122550
## [282,] 33.94480 4.5805498
## [283,] 62.86278 5.7359544
## [284,] 48.56533 5.7140510
## [285,] 46.35034 5.6675063
## [286,] 38.85390 5.6866718
## [287,] 58.64911 4.2492608
## [288,] 48.93768 2.9213668
## [289,] 67.57475 2.1876027
## [290,] 65.98675 5.5634651
## [291,] 40.90187 2.4668711
## [292,] 50.24641 4.8871975
## [293,] 57.19801 5.4457343
## [294,] 60.53828 5.3964516
## [295,] 35.35210 2.3956850
## [296,] 31.38210 5.4484722
## [297,] 55.98784 1.4593144
## [298,] 52.72697 5.3909758
## [299,] 38.09276 5.3718103
## [300,] 58.17271 0.5667506
## [301,] 45.21137 5.3909758
## [302,] 37.79980 5.3115760
## [303,] 60.66148 4.3724674
## [304,] 35.53554 5.1993210
## [305,] 43.06757 5.1609900

```

```
## [306,] 56.39306 5.1609900
## [307,] 30.57442 4.9775490
## [308,] 61.18443 4.9885007
## [309,] 58.30139 4.5531705
## [310,] 62.33436 4.4025846
## [311,] 37.99967 4.1287920
## [312,] 33.15354 3.9891578
```

TAKE CARE

```
Columns_com <- cbind(c(1:4), c(1:8))
```

```
## Create data frames
```

```
DF <- data.frame(Age = c(30, 20, 50),
                 Sex = c("male", "female", "female"),
                 Drug = c("yes", "yes", "no"))

DF <- data.frame(Age = runif(30, 1, 80),
                 Sex = sample(1:2, 30, replace = TRUE),
                 Drug = sample(1:3, 30, replace = TRUE))

head(DF)
```

```
##      Age Sex Drug
## 1 45.89339  1   1
## 2 63.77637  1   2
## 3 19.42001  1   3
## 4 72.40499  2   1
## 5 77.09298  2   2
## 6 57.01808  2   3
```

```
## Create lists
```

```
myList <- list(x = c(1:20), sex = c("male", "female"))
myList
```

```
## $x
## [1]  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
##
## $sex
## [1] "male"  "female"
```