4.2 Exercise R Plots

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R Plots

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
## Google's Terms of Service: https://cloud.google.com/maps-platform/terms/.
```

```
## Please cite ggmap if you use it! See citation("ggmap") for details.
```

```
##
## Attaching package: 'plotly'
```

```
## The following object is masked from 'package:ggmap':
##
##     wind
```

```
## The following object is masked from 'package:ggplot2':
##
##     last_plot
```

```
## The following object is masked from 'package:stats':
##
##     filter
```

```
## The following object is masked from 'package:graphics':
##
##     layout
```

```
##               Name  G  MIN  PTS  FGM  FGA   FGP FTM FTA   FTP X3PM X3PA  X3PP ORB
## 1   Dwyane Wade  79 38.6 30.2 10.8 22.0 0.491 7.5 9.8 0.765  1.1  3.5 0.317 1.1
## 2  LeBron James  81 37.7 28.4  9.7 19.9 0.489 7.3 9.4 0.780  1.6  4.7 0.344 1.3
## 3   Kobe Bryant  82 36.2 26.8  9.8 20.9 0.467 5.9 6.9 0.856  1.4  4.1 0.351 1.1
## 4 Dirk Nowitzki  81 37.7 25.9  9.6 20.0 0.479 6.0 6.7 0.890  0.8  2.1 0.359 1.1
## 5 Danny Granger  67 36.2 25.8  8.5 19.1 0.447 6.0 6.9 0.878  2.7  6.7 0.404 0.7
## 6  Kevin Durant  74 39.0 25.3  8.9 18.8 0.476 6.1 7.1 0.863  1.3  3.1 0.422 1.0
##   DRB TRB AST STL BLK  TO  PF
## 1 3.9 5.0 7.5 2.2 1.3 3.4 2.3
## 2 6.3 7.6 7.2 1.7 1.1 3.0 1.7
## 3 4.1 5.2 4.9 1.5 0.5 2.6 2.3
## 4 7.3 8.4 2.4 0.8 0.8 1.9 2.2
## 5 4.4 5.1 2.7 1.0 1.4 2.5 3.1
## 6 5.5 6.5 2.8 1.3 0.7 3.0 1.8
```

```
##                        Address        City    State   Zip.Code Latitude   Longitude
## 1  1205 N. Memorial Parkway Huntsville Alabama 35801-5930 34.74309  -86.60096
## 2       3650 Galleria Circle     Hoover Alabama 35244-2346 33.37765  -86.81242
## 3    8251 Eastchase Parkway Montgomery Alabama      36117 32.36389  -86.15088
## 4 5225 Commercial Boulevard     Juneau  Alaska 99801-7210 58.35920 -134.48300
## 5      330 West Dimond Blvd  Anchorage  Alaska 99515-1950 61.14327 -149.88422
## 6          4125 DeBarr Road  Anchorage  Alaska 99508-3115 61.21081 -149.80434
```
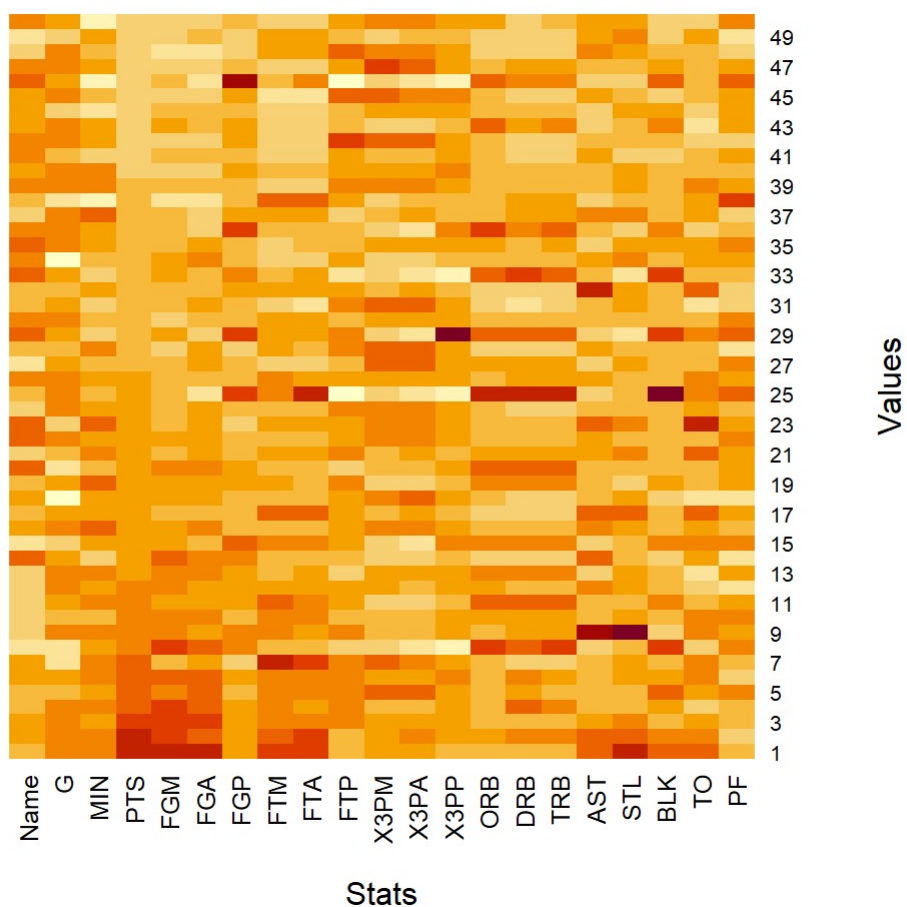
Heat Map

```
##      G  MIN  PTS  FGM  FGA   FGP  FTM   FTA   FTP  X3PM X3PA  X3PP  ORB DRB   TRB
## 1   79 38.6 30.2 10.8 22.0 0.491  7.5   9.8 0.765  1.1  3.5 0.317  1.1 3.9   5.0
## 2   81 37.7 28.4  9.7 19.9 0.489  7.3   9.4 0.780  1.6  4.7 0.344  1.3 6.3   7.6
## 3   82 36.2 26.8  9.8 20.9 0.467  5.9   6.9 0.856  1.4  4.1 0.351  1.1 4.1   5.2
## 4   81 37.7 25.9  9.6 20.0 0.479  6.0   6.7 0.890  0.8  2.1 0.359  1.1 7.3   8.4
## 5   67 36.2 25.8  8.5 19.1 0.447  6.0   6.9 0.878  2.7  6.7 0.404  0.7 4.4   5.1
## 6   74 39.0 25.3  8.9 18.8 0.476  6.1   7.1 0.863  1.3  3.1 0.422  1.0 5.5   6.5
## 7   51 38.2 24.6  6.7 15.9 0.420  9.0  10.3 0.867  2.3  5.4 0.415  0.6 3.0   3.6
## 8   50 36.6 23.1  9.7 19.5 0.497  3.7   5.0 0.738  0.0  0.1 0.000  3.4 7.5  11.0
## 9   78 38.5 22.8  8.1 16.1 0.503  5.8   6.7 0.868  0.8  2.3 0.364  0.9 4.7   5.5
## 10  66 34.5 22.8  8.1 18.3 0.443  5.6   7.1 0.793  1.0  2.6 0.371  1.6 5.2   6.8
## 11  77 38.1 22.7  8.0 16.4 0.487  6.5   8.0 0.817  0.2  0.6 0.245  2.8 7.2  10.0
## 12  78 37.2 22.6  8.1 16.9 0.480  5.3   6.5 0.824  1.1  2.8 0.377  1.3 3.4   4.7
## 13  81 38.2 22.2  8.3 17.8 0.468  4.2   5.6 0.754  1.4  3.9 0.351  2.4 6.5   8.9
## 14  72 34.1 22.0  8.9 17.5 0.506  3.9   5.0 0.782  0.3  0.9 0.292  0.4 2.7   3.1
## 15  53 36.8 21.4  7.6 14.1 0.539  6.1   7.3 0.835  0.1  0.1 0.429  2.2 5.9   8.1
## 16  79 39.5 21.4  7.8 18.0 0.437  3.8   4.6 0.826  1.9  5.2 0.360  0.8 3.6   4.4
## 17  69 36.1 21.3  6.6 15.1 0.438  7.2   8.8 0.820  0.9  3.2 0.291  0.4 2.9   3.3
## 18  33 36.4 21.2  7.5 16.6 0.455  4.0   4.9 0.814  2.1  5.8 0.366  0.7 2.5   3.2
## 19  76 39.3 21.0  8.0 17.0 0.472  4.8   5.5 0.884  0.1  0.3 0.240  2.1 6.4   8.5
## 20  50 35.1 20.8  8.3 17.5 0.475  3.6   4.9 0.734  0.6  1.9 0.330  3.1 6.9  10.1
## 21  67 38.6 20.8  7.3 16.2 0.453  5.1   6.0 0.858  1.0  3.1 0.310  1.8 4.4   6.2
## 22  80 36.8 20.8  7.4 16.8 0.437  4.2   5.1 0.817  1.9  4.9 0.385  0.9 4.2   5.1
## 23  59 39.7 20.7  7.0 16.9 0.414  5.0   6.0 0.826  1.7  5.2 0.338  1.2 3.9   5.1
## 24  82 36.6 20.7  7.3 16.0 0.455  4.0   4.7 0.864  2.1  5.1 0.410  0.6 2.8   3.5
## 25  79 35.7 20.6  7.1 12.4 0.572  6.4  10.7 0.594  0.0  0.0 0.000  4.3 9.6  13.8
## 26  81 37.4 20.5  6.7 14.6 0.457  5.7   6.8 0.830  1.5  3.8 0.391  0.7 5.0   5.6
## 27  73 34.9 20.1  7.3 16.6 0.439  3.2   4.0 0.793  2.3  6.4 0.364  1.4 4.9   6.2
## 28  65 38.1 19.7  6.4 15.7 0.410  4.6   5.3 0.872  2.2  6.1 0.360  0.4 2.6   3.0
## 29  77 33.6 19.7  7.4 13.4 0.548  4.9   5.7 0.866  0.0  0.0 1.000  2.6 7.2   9.9
## 30  82 35.9 19.6  6.5 14.9 0.439  5.1   6.3 0.805  1.4  3.6 0.397  0.7 3.9   4.6
## 31  74 33.6 19.6  7.3 15.8 0.463  2.7   3.0 0.880  2.3  6.2 0.366  0.5 1.9   2.4
## 32  68 36.9 19.4  6.8 14.5 0.471  4.8   5.6 0.849  1.0  3.3 0.310  0.4 2.5   2.9
## 33  75 33.7 19.3  7.4 14.8 0.504  4.5   6.4 0.692  0.0  0.0 0.000  2.7 8.0  10.7
## 34  25 35.6 19.0  7.8 17.2 0.451  3.1   3.8 0.830  0.3  1.0 0.308  0.6 3.8   4.3
## 35  79 37.3 18.9  7.2 16.0 0.453  3.3   4.4 0.767  1.1  3.1 0.351  1.4 4.2   5.5
## 36  81 37.1 18.9  7.3 12.9 0.567  4.2   5.4 0.781  0.0  0.0 0.500  3.2 6.4   9.6
## 37  82 39.8 18.8  6.6 14.0 0.473  4.6   6.4 0.724  1.0  3.2 0.307  1.1 4.6   5.7
## 38  51 31.1 18.6  5.7 12.4 0.461  6.7   8.1 0.824  0.5  1.9 0.253  1.0 4.6   5.5
## 39  82 38.0 18.5  6.9 15.6 0.438  3.0   3.4 0.879  1.8  4.6 0.384  0.7 3.1   3.8
## 40  79 37.5 18.3  6.5 13.8 0.472  3.6   4.4 0.830  1.6  3.8 0.417  0.7 3.5   4.2
## 41  67 34.0 18.3  7.0 15.6 0.447  3.3   3.9 0.848  1.0  2.8 0.368  0.7 2.4   3.1
## 42  79 36.3 18.2  6.3 13.2 0.480  3.0   3.2 0.952  2.5  6.2 0.409  0.8 2.7   3.5
## 43  81 37.1 18.1  7.4 15.3 0.484  3.2   4.1 0.781  0.1  0.3 0.250  2.9 4.6   7.5
## 44  52 31.9 18.0  6.8 15.1 0.451  3.3   4.2 0.782  1.1  3.2 0.345  1.1 3.9   5.1
## 45  81 35.0 17.8  6.5 13.9 0.467  2.6   2.8 0.912  2.3  5.2 0.436  0.6 2.9   3.4
## 46  75 30.1 17.8  6.8 11.2 0.609  4.1   6.9 0.595  0.0  0.0 0.000  2.5 5.9   8.4
## 47  79 36.2 17.7  6.1 13.8 0.439  2.8   3.4 0.836  2.8  7.0 0.397  1.2 4.6   5.7
## 48  79 35.3 17.7  5.2 12.4 0.418  5.3   5.8 0.913  2.1  5.0 0.408  0.4 2.6   3.0
## 49  57 36.7 17.5  6.1 14.6 0.417  4.8   6.1 0.781  0.5  1.7 0.283  0.5 2.5   3.0
```

```
## 50 74 29.9 17.2  6.1 13.9 0.437 3.4  4.0 0.841  1.7  5.2 0.325 1.3 2.6  3.9
##      AST STL BLK   TO  PF
## 1   7.5 2.2 1.3 3.4 2.3
## 2   7.2 1.7 1.1 3.0 1.7
## 3   4.9 1.5 0.5 2.6 2.3
## 4   2.4 0.8 0.8 1.9 2.2
## 5   2.7 1.0 1.4 2.5 3.1
## 6   2.8 1.3 0.7 3.0 1.8
## 7   2.7 1.2 0.2 2.9 2.3
## 8   1.6 0.8 1.7 1.8 2.8
## 9  11.0 2.8 0.1 3.0 2.7
## 10  3.4 1.1 0.4 3.0 3.0
## 11  2.5 0.9 1.0 2.3 2.5
## 12  5.1 1.1 0.3 1.9 1.6
## 13  1.9 1.2 0.3 1.5 2.7
## 14  6.9 0.9 0.1 2.6 1.5
## 15  2.0 0.9 1.1 2.8 3.1
## 16  5.8 1.1 0.2 2.5 2.2
## 17  6.9 1.7 0.2 3.1 2.4
## 18  2.7 1.1 0.1 1.6 1.4
## 19  2.3 0.6 0.9 2.1 2.7
## 20  2.1 0.9 0.3 2.3 2.7
## 21  4.3 1.6 0.3 3.1 2.5
## 22  4.7 1.0 0.5 2.1 2.9
## 23  6.5 1.5 0.5 3.9 2.6
## 24  3.4 0.9 0.3 2.4 2.2
## 25  1.4 1.0 2.9 3.0 3.4
## 26  3.6 1.0 0.3 2.8 2.7
## 27  1.4 1.2 0.3 2.2 3.1
## 28  4.4 0.9 0.2 2.3 1.4
## 29  1.8 0.4 1.9 3.0 3.3
## 30  2.4 0.8 0.2 2.0 3.1
## 31  3.4 1.3 0.3 1.6 1.9
## 32 10.7 1.1 0.3 3.4 2.0
## 33  3.5 0.5 1.7 2.2 2.3
## 34  3.7 1.6 0.3 2.7 2.7
## 35  1.7 1.2 0.7 2.6 2.8
## 36  3.5 0.6 1.0 1.9 2.1
## 37  5.3 1.6 0.4 2.7 1.9
## 38  1.8 0.9 0.2 2.4 3.8
## 39  3.2 1.1 0.2 2.8 2.5
## 40  3.2 1.1 0.3 2.1 2.3
## 41  4.4 0.6 0.1 2.0 2.6
## 42  2.8 0.9 0.2 1.7 2.0
## 43  1.9 1.0 1.0 1.5 2.6
## 44  1.6 1.1 0.6 1.7 2.6
## 45  4.1 0.9 0.1 2.2 2.7
## 46  1.7 0.7 1.4 2.2 3.4
## 47  2.6 1.0 0.6 2.0 2.5
## 48  6.4 1.2 0.2 2.2 2.0
## 49  5.0 1.5 0.1 2.6 1.5
```

```
## 50   4.1 1.3 0.1 1.9 2.8
```


NBA Stats of 2008 Season

Spatial Plot

Contour Plot