Assignment_Week_7&8_Venkidusamy_KesavAdithya

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```
knitr::opts_chunk$set(echo = TRUE)

library(readxl)
library(ggplot2)
library(dplyr)
```

```
##
## 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
```

Data Loading

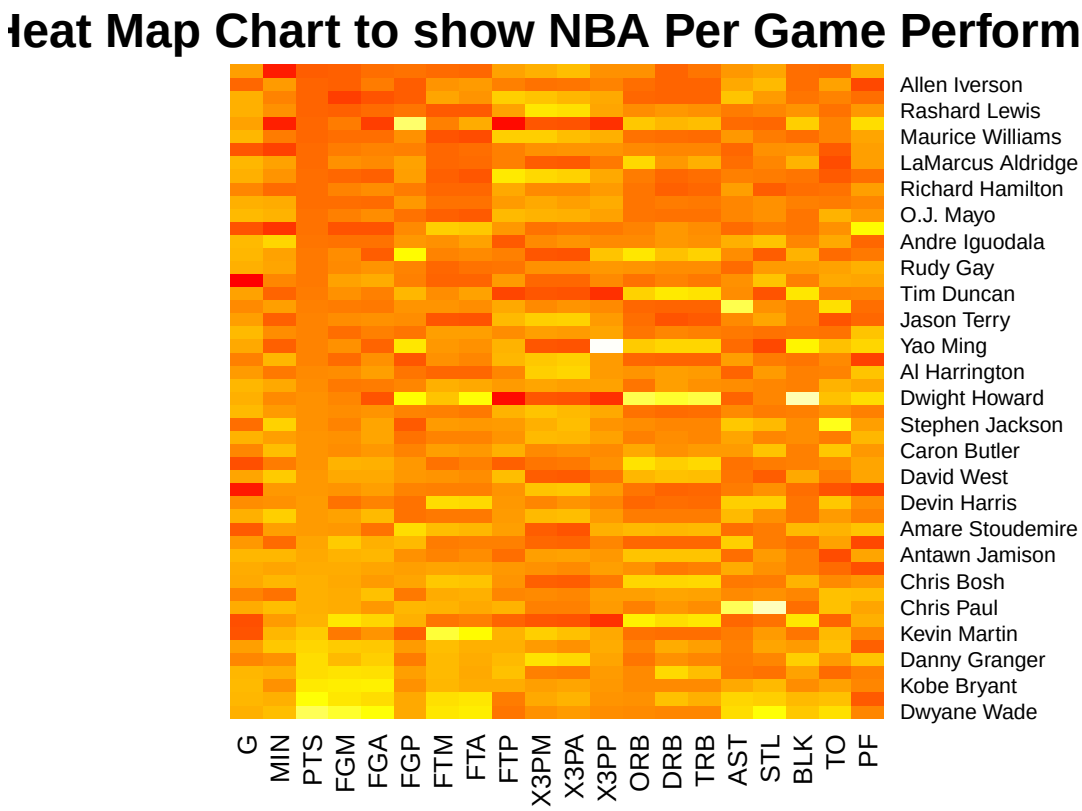
```
# Creating dataframe
ppg_df <- read.csv("E:/Personal/Bellevue University/Course/github/dsc640/Week 7&8/ppg2008.csv")
head(ppg_df)
```

```
##             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
```

```r
# Total number of records present in the data set
nrow(ppg_df)
```

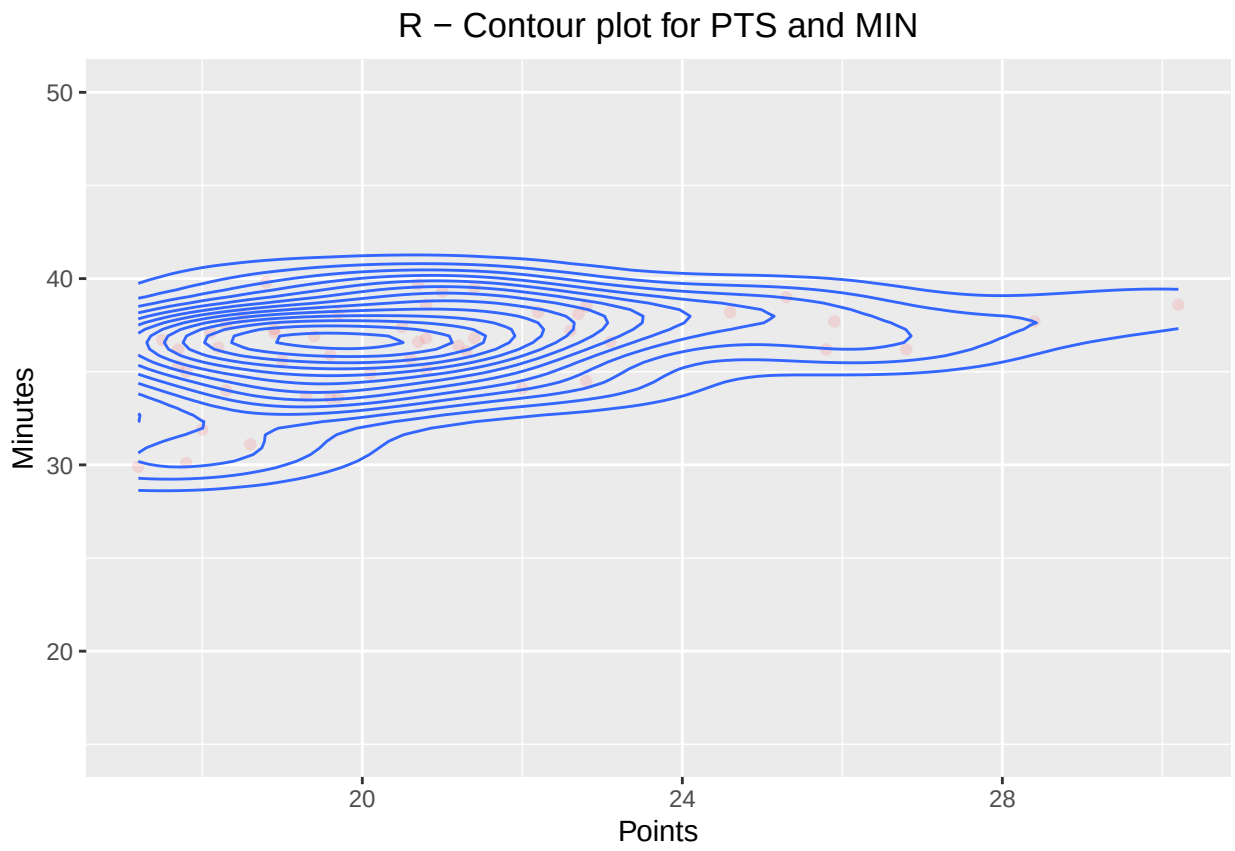
```
## [1] 50
```

```r
# Scatter Plot
df1 <- data.frame(ppg_df[,-1], row.names = ppg_df[,1])
heatmap(as.matrix(df1), scale="column",col=heat.colors(100),main="R: Heat Map Chart to show NBA Per Game
```




```r
## Create Contour Chart

ggplot(data=ppg_df, aes(x=PTS, y=MIN)) +
  ylim(15,50) +
  geom_point(alpha=0.1, col="red") +
  geom_density_2d() +
  ggtitle("R - Contour plot for PTS and MIN") +
  theme(plot.title = element_text(hjust=0.5)) +
  labs(x="Points", y="Minutes")
```




```
# Creating dataframe
costco_df <- read.csv("E:/Personal/Bellevue University/Course/github/dsc640/Week 7&8/costcos-geocoded.cs
head(costco_df)
```

```
##                    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
```

```
# Total number of records present in the data set
nrow(costco_df)
```

```
## [1] 417
```

```
library(maps)
```

```
## Warning: package 'maps' was built under R version 4.1.3
```

```
library(mapdata)
```

```
## Warning: package 'mapdata' was built under R version 4.1.3
```

```
usa <- map_data("usa")

cost <- costco_df[costco_df$Longitude > -130,]
gg1 <- ggplot() +
  geom_polygon(data = usa, aes(x=long, y = lat, group = group), fill = "lightblue", color = "blue") +
  coord_fixed(1.3)
gg1 +
  geom_point(data=cost, aes(x=Longitude,y=Latitude), color="black",size=2)+
  geom_point(data=cost, aes(x=Longitude,y=Latitude), color="blue",size=1)+
  ggtitle("R - Saptial Map For Costco Store Locations")
```