2011.R

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Mon Feb 18 09:23:03 2019

```
library(ggplot2)
library(ggthemes)
library(pdftools)
library(cowplot)

df <- read.csv("D:\\Programming\\DA\\Lab 2\\2011\\2011.csv", header = T)

summary(df)
```

```
##      Sr..No               District  Birth.Registered   Birth.Rate
##  Min.   : 1.00   BAGALKOTE    : 1   Min.   :  4716   Min.   :12.80
##  1st Qu.: 8.25   BANGALORE (R): 1   1st Qu.: 15012   1st Qu.:16.52
##  Median :15.50   BANGALORE (U): 1   Median : 18612   Median :17.93
##  Mean   :15.50   BELGAUM      : 1   Mean   : 25606   Mean   :18.42
##  3rd Qu.:22.75   BELLARY      : 1   3rd Qu.: 29383   3rd Qu.:20.57
##  Max.   :30.00   BIDAR        : 1   Max.   :141434   Max.   :24.59
##                  (Other)      :24
##  Death.Regesterd   Death.Rate    Registered.Infant.Death
##  Min.   :  884   Min.   :3.980   Min.   :   9.00
##  1st Qu.: 2161   1st Qu.:5.665   1st Qu.:  87.25
##  Median : 3639   Median :6.300   Median : 135.00
##  Mean   : 5753   Mean   :6.201   Mean   : 273.27
##  3rd Qu.: 5564   3rd Qu.:6.740   3rd Qu.: 360.75
##  Max.   :48611   Max.   :8.370   Max.   :1216.00
##
##  Still.Birth.Registered Still.Birth.Rate
##  Min.   :  4.0          Min.   : 0.000
##  1st Qu.: 26.0          1st Qu.: 1.323
##  Median :217.0          Median : 4.265
##  Mean   :217.8          Mean   : 5.062
##  3rd Qu.:327.0          3rd Qu.: 8.918
##  Max.   :868.0          Max.   :13.370
##  NA's   :1
```

```
var(df$Birth.Registered)
```

```
## [1] 609322101
```

```
sd(df$Birth.Registered)
```

```
## [1] 24684.45
```

```
head(df)
```

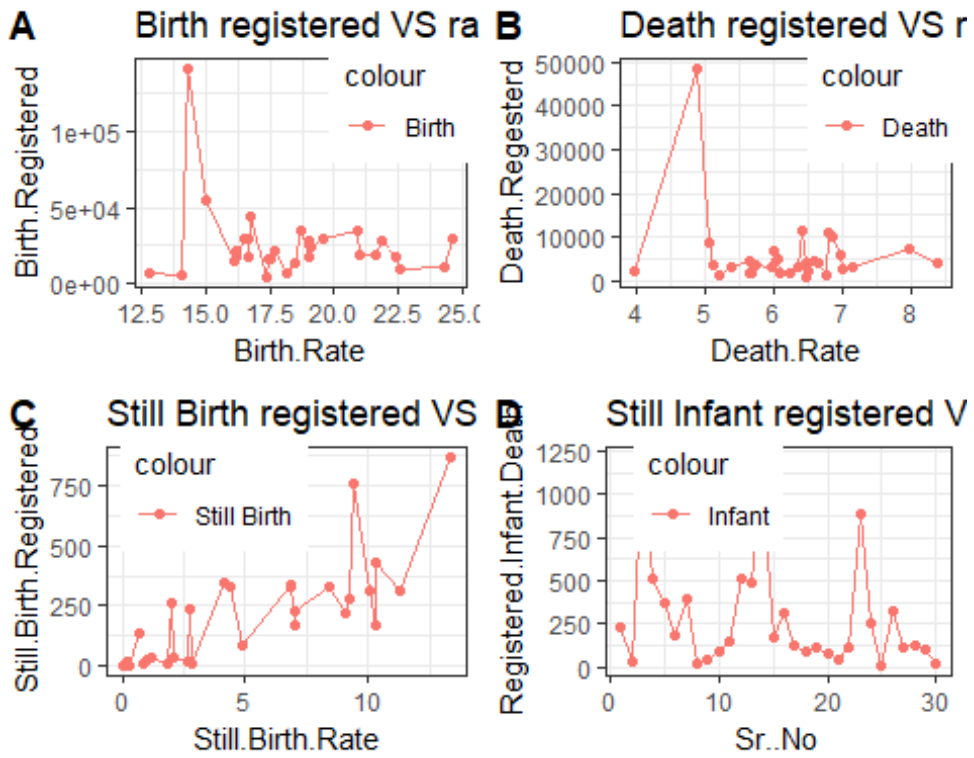
```
##   Sr..No      District Birth.Registered Birth.Rate Death.Regesterd
## 1      1     BAGALKOTE            35199      18.74            5119
## 2      2 BANGALORE (R)             7479      12.80            1722
## 3      3 BANGALORE (U)           141434      14.28           48611
## 4      4       BELGAUM            54881      14.99           10951
## 5      5       BELLARY            28309      21.87            6728
## 6      6         BIDAR            24793      19.08            2370
##   Death.Rate Registered.Infant.Death Still.Birth.Registered
## 1       6.06                    234                   426
## 2       5.66                     27                     4
## 3       4.88                   1216                   264
## 4       6.80                    516                   868
## 5       6.00                    372                   335
## 6       3.98                    188                   343
##   Still.Birth.Rate
## 1            10.35
## 2             0.29
## 3             2.00
## 4            13.37
## 5             6.85
## 6             4.18
```

```
tail(df)
```

```
##    Sr..No       District Birth.Registered Birth.Rate Death.Regesterd
## 25     25      RAMANAGAR             9712      22.55            1885
## 26     26        SHIMOGA            29433      16.48            5713
## 27     27         TUMKUR            29496      19.57            4428
## 28     28          UDUPI            16463      17.51            3770
## 29     29 UTTARA KANNADA            22150      17.69            3096
## 30     30         YADGIR             4716      17.37            1074
##    Death.Rate Registered.Infant.Death Still.Birth.Registered
## 25       6.25                      9                     6
## 26       6.97                    327                   329
## 27       6.60                    110                    32
## 28       5.12                    125                   136
## 29       6.35                    101                   173
## 30       5.20                     19                    NA
##    Still.Birth.Rate
## 25             0.00
## 26             6.89
## 27             1.14
## 28             0.67
## 29             7.00
## 30             0.78
```

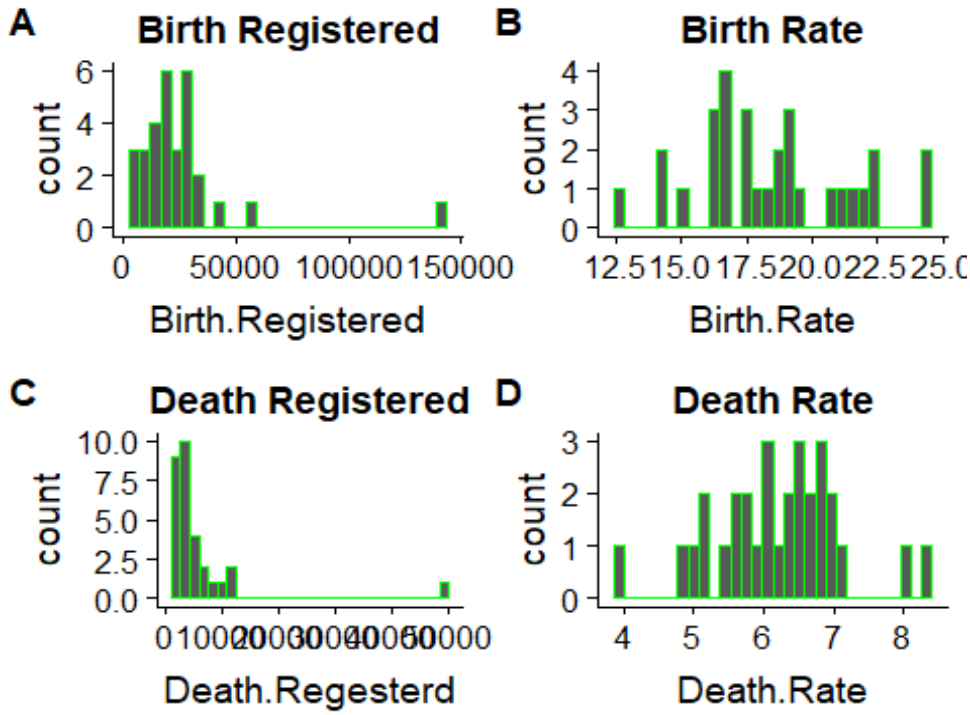
```
a <- ggplot(df, aes(Birth.Rate, Birth.Registered, colour = "Birth"))+
  geom_point()+ ggtitle("Birth registered VS rate")+theme_bw()+
  theme(legend.position = c(0.8, 0.8))+geom_line()
b <- ggplot(df, aes(Death.Rate, Death.Regesterd, colour = "Death"))+
```

```
  geom_point()+ ggtitle("Death registered VS rate")+theme_bw()+
  theme(legend.position = c(0.8, 0.8))+geom_line()
c <- ggplot(df, aes(Still.Birth.Rate, Still.Birth.Registered, colour = "Still
Birth")) +
  geom_point()+ ggtitle("Still Birth registered VS rate")+theme_bw()+
  theme(legend.position = c(0.3, 0.8))+geom_line()
d <- ggplot(df, aes(Sr..No, Registered.Infant.Death, colour = "Infant"))+
  geom_point()+ ggtitle("Still Infant registered VS rate") + theme_bw()+
  theme(legend.position = c(0.3, 0.8))+geom_line()

plot_grid(a, b,c,d, labels = "AUTO")
```

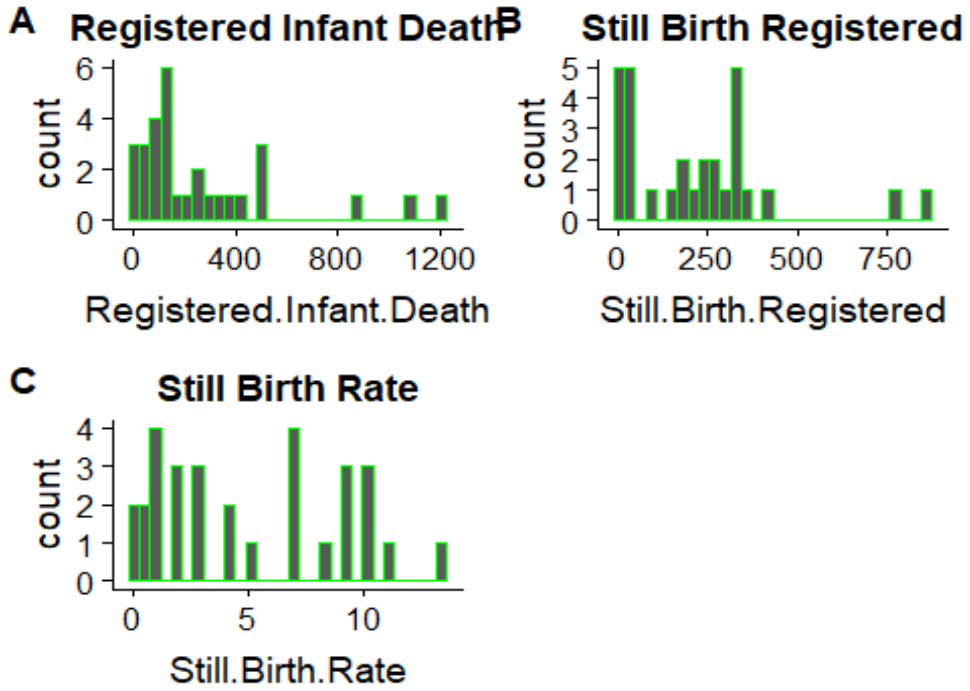



```
p <- ggplot(df, aes(Birth.Registered)) + geom_histogram(colour="green") +
  ggtitle("Birth Registered")
q <- ggplot(df, aes(Birth.Rate)) + geom_histogram(colour="green") +
  ggtitle("Birth Rate")
r <- ggplot(df, aes(Death.Regesterd)) + geom_histogram(colour="green") +
  ggtitle("Death Registered")
s <- ggplot(df, aes(Death.Rate)) + geom_histogram(colour="green") +
  ggtitle("Death Rate")
t <- ggplot(df, aes(Registered.Infant.Death)) + geom_histogram(colour="green"
)+
  ggtitle("Registered Infant Death")
u <- ggplot(df, aes(Still.Birth.Registered)) + geom_histogram(colour="green")
+
  ggtitle("Still Birth Registered")
v <- ggplot(df, aes(Still.Birth.Rate)) +
```

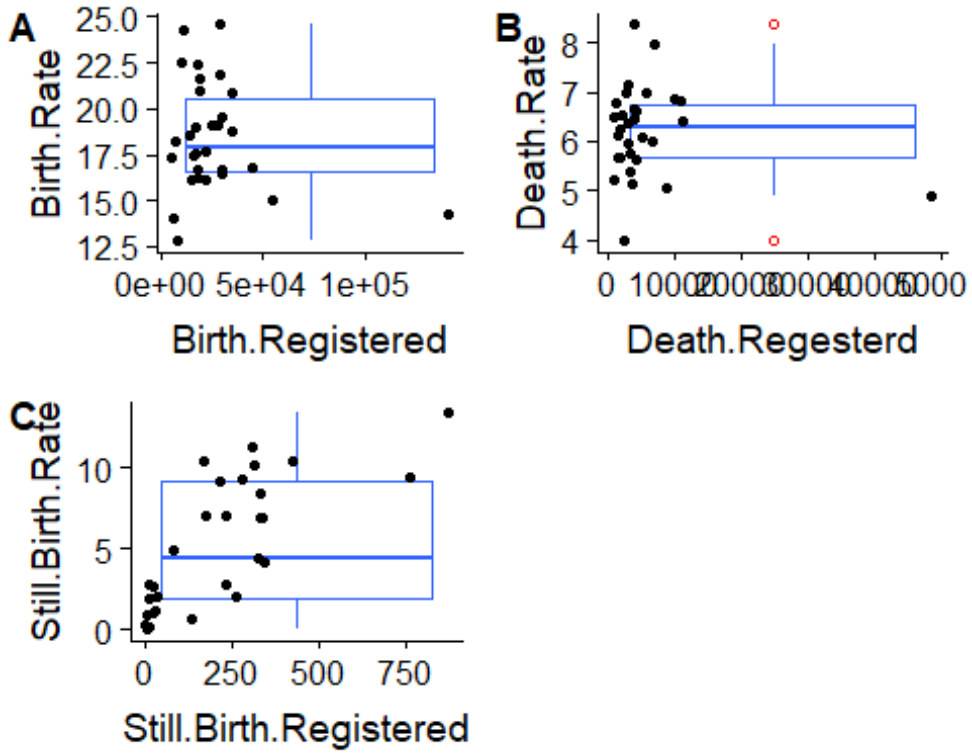
```
  geom_histogram(colour="green") + ggtitle("Still Birth Rate")

plot_grid(p,q,r,s, labels = "AUTO")
```



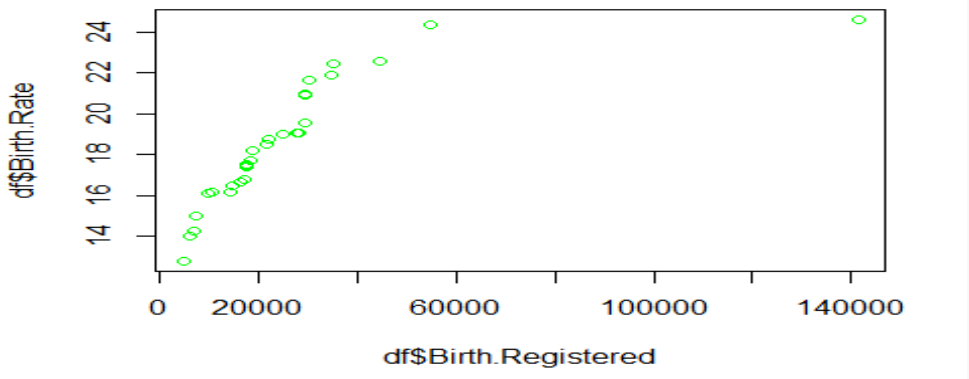

```
plot_grid(t,u,v, labels = "AUTO")
```



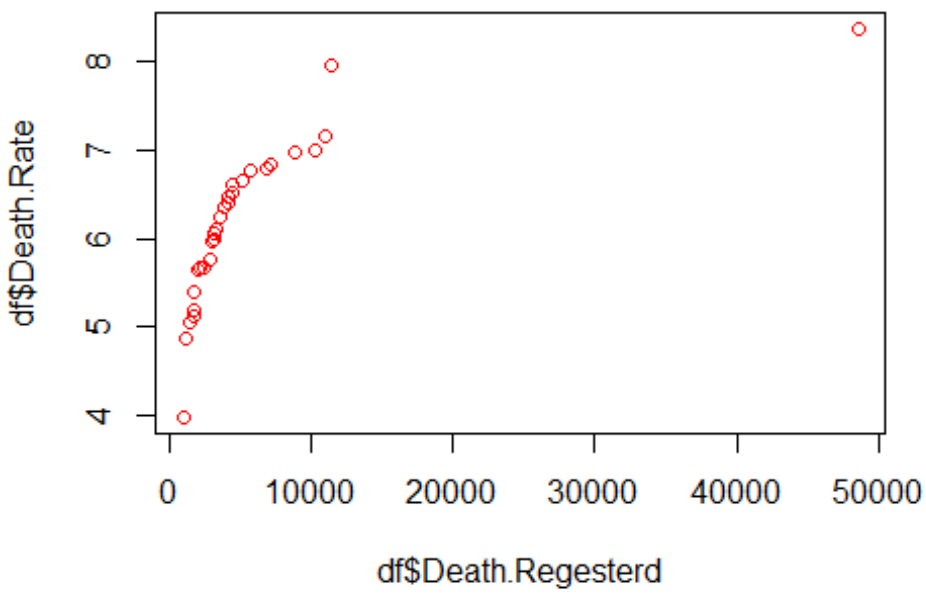
```r
g <- ggplot(df, aes(Birth.Registered, Birth.Rate)) +
  geom_boxplot(fill = "white", colour = "#3366FF", outlier.colour = "red",
               outlier.shape = 1)+  geom_jitter(width = 0.2)
y <- ggplot(df, aes(Death.Regesterd, Death.Rate)) +
  geom_boxplot(fill = "white", colour = "#3366FF", outlier.colour = "red",
               outlier.shape = 1)+geom_jitter(width = 0.2)
z <- ggplot(df, aes(Still.Birth.Registered, Still.Birth.Rate)) +
  geom_boxplot(fill = "white", colour = "#3366FF", outlier.colour = "red",
               outlier.shape = 1)+geom_jitter(width = 0.2)

plot_grid(g,y,z, labels = "AUTO")
```



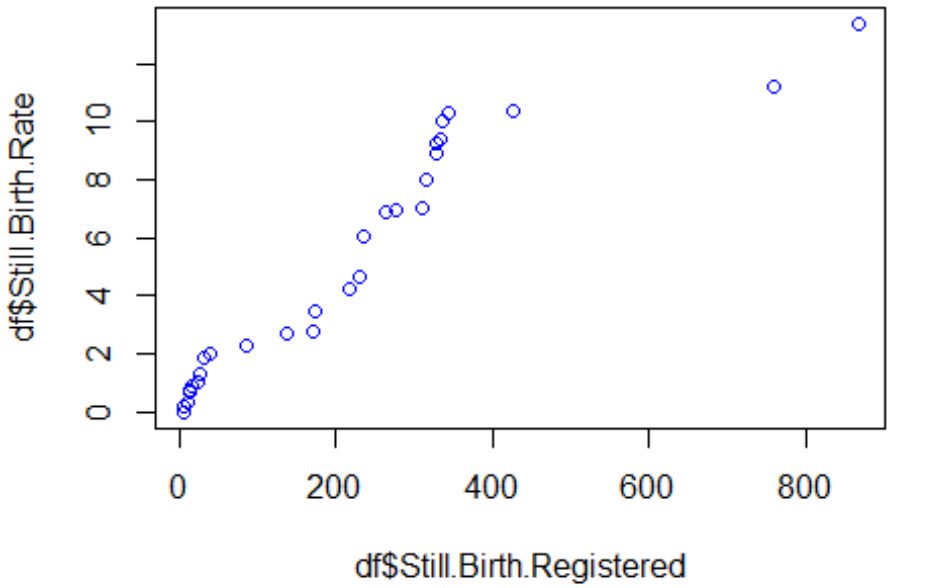

```r
aa <- qqplot(df$Birth.Registered, df$Birth.Rate, col = "green")
```



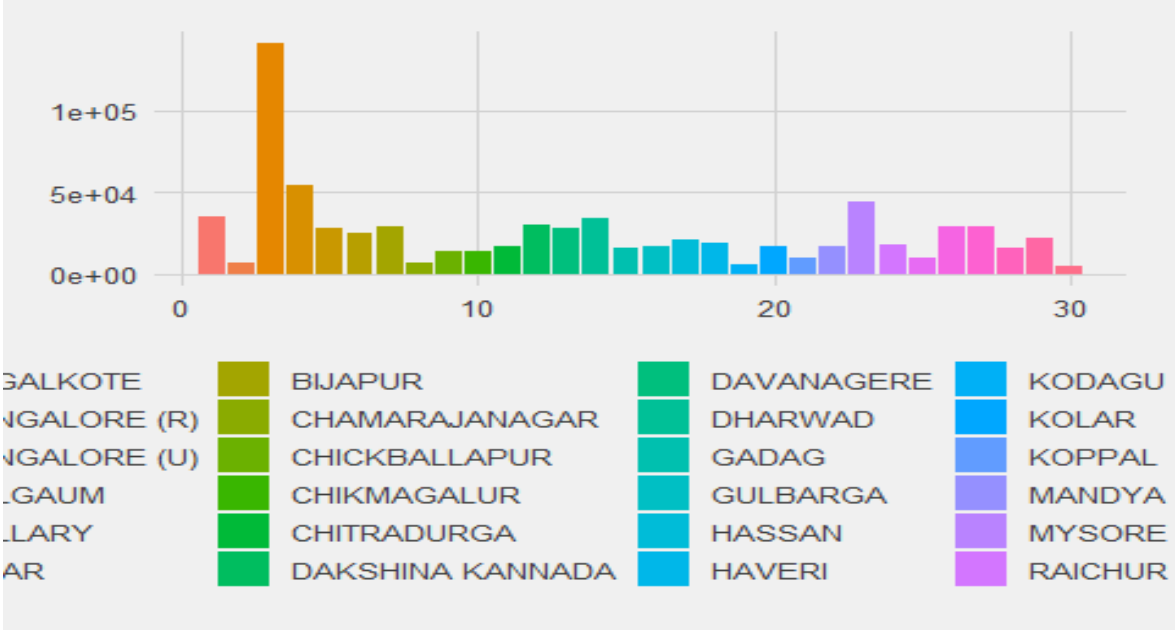
```
bb <- qqplot(df$Death.Regesterd,df$Death.Rate, col = "red")
```



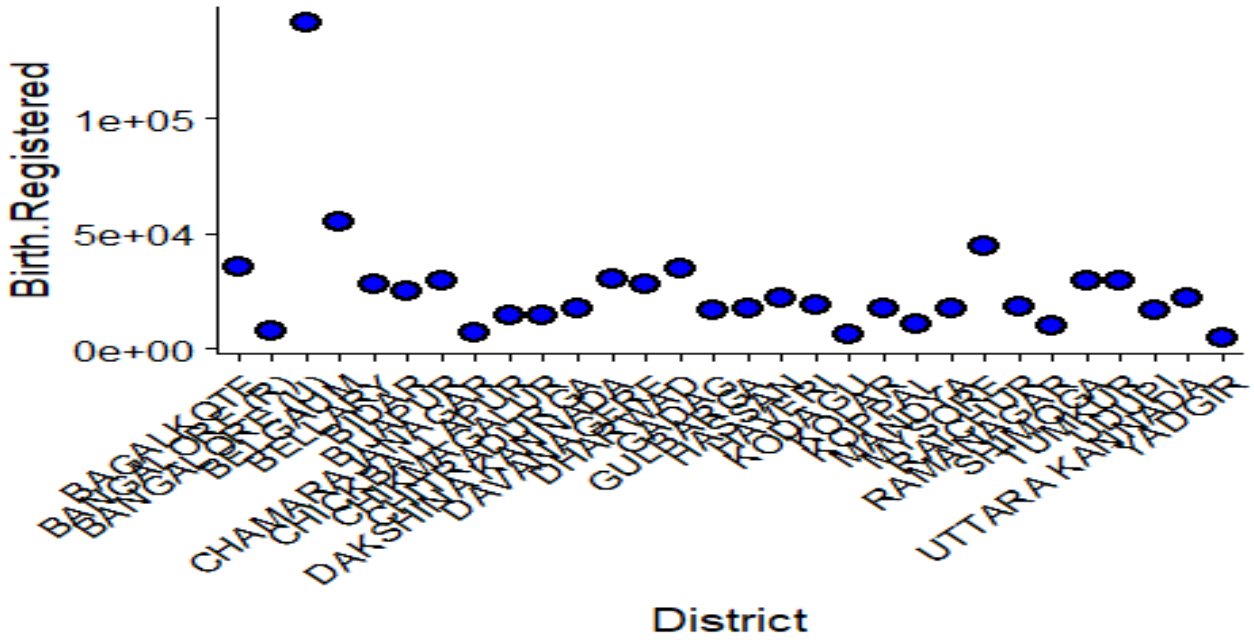

```
cc <- qqplot(df$Still.Birth.Registered, df$Still.Birth.Rate, col = "blue")
```



```
ggplot(df) + theme_fivethirtyeight(base_size = 12, base_family = "sans") +
  scale_shape_manual(values=1:nlevels(df$sn)) +
  geom_bar(aes(y = Birth.Registered, x = Sr..No, fill = District),
           stat = "identity", position = "dodge")
```




```
ggplot(df, aes(District ,Birth.Registered)) +
  theme(axis.text.x = element_text( angle = 45, hjust = 1))+
  geom_point(colour="black", size = 3.75) +
  geom_point(colour="blue", size = 2.5)
```

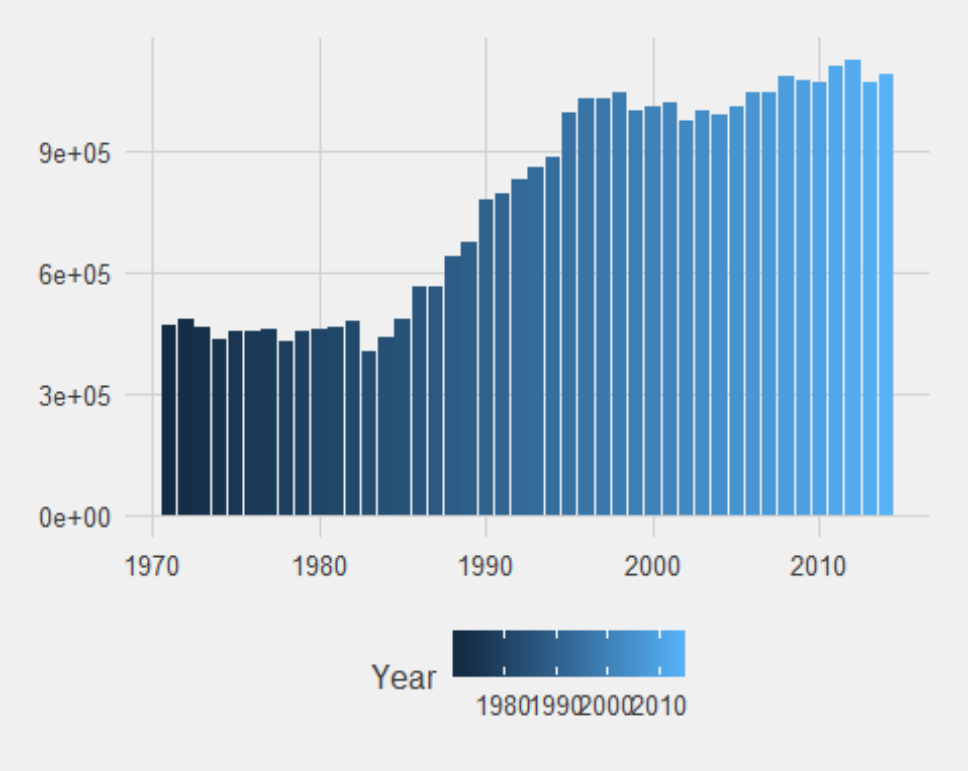


2014.R

Suraj

Mon Feb 18 09:36:15 2019

```
library(ggplot2)
library(ggthemes)

df <- read.csv("D:\\Programming\\DA\\Lab 2\\2014\\2014.csv", header = T)


ggplot(df) + theme_fivethirtyeight()
+scale_shape_manual(values=1:nlevels(df$sn)) +
  geom_bar(aes(y = df$Live.births, x = Year, fill = Year),
           stat = "identity", position = "dodge")
```

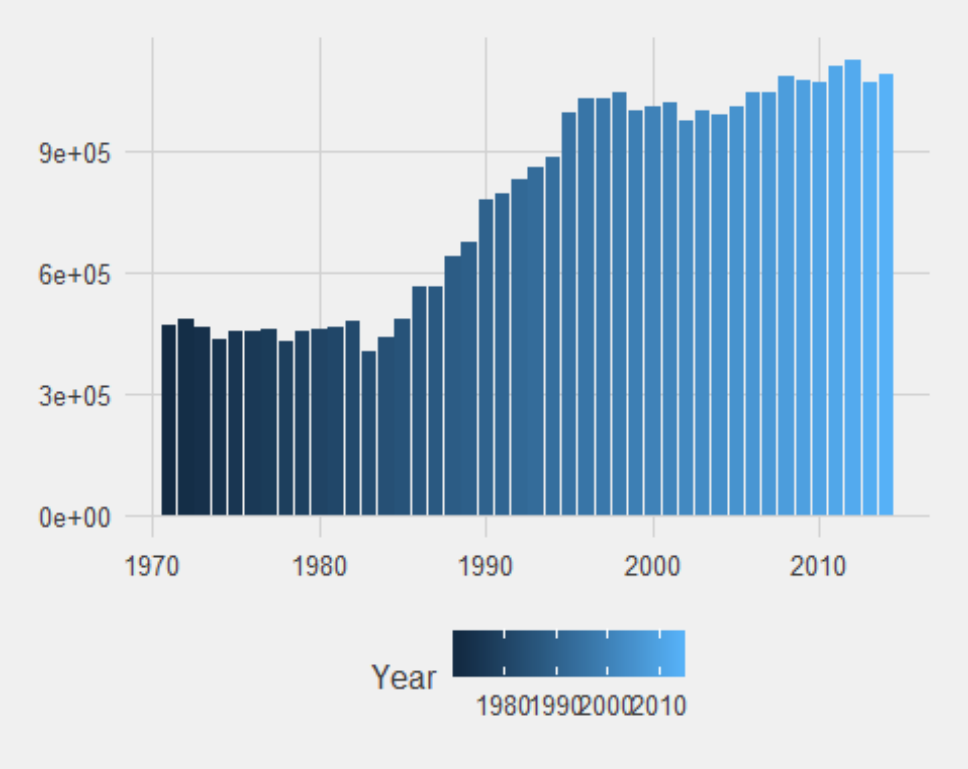


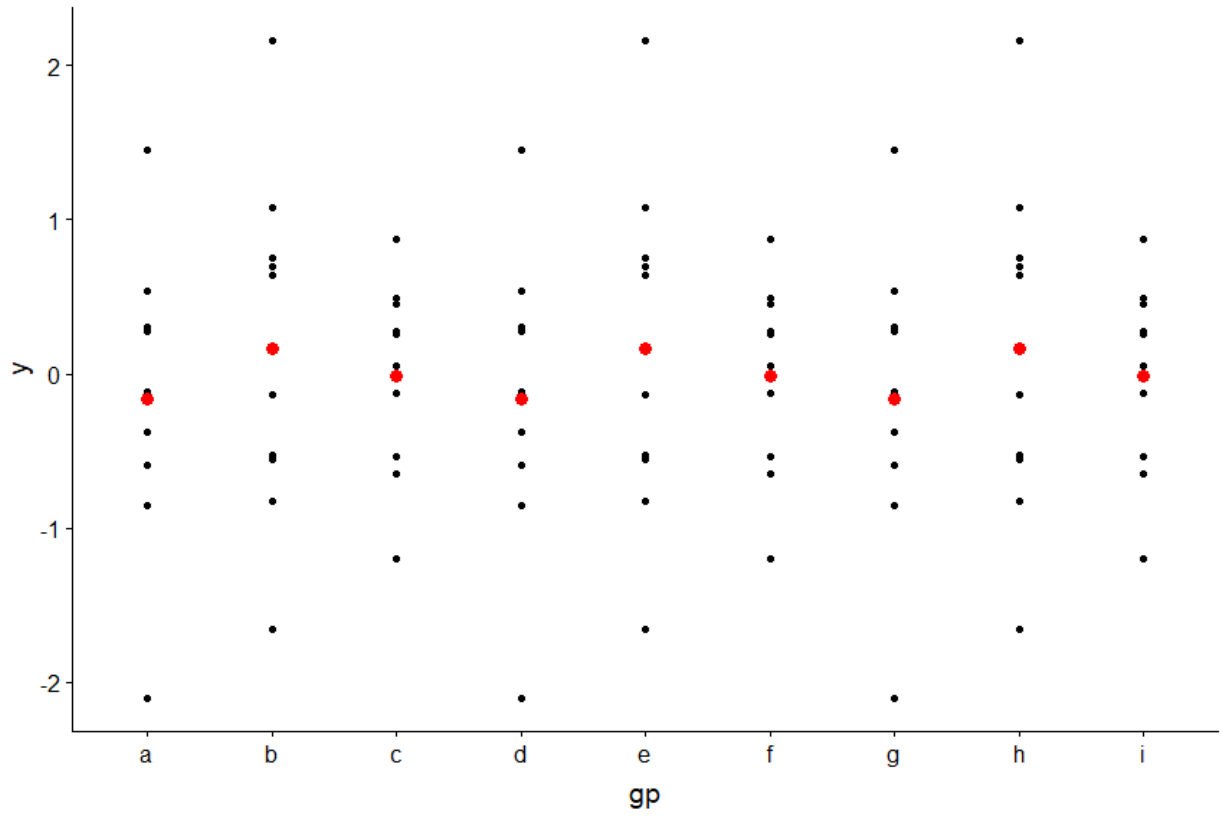
2015.R

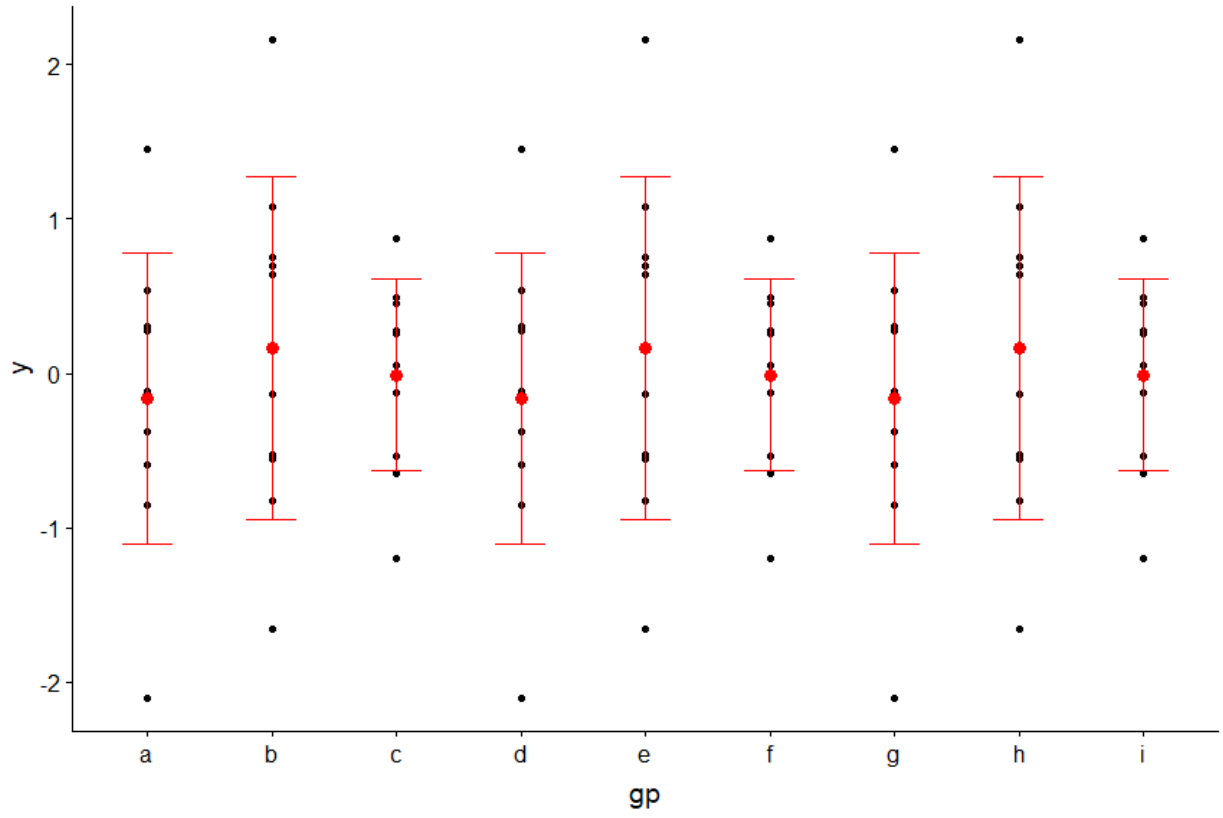
Suraj

Mon Feb 18 09:36:15 2019

```
library(ggplot2)
library(ggthemes)

df <- read.csv("D:\\Programming\\DA\\2015\\2015_2.csv", header = T)


ggplot(df) + theme_fivethirtyeight()
+scale_shape_manual(values=1:nlevels(df$sn)) +
  geom_bar(aes(y = df$Live.births, x = Year, fill = Year),
           stat = "identity", position = "dodge")
```




2
1
0
-1
-2
y
a
b
c
d
e
f
g
h
i
gp


2
1
0
-1
-2
y
a
b
c
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e
f
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h
i
gp