Assignment_4.2_Vayuvegula_Soma_Shekar_R

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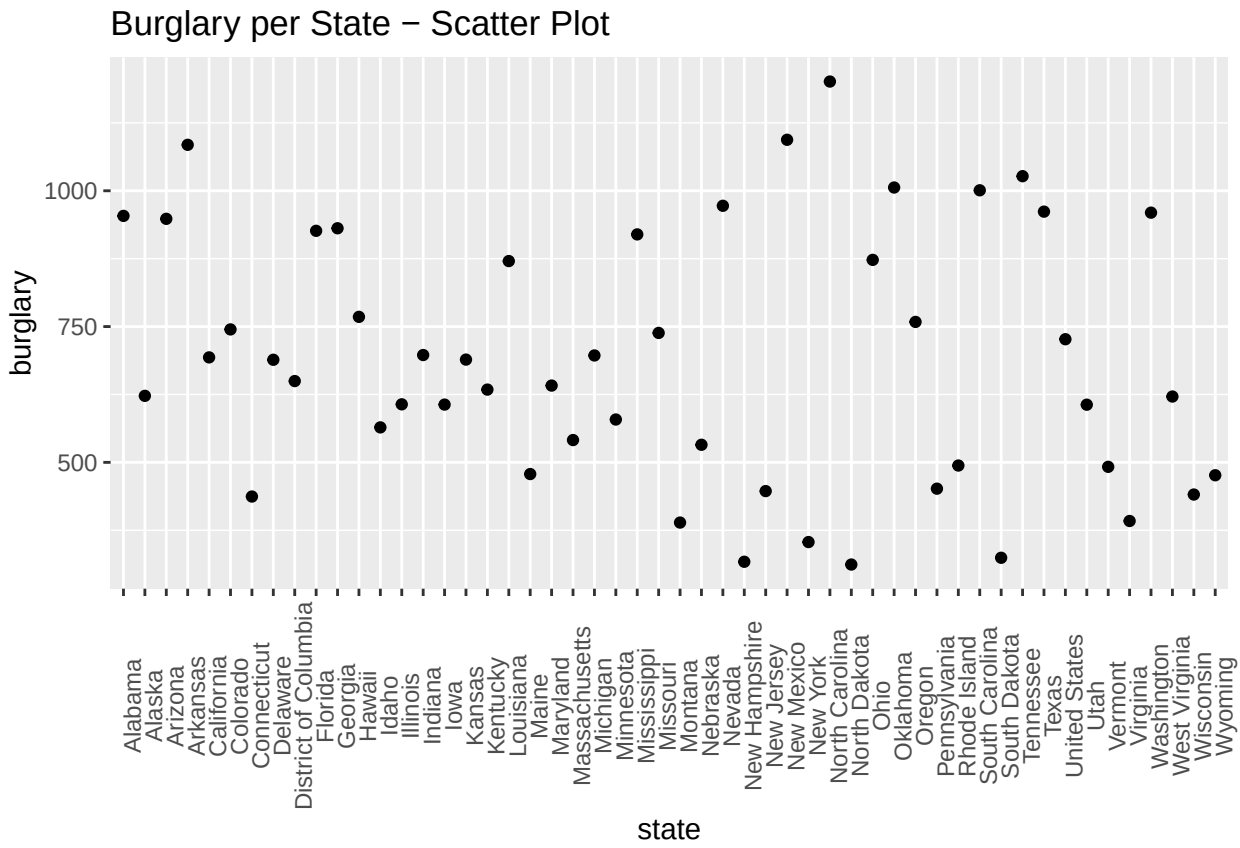
```
##
## Attaching package: 'dplyr'

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

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

## -- Attaching packages --------------------------------------- tidyverse 1.3.2 --
## v tibble  3.1.7     v purrr   0.3.4
## v tidyr   1.2.0     v stringr 1.4.0
## v readr   2.1.2     v forcats 0.5.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
##
## Attaching package: 'reshape2'
##
##
## The following object is masked from 'package:tidyr':
##
##     smiths
##
##
##
## Attaching package: 'data.table'
##
##
## The following objects are masked from 'package:reshape2':
##
##     dcast, melt
##
##
## The following object is masked from 'package:purrr':
##
##     transpose
##
##
## The following objects are masked from 'package:dplyr':
##
##     between, first, last
```

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

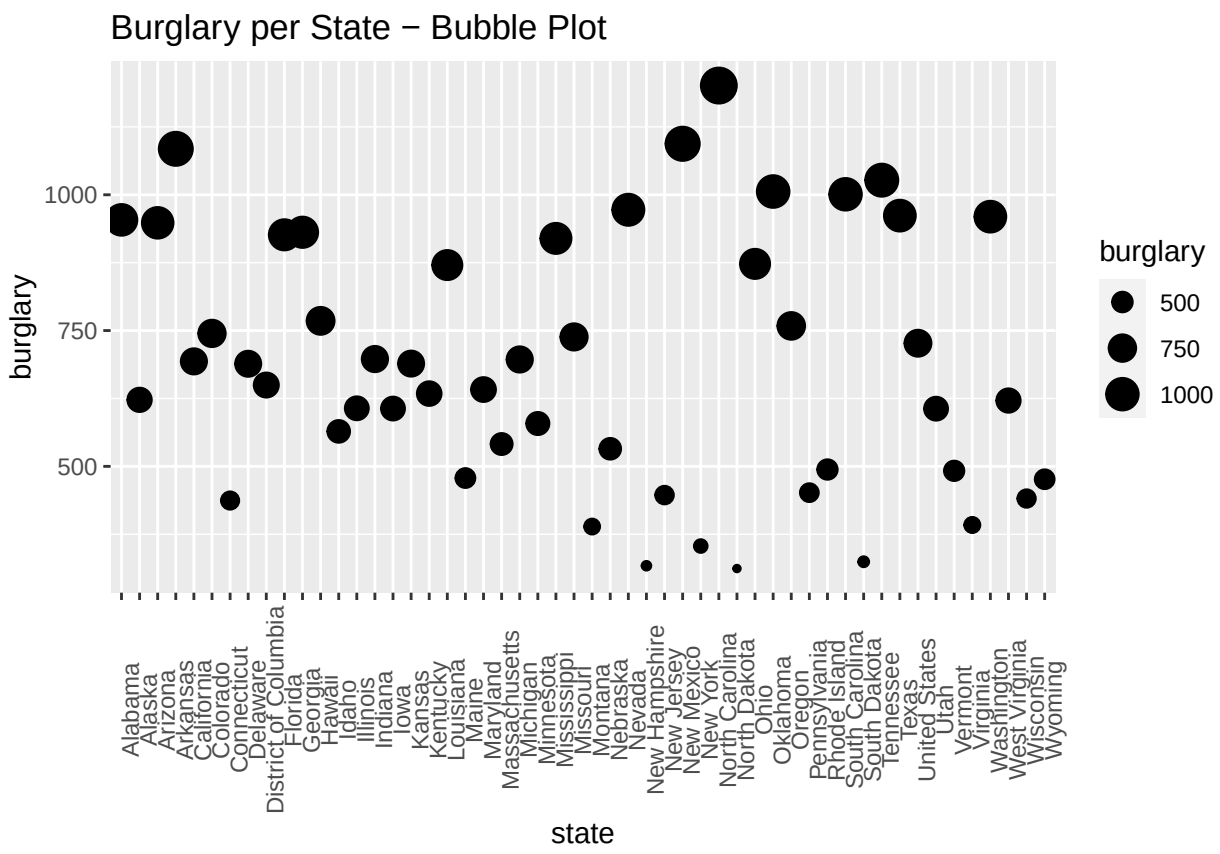
```
df_crime<-read.csv("crimerates-by-state-2005.csv")
head(df_crime,5)
```

```
##           state murder forcible_rape robbery aggravated_assault burglary
## 1 United States    5.6          31.7   140.7              291.1    726.7
## 2       Alabama    8.2          34.3   141.4              247.8    953.8
## 3        Alaska    4.8          81.1    80.9              465.1    622.5
## 4       Arizona    7.5          33.8   144.4              327.4    948.4
## 5      Arkansas    6.7          42.9    91.1              386.8   1084.6
##   larceny_theft motor_vehicle_theft population
## 1        2286.3               416.7  295753151
## 2        2650.0               288.3    4545049
## 3        2599.1               391.0     669488
## 4        2965.2               924.4    5974834
## 5        2711.2               262.1    2776221
```

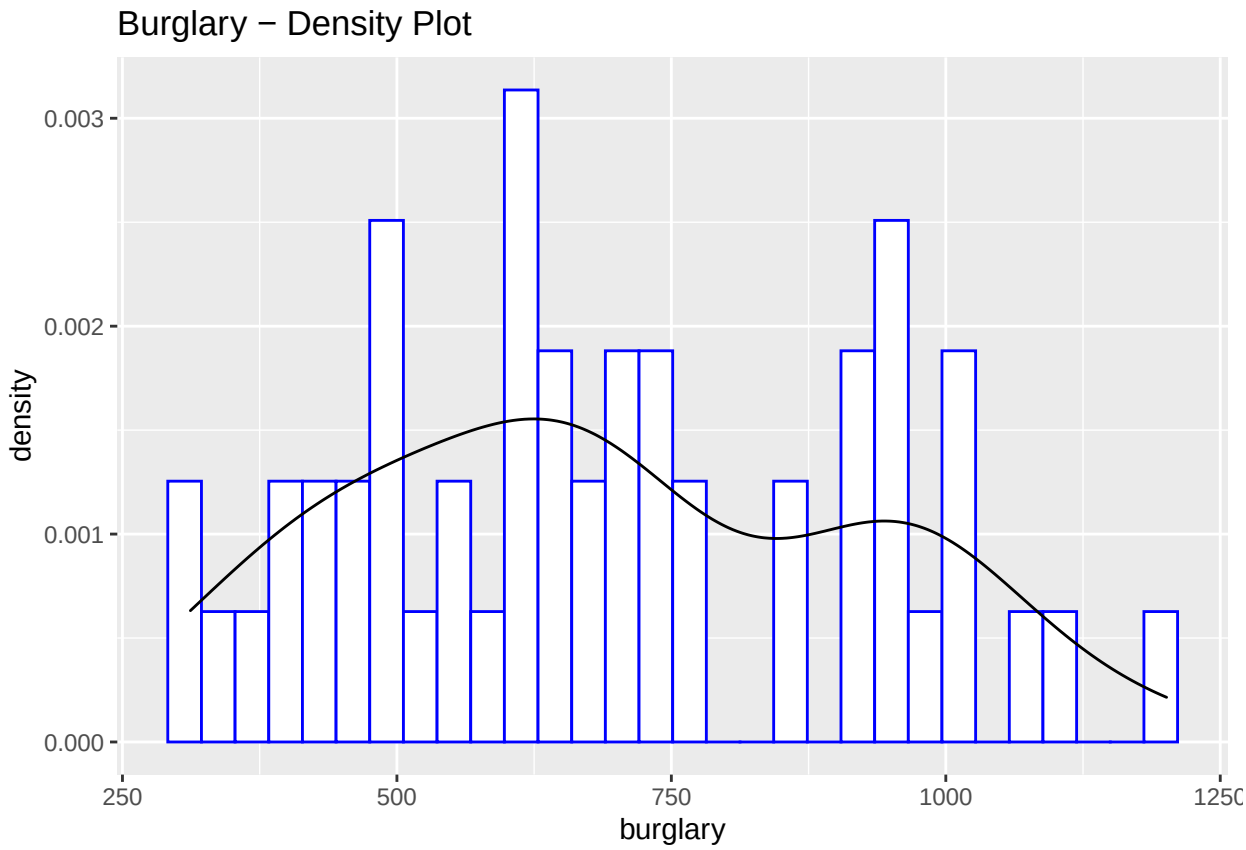
```
ggplot(df_crime,aes(x=state,y=burglary))+geom_point()+
  ggtitle("Burglary per State - Scatter Plot")+
  theme(axis.text.x = element_text(angle=90))
```




```
ggplot(df_crime,aes(x=state,y=burglary,size=burglary))+geom_point()+
  ggtitle("Burglary per State - Bubble Plot")+
  theme(axis.text.x = element_text(angle=90))
```




```
ggplot(df_crime,aes(x=burglary))+
  geom_histogram(aes(y=..density..),bins=30,color="blue",fill="white")+
  geom_density()+ggtitle("Burglary - Density Plot")
```


Burglary − Density Plot
0.003
0.002
0.001
0.000
density
250
500
750
1000
1250
burglary