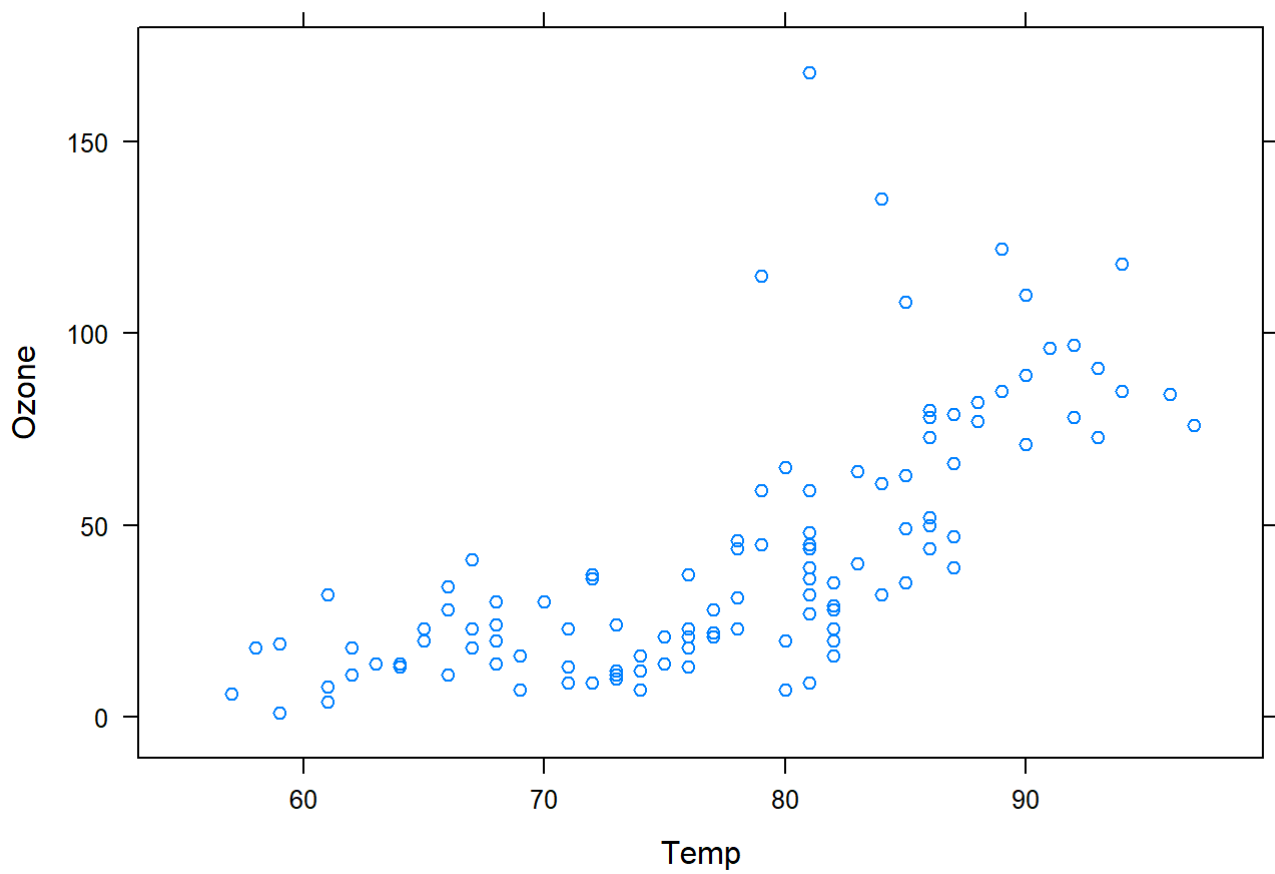


A13.R

JAK

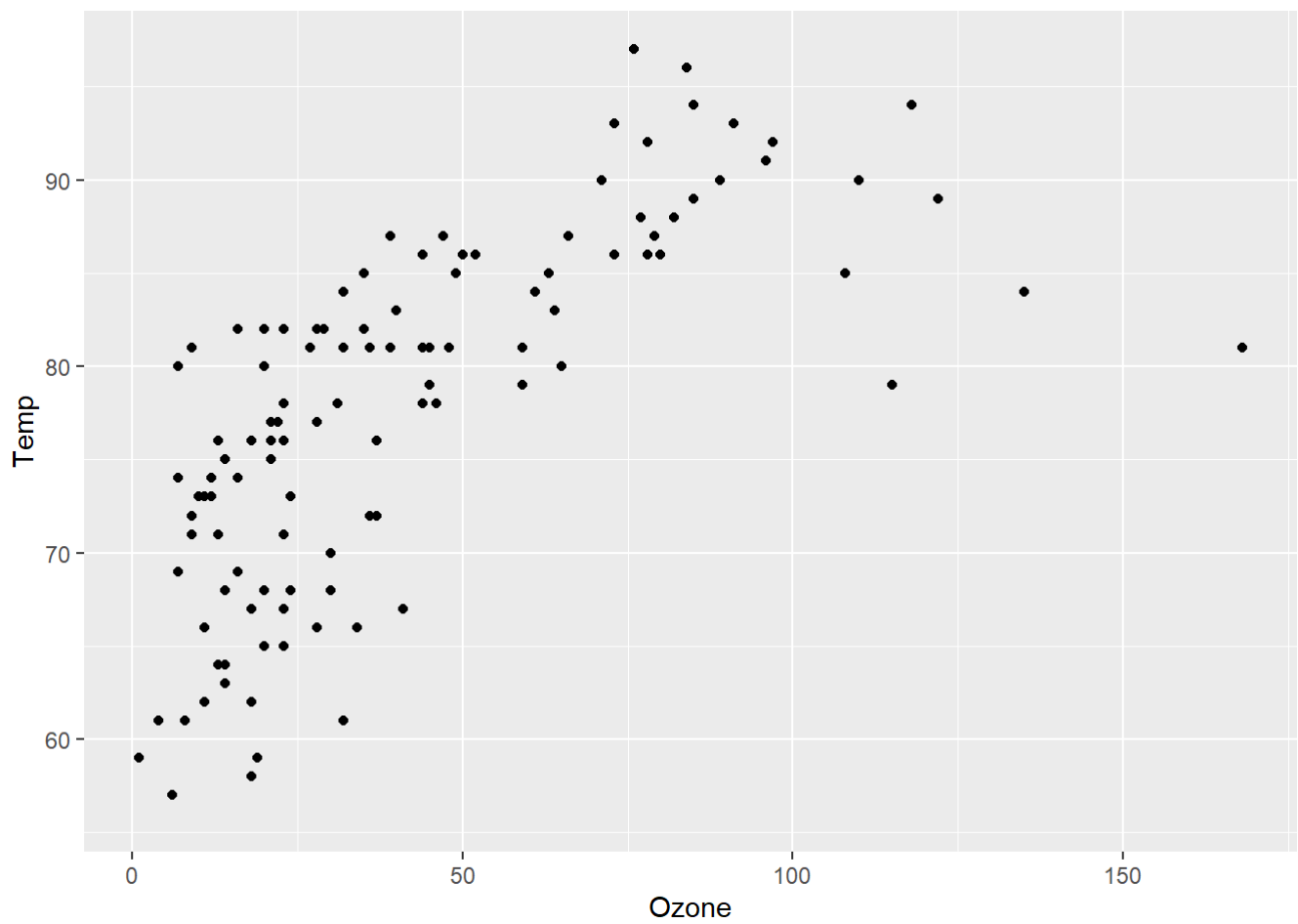
2021-05-06

```
Data=airquality  
library(lattice)  
library(ggplot2)  
attach(Data)  
xyplot(Ozone~Temp)
```

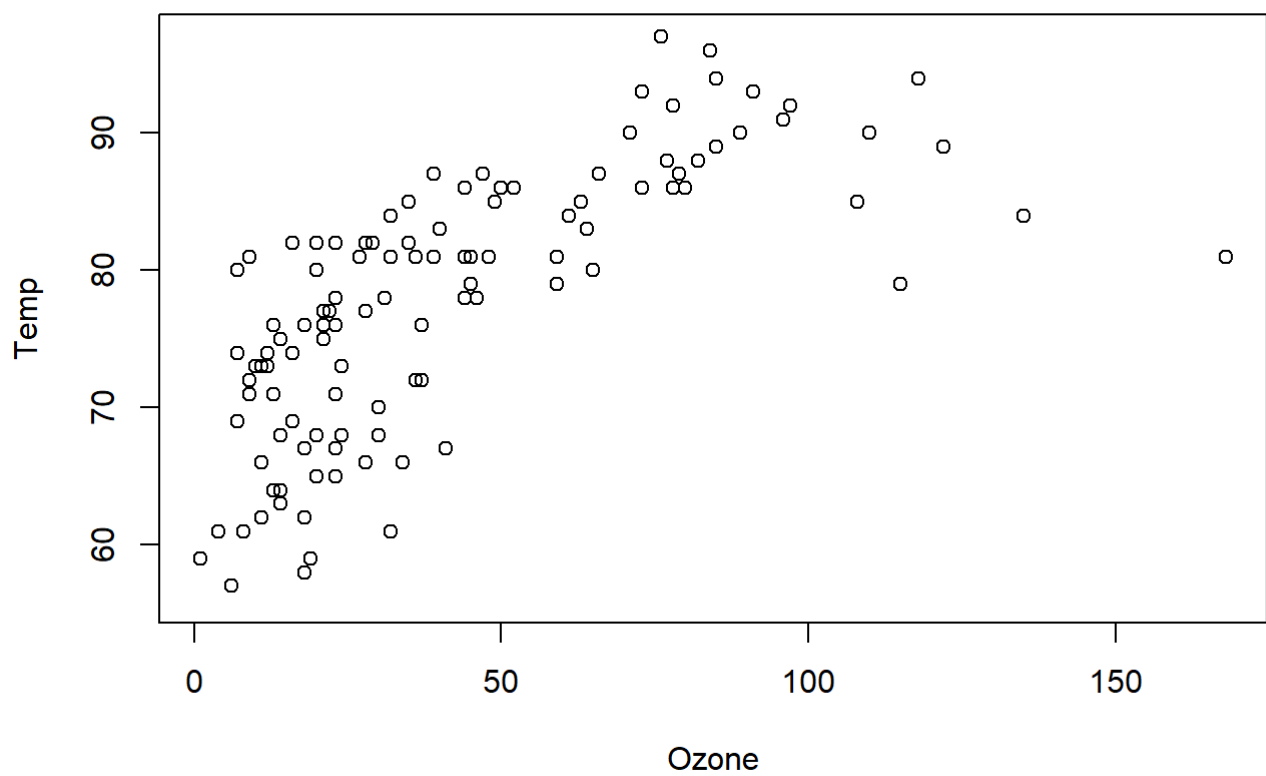


```
ggplot(Data,aes(Ozone,Temp))+geom_point()
```

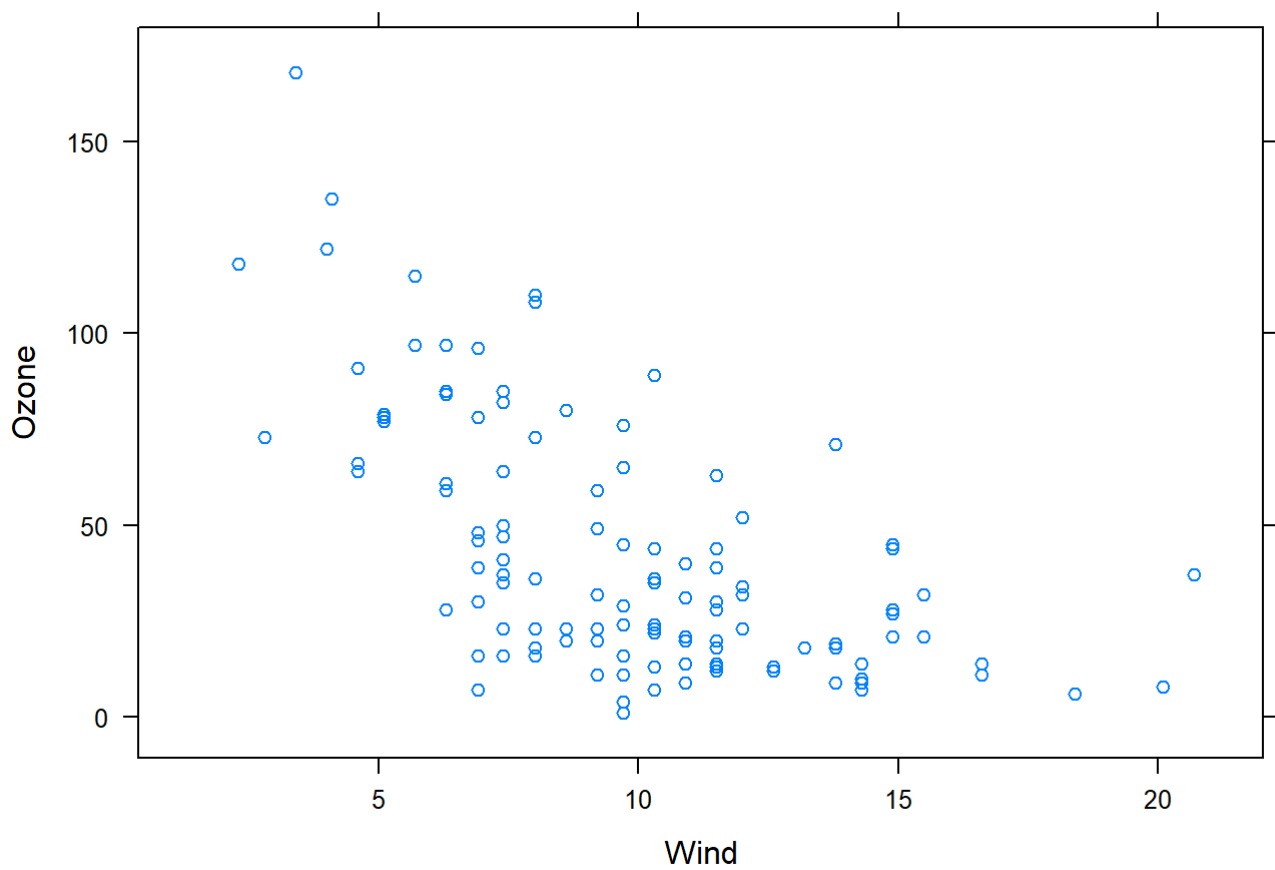
```
## Warning: Removed 37 rows containing missing values (geom_point).
```



```
plot(Ozone,Temp)
```

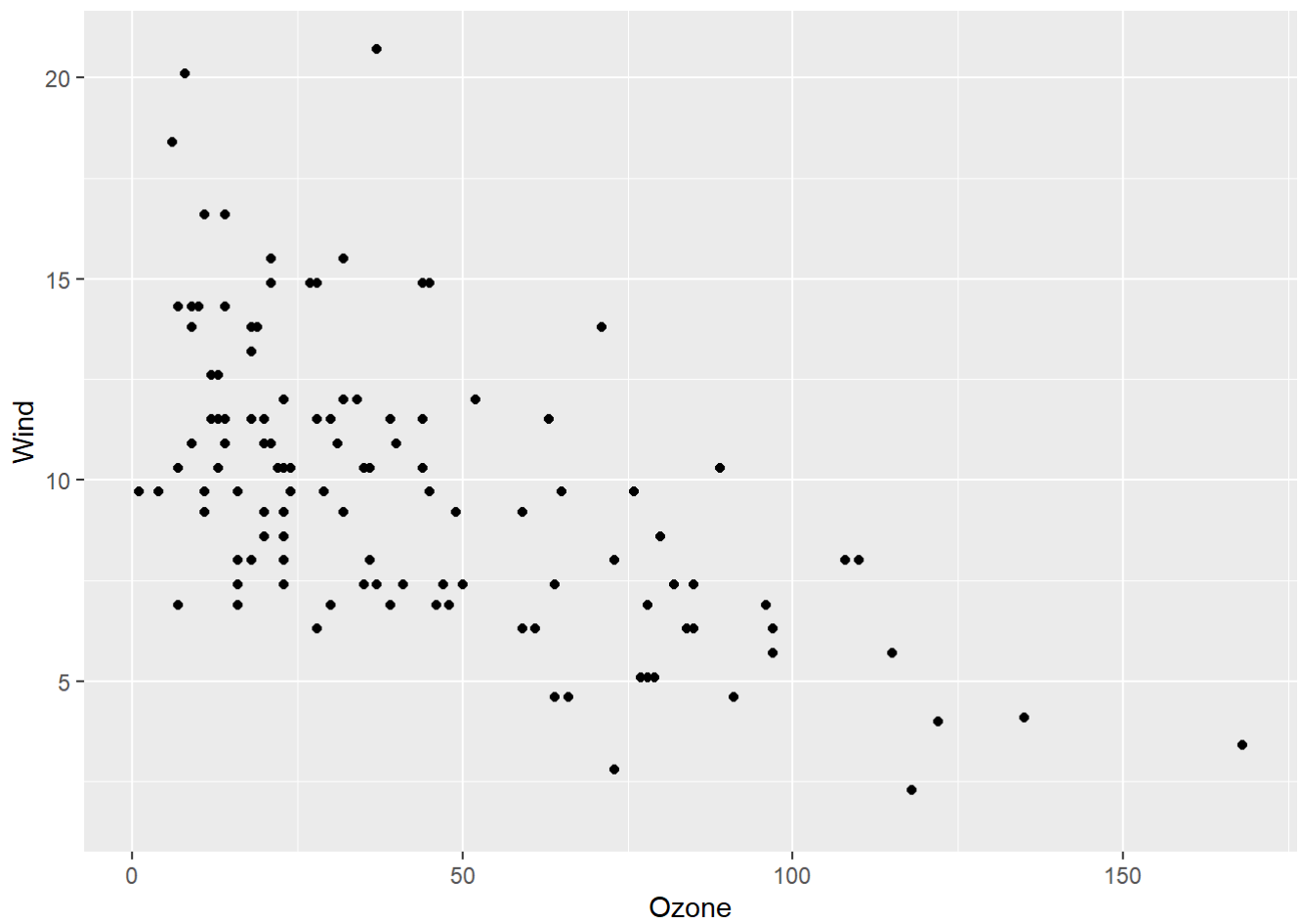


```
xyplot(Ozone~Wind)
```

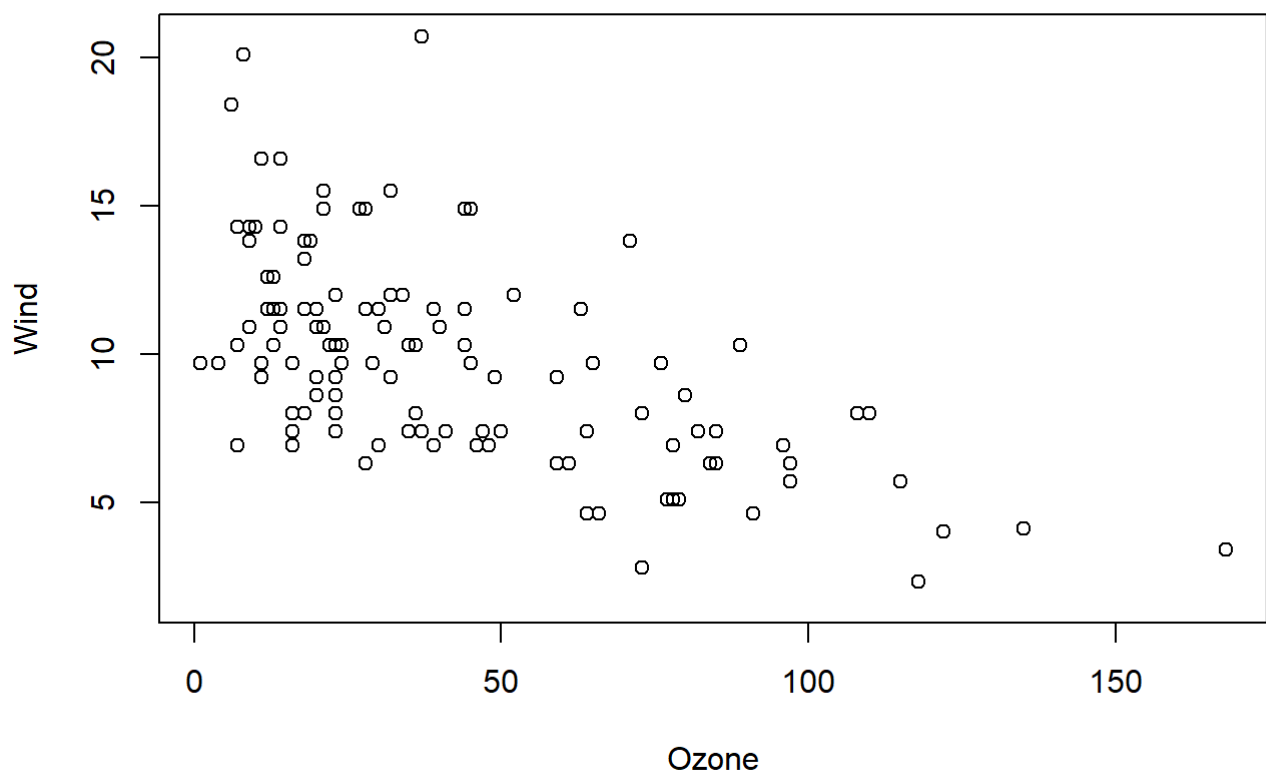


```
ggplot(Data,aes(Ozone,Wind))+geom_point()
```

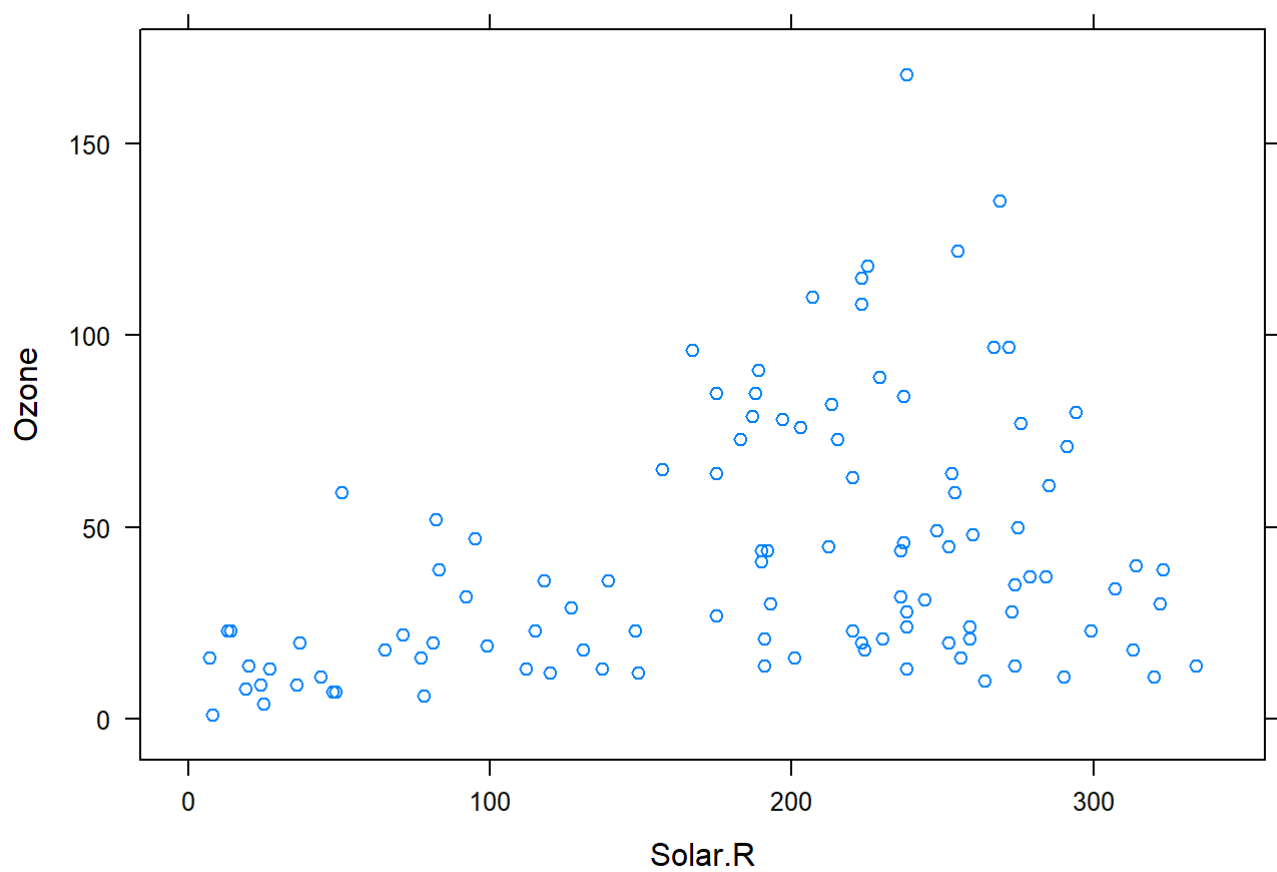
```
## Warning: Removed 37 rows containing missing values (geom_point).
```



```
plot(Ozone, Wind)
```

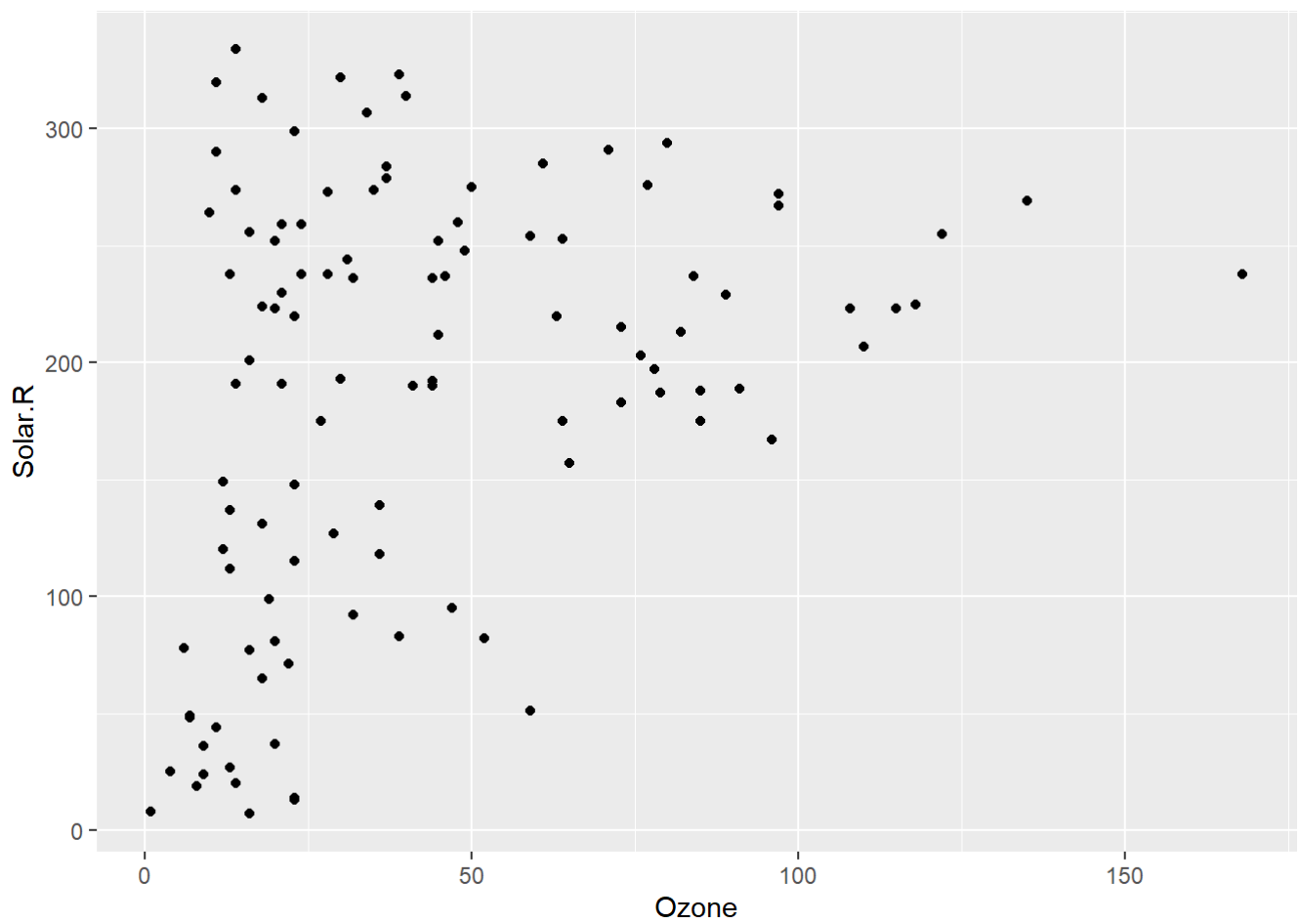


```
xyplot(Ozone~Solar.R)
```

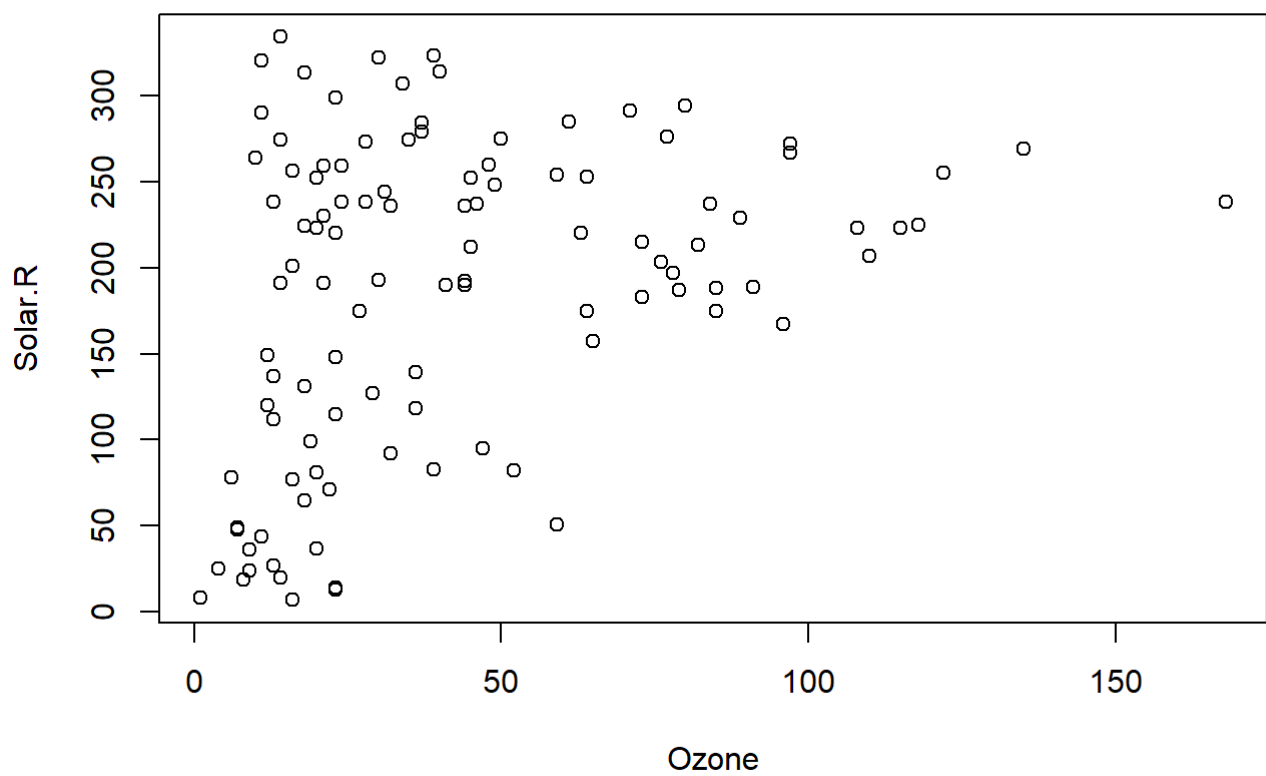


```
ggplot(Data,aes(Ozone,Solar.R))+geom_point()
```

```
## Warning: Removed 42 rows containing missing values (geom_point).
```



```
plot(Ozone,Solar.R)
```



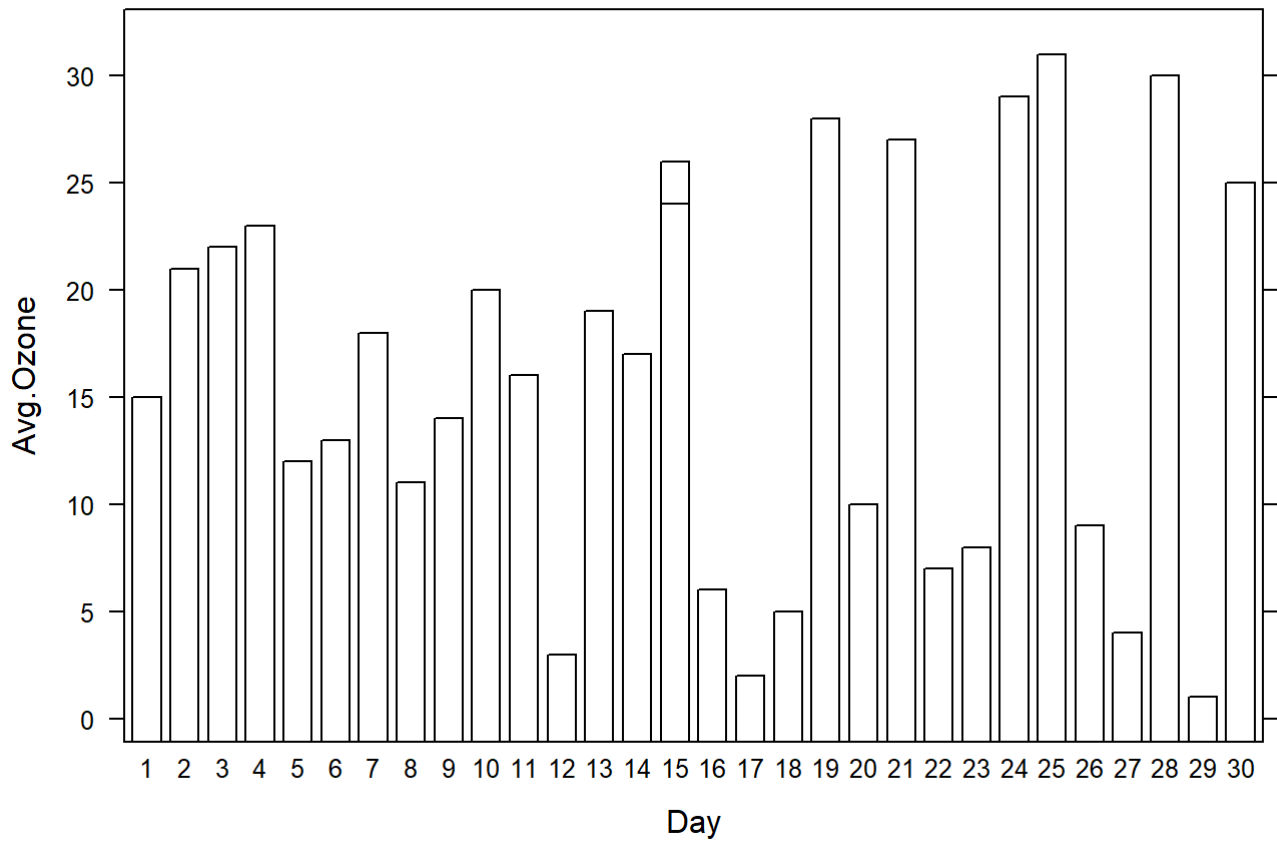
```
A1=aggregate(Ozone~Day,Data,mean)
barchart(A1$Day~A1$Ozone, main = "Average Ozone density per day",panel = lattice.getOption("panel.barchart"),default.prepanel = lattice.getOption("prepanel.default.barchart"),box.ratio = 3,ylab = "Avg.Ozone", xlab = "Day",col =A1,horizontal=FALSE)
```

```
## Warning in grid.Call.graphics(C_rect, x$x, x$y, x$width, x$height,
## resolveHJust(x$just, : supplied color is neither numeric nor character
```

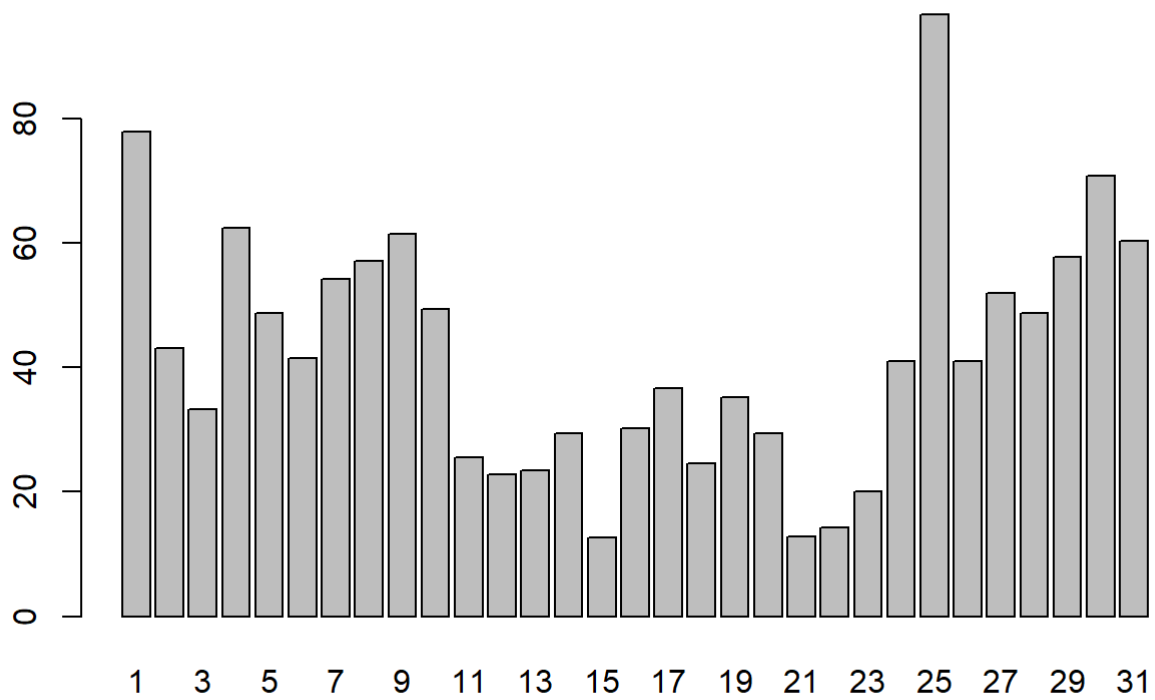
[illegible]

[illegible]

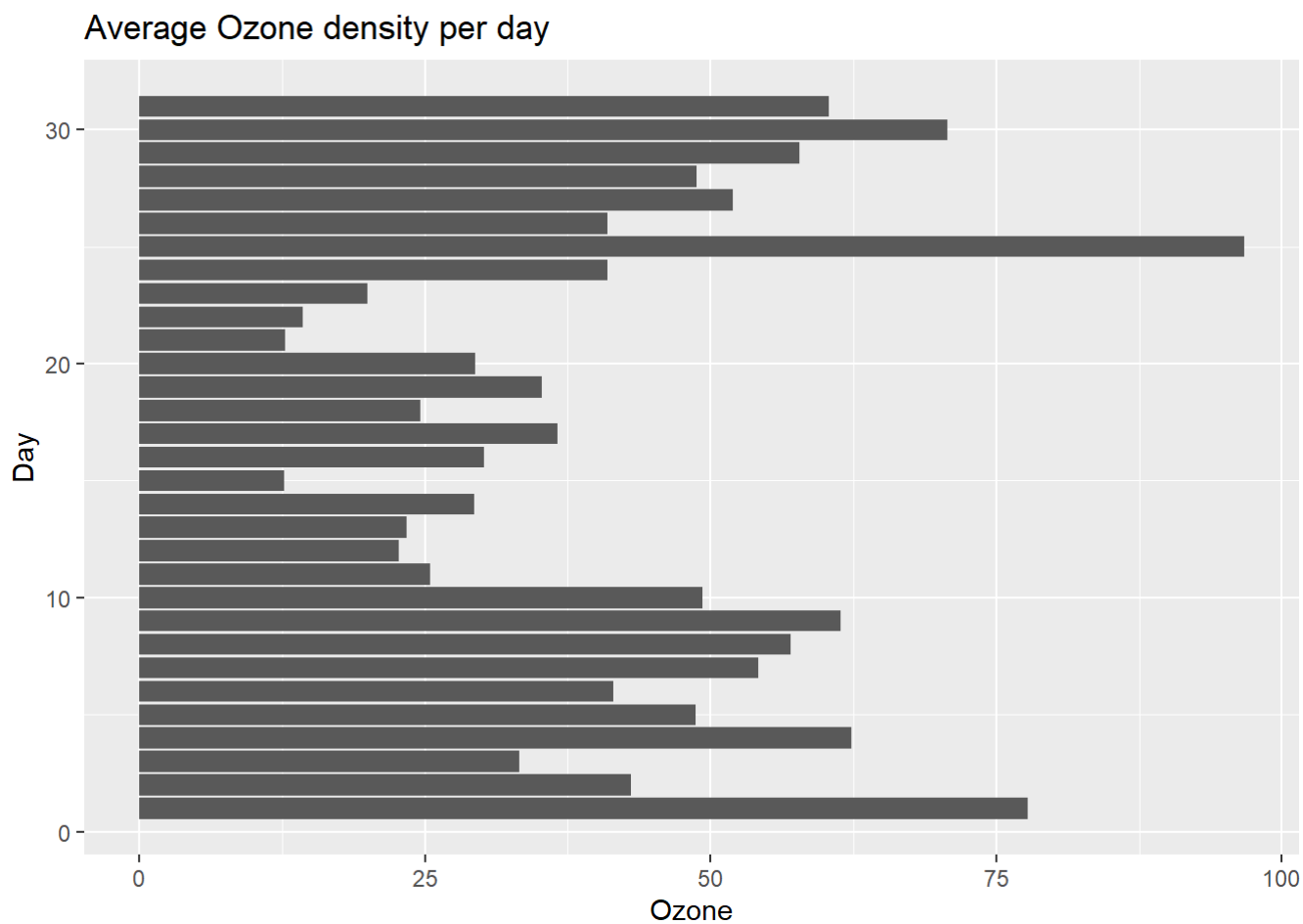
Average Ozone density per day



```
barplot(A1$Ozone,names.arg =A1$Day)
```

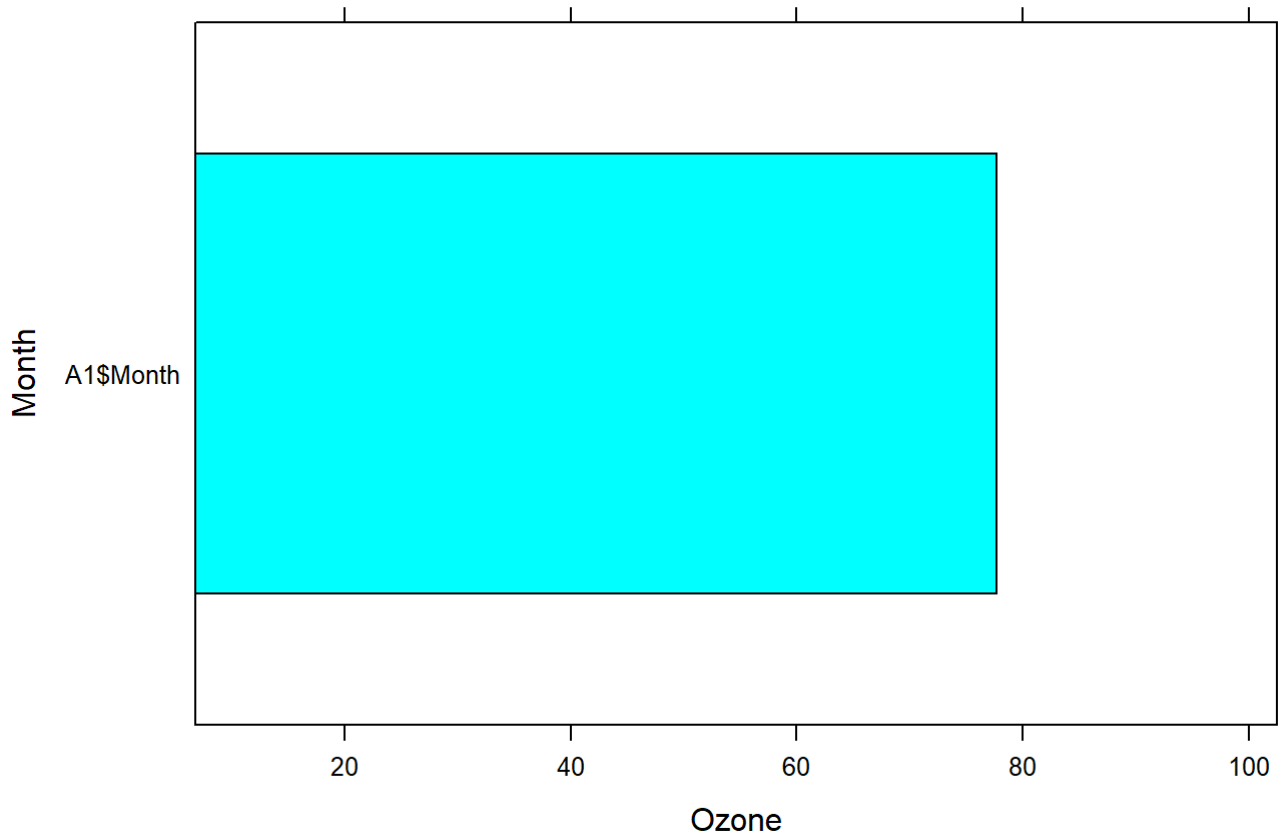


```
ggplot(A1,aes(x=Day,y=Ozone))+geom_bar(stat='identity')+ggtitle("Average Ozone density per da
y")+coord_flip()
```

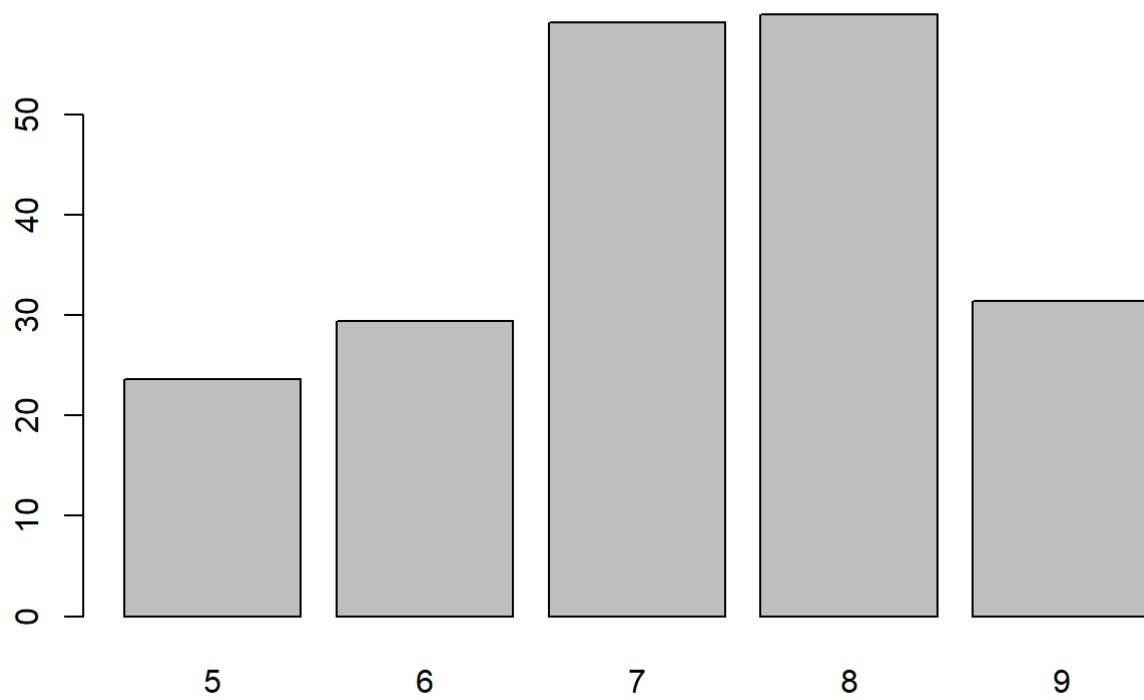


```
A2=aggregate(Ozone~Month,Data,mean)
barchart(A1$Month~A1$Ozone, main = "Average Ozone density per month",ylab = "Month", xlab =
"Ozone",box.ratio = 3)
```

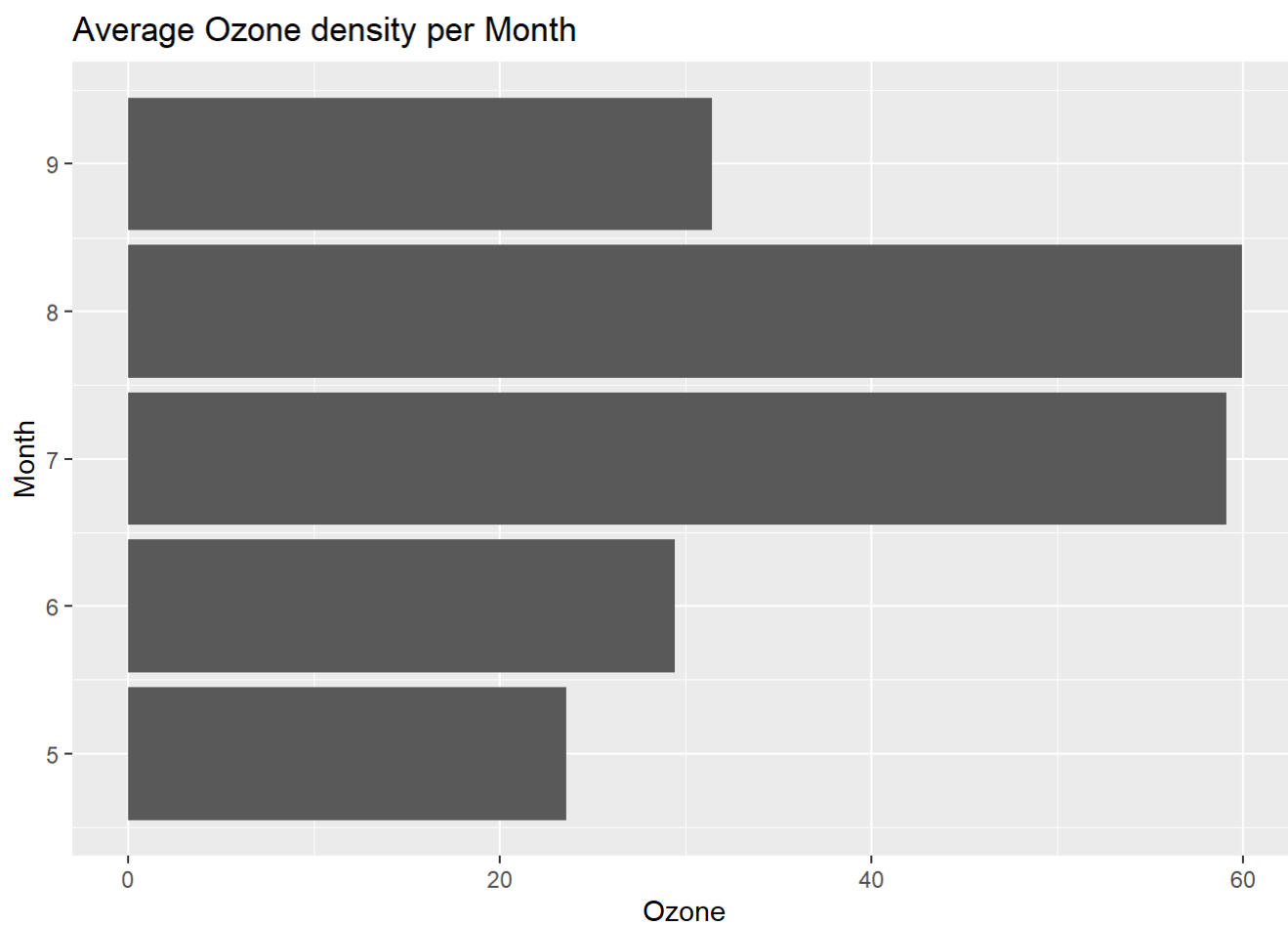
Average Ozone density per month



```
barplot(A2$Ozone,names.arg =A2$Month)
```

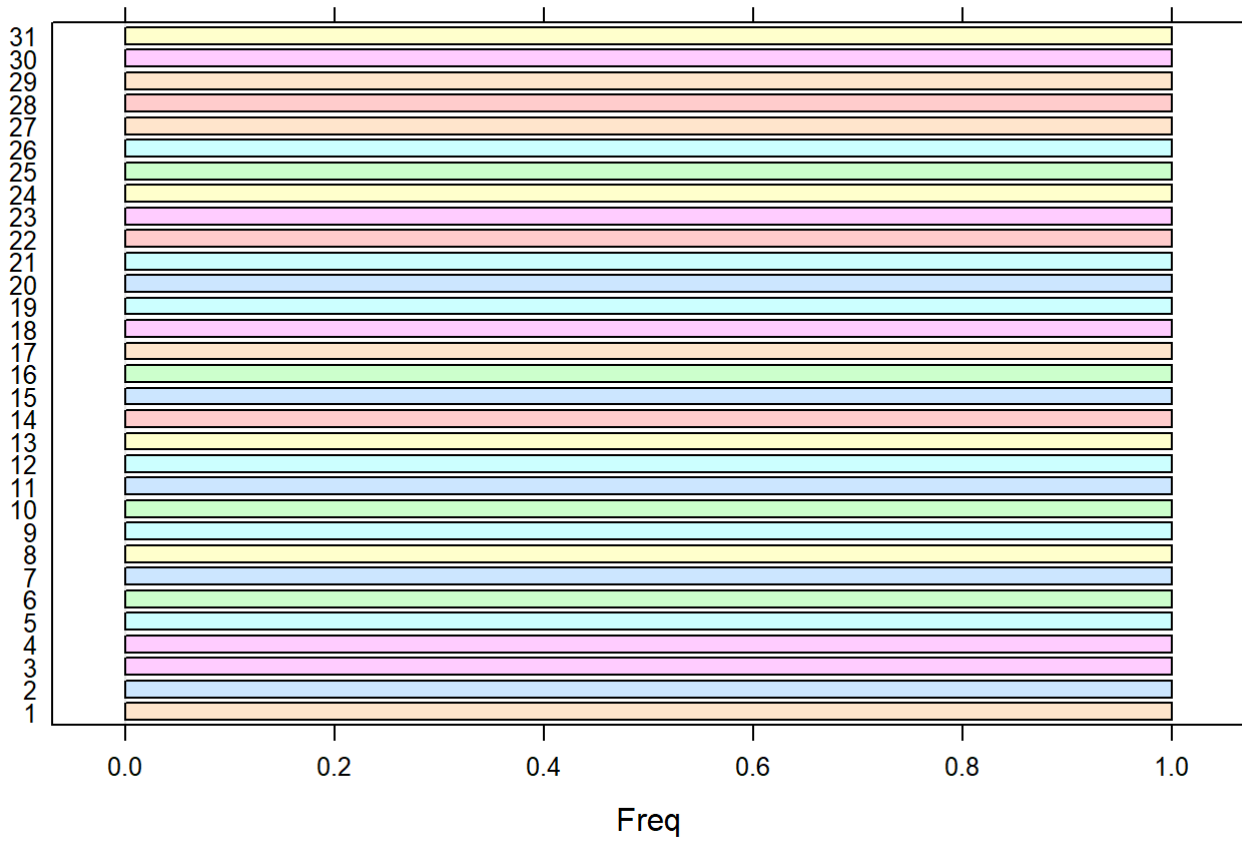


```
ggplot(A2,aes(x=Month,y=Ozone))+geom_bar(stat='identity')+ggtitle("Average Ozone density per Month")+coord_flip()
```

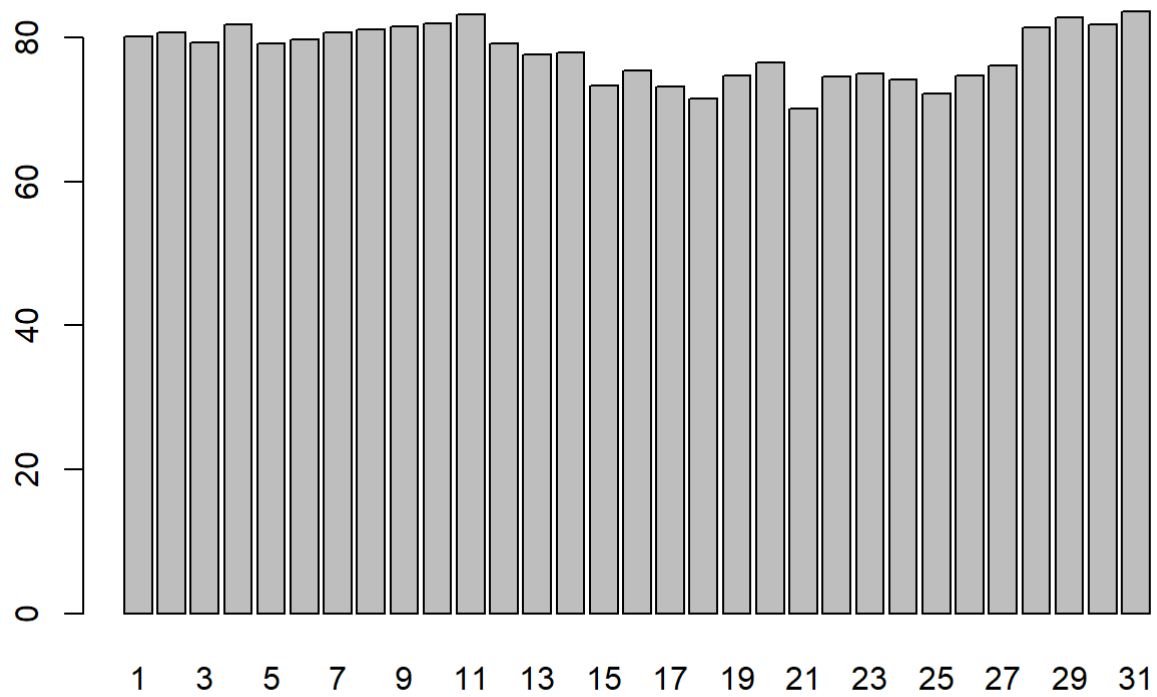


```
A3=aggregate(Temp~Day,Data,mean)
barchart(A3, main = "Average Temp per day",box.ratio = 3)
```

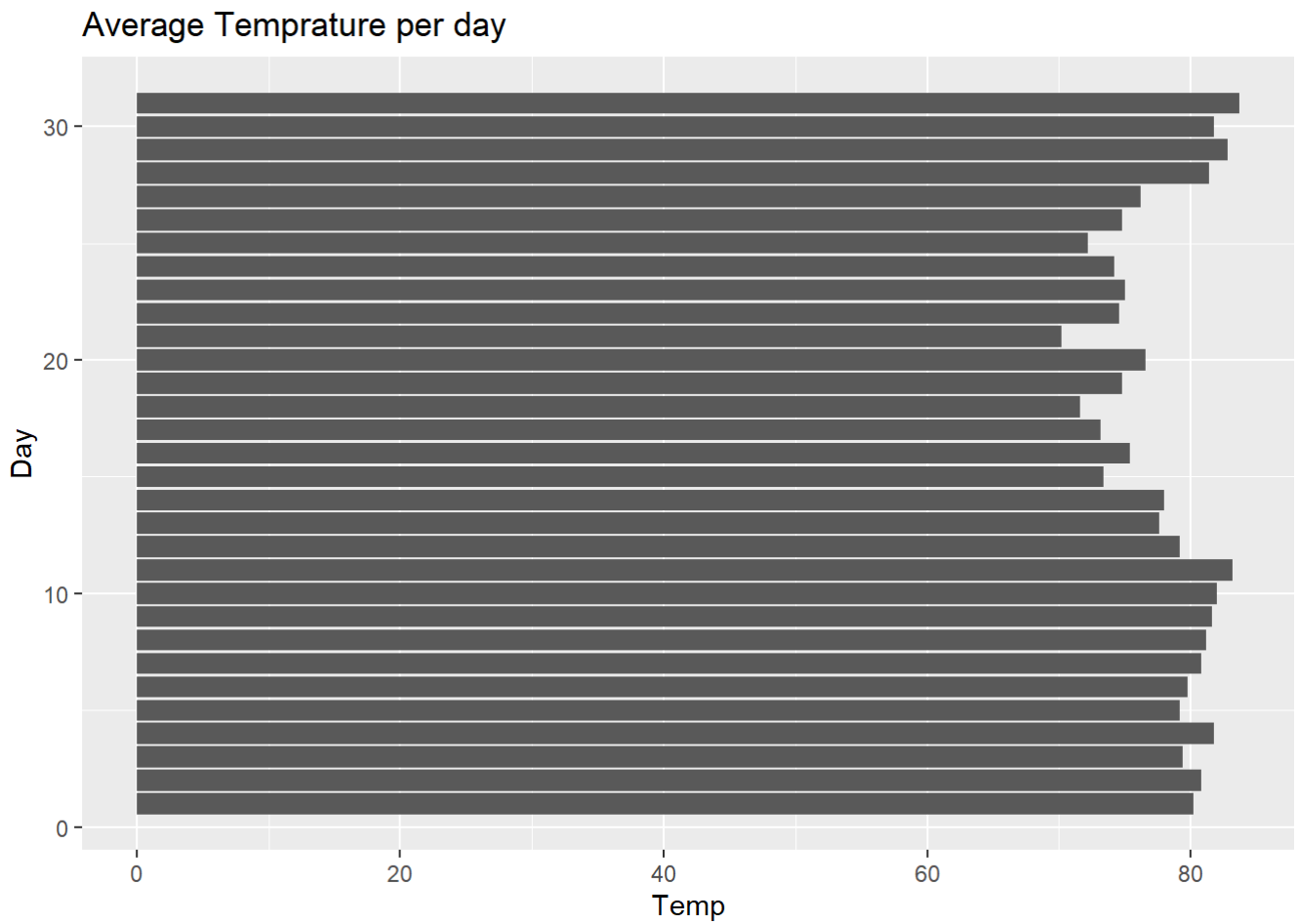
Average Temp per day



```
barplot(A3$Temp,names.arg =A3$Day)
```

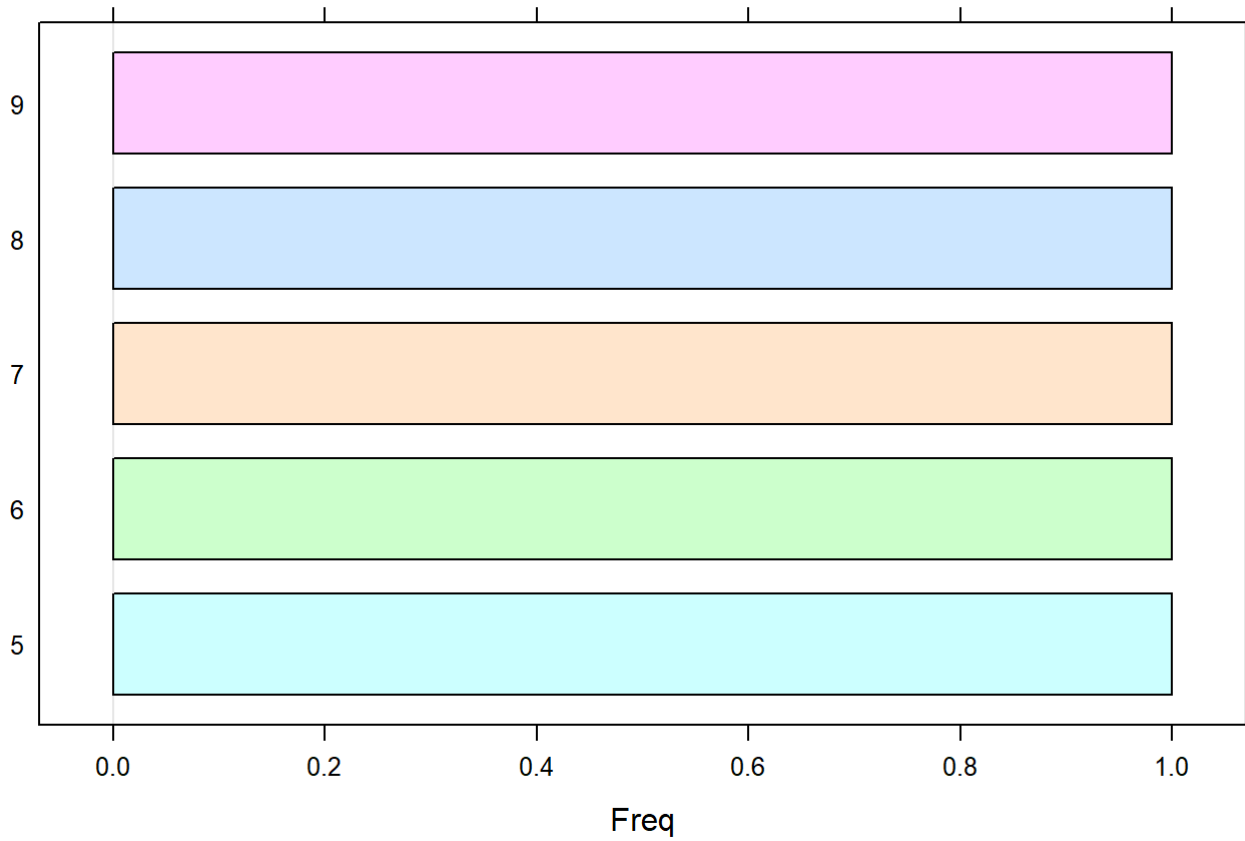


```
ggplot(A3,aes(x=Day,y=Temp))+geom_bar(stat='identity')+ggtitle("Average Temprature per day")+
coord_flip()
```

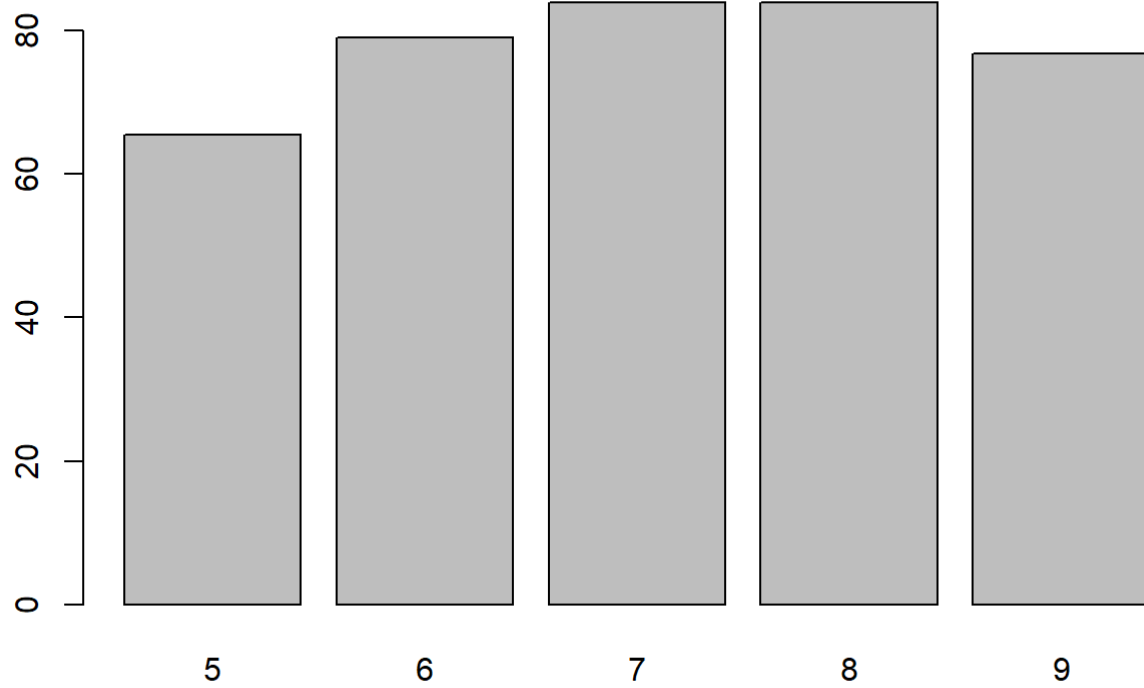


```
A4=aggregate(Temp~Month,Data,mean)
barchart(A4, main = "Average Temp per month",box.ratio = 3)
```

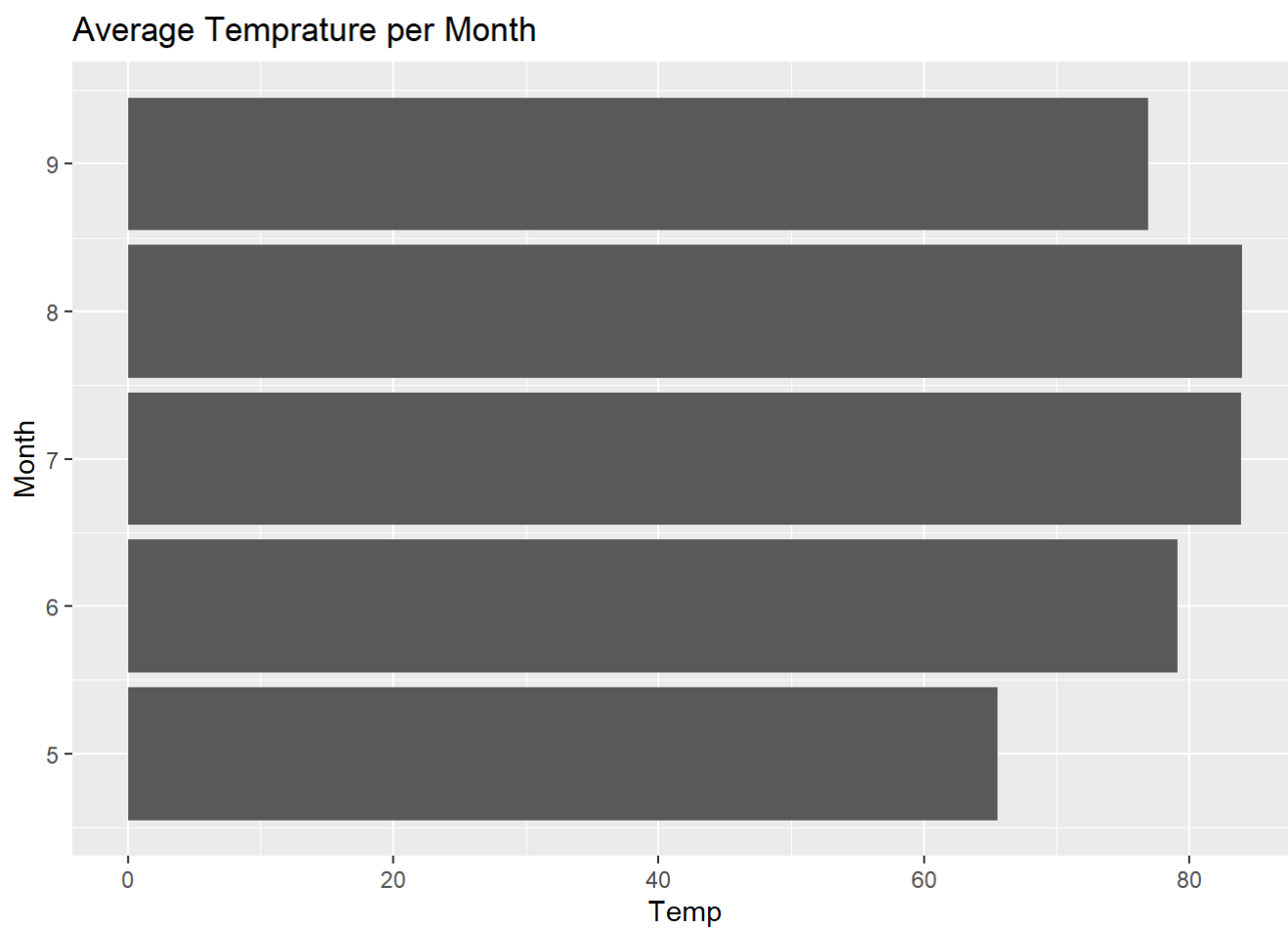
Average Temp per month



```
barplot(A4$Temp,names.arg =A4$Month)
```

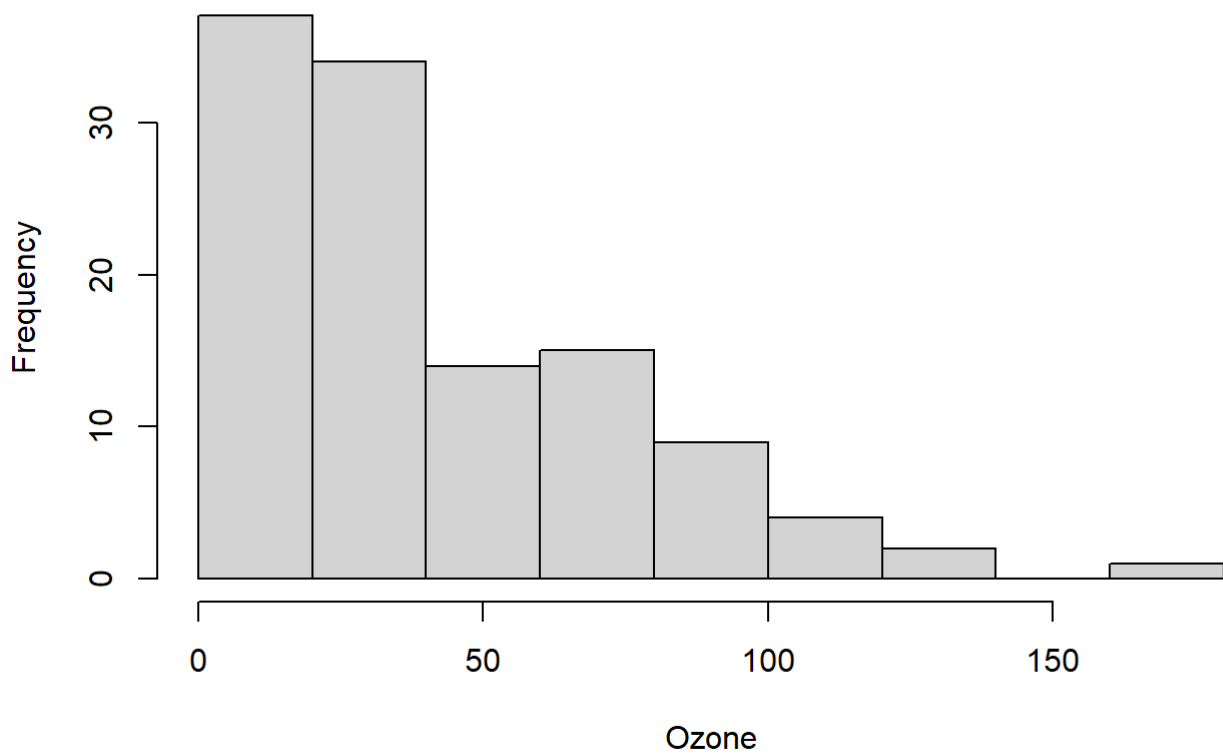



```
ggplot(A4,aes(x=Month,y=Temp))+geom_bar(stat='identity')+ggtitle("Average Temprature per Mont  
h")+coord_flip()
```



```
hist(Ozone)
```

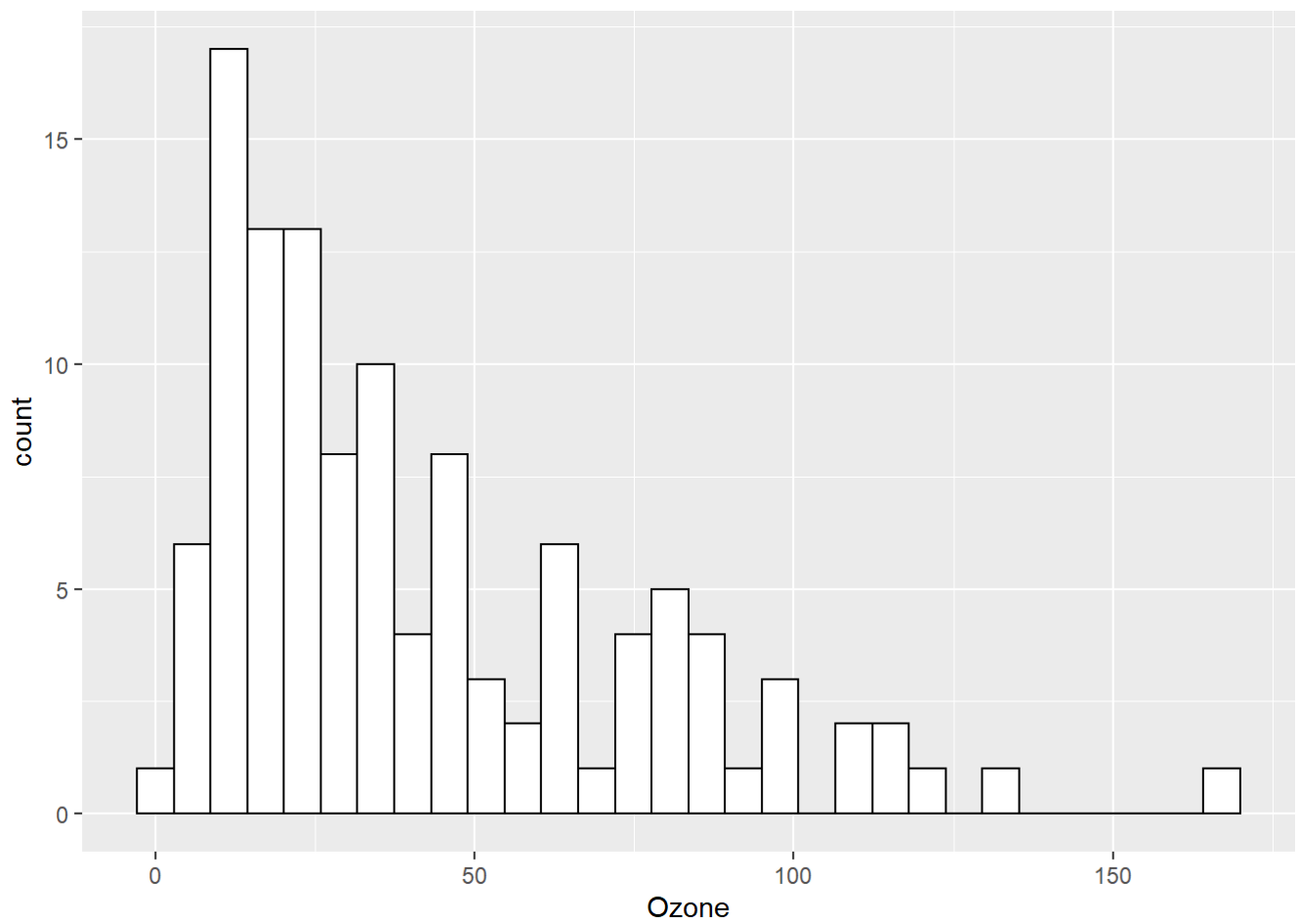
Histogram of Ozone



```
ggplot(Data,aes(x=Ozone))+geom_histogram(color="black", fill="white")
```

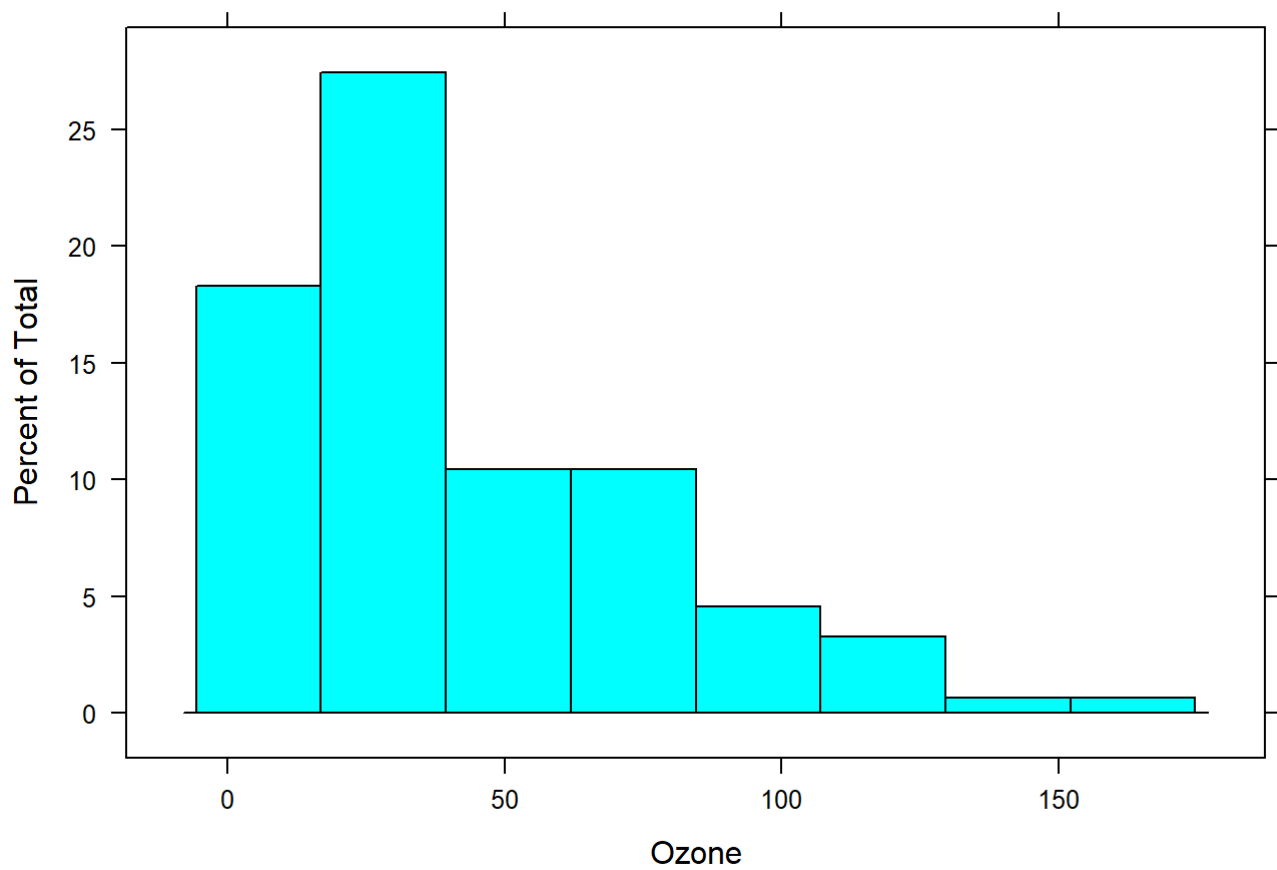
```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

```
## Warning: Removed 37 rows containing non-finite values (stat_bin).
```



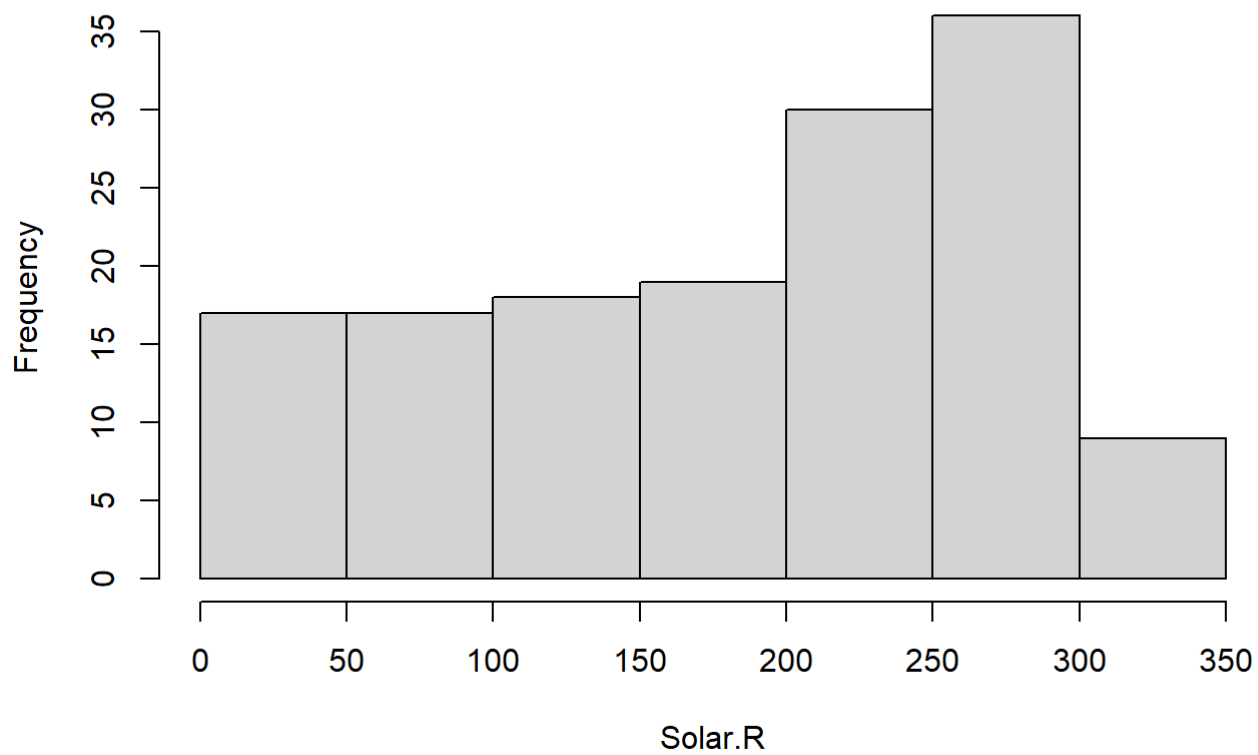
```
histogram(Ozone,Data)
```

```
## Warning in histogram.numeric(Ozone, Data): explicit 'data' specification ignored
```



```
hist(Solar.R)
```

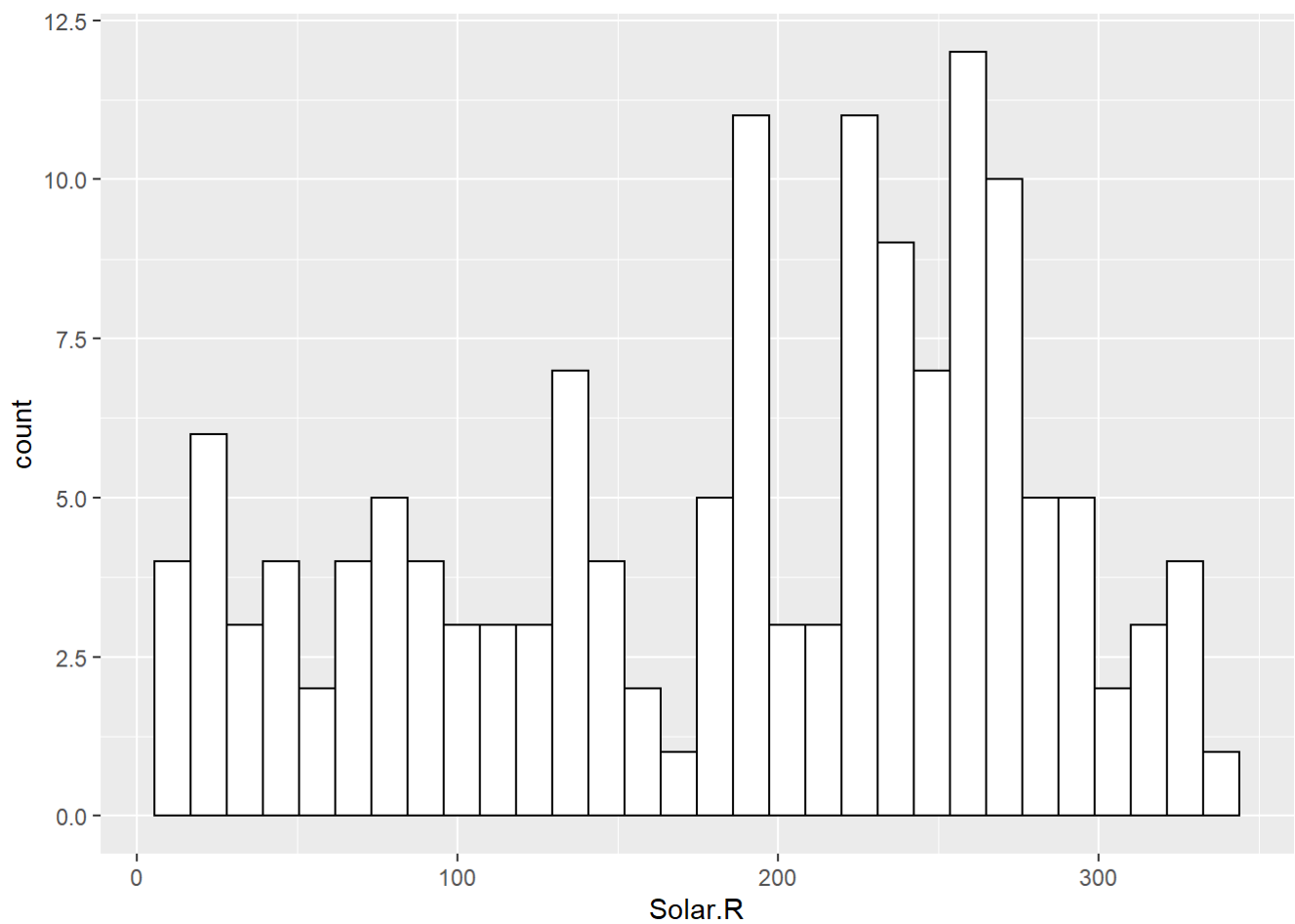
Histogram of Solar.R



```
ggplot(Data,aes(x=Solar.R))+geom_histogram(color="black", fill="white")
```

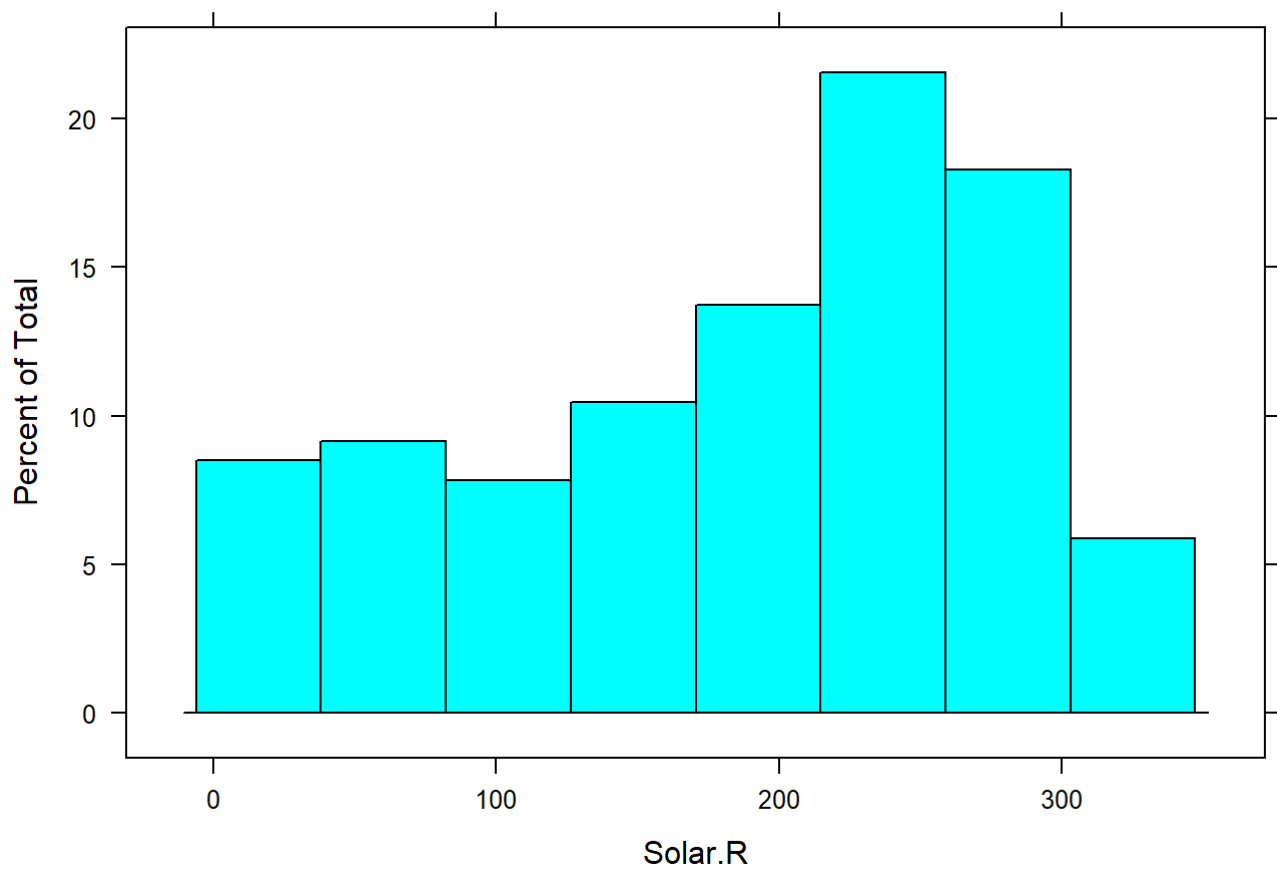
```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

```
## Warning: Removed 7 rows containing non-finite values (stat_bin).
```



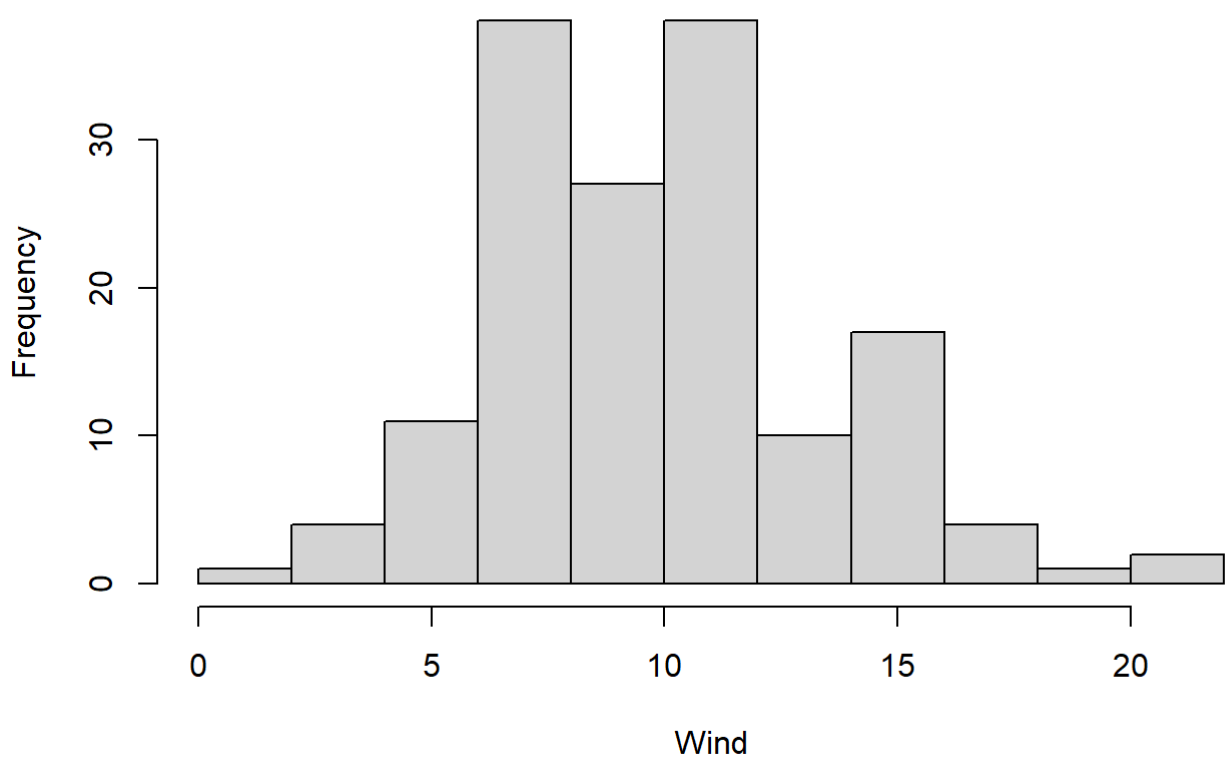
```
histogram(Solar.R,Data)
```

```
## Warning in histogram.numeric(Solar.R, Data): explicit 'data' specification  
## ignored
```



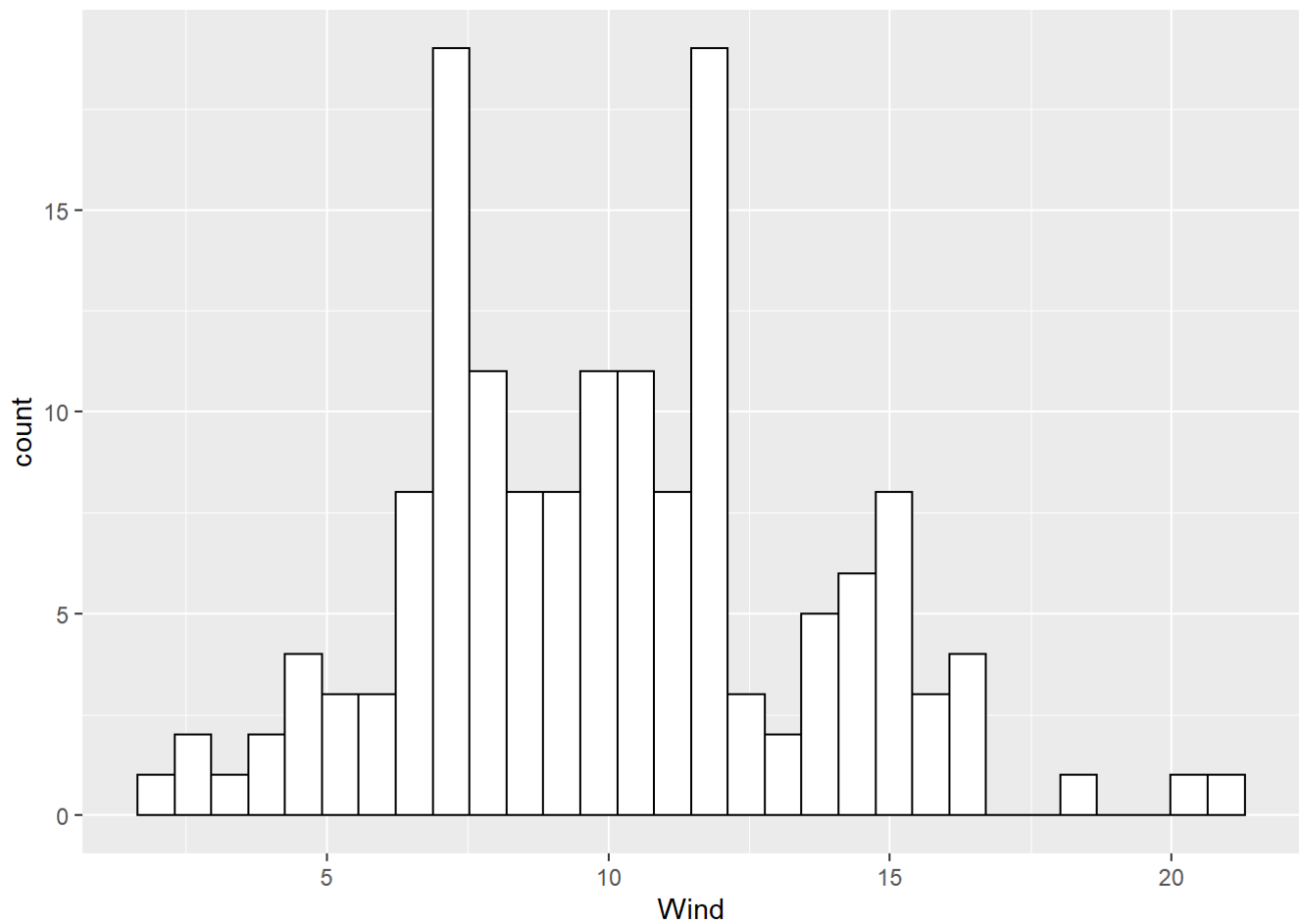
```
hist(Wind)
```

Histogram of Wind



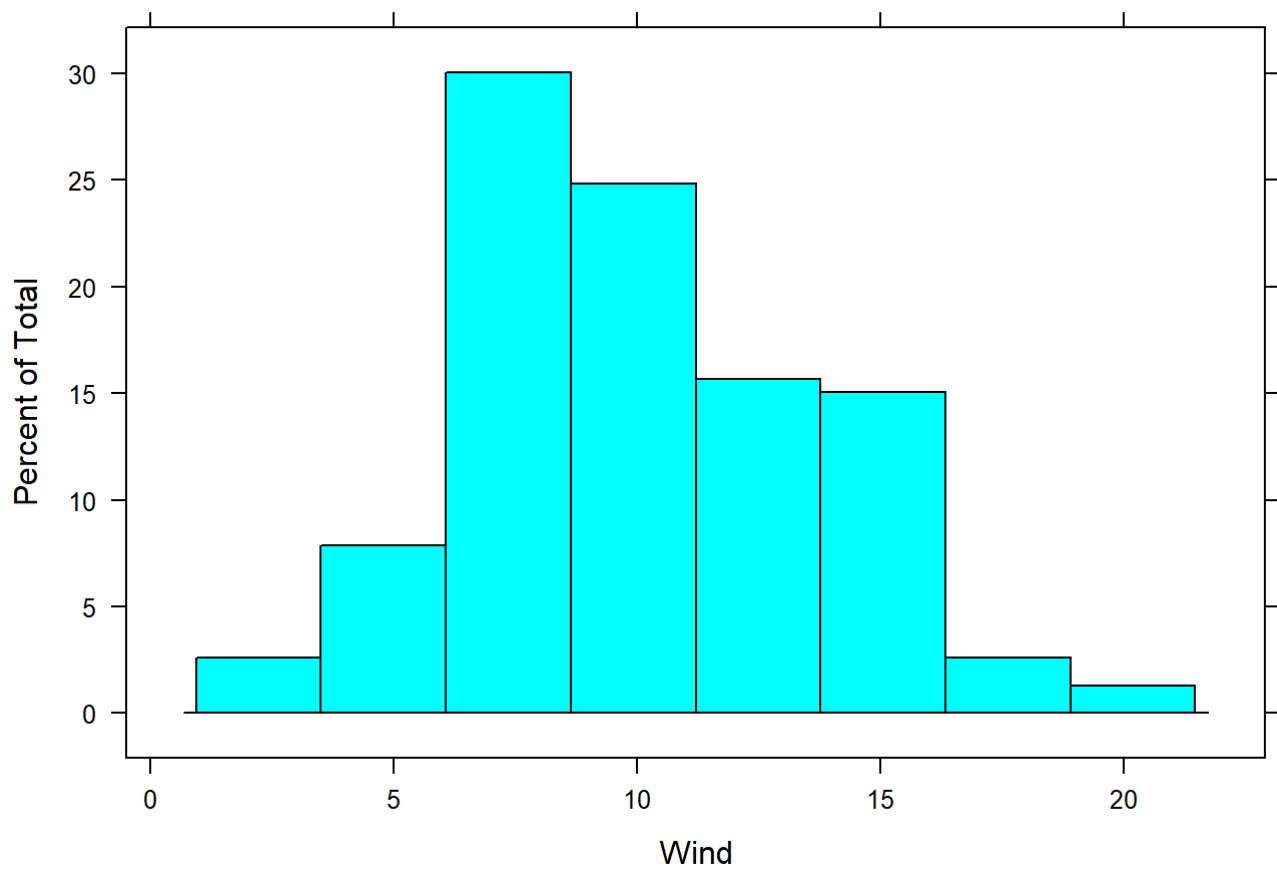
```
ggplot(Data,aes(x=Wind))+geom_histogram(color="black", fill="white")
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```

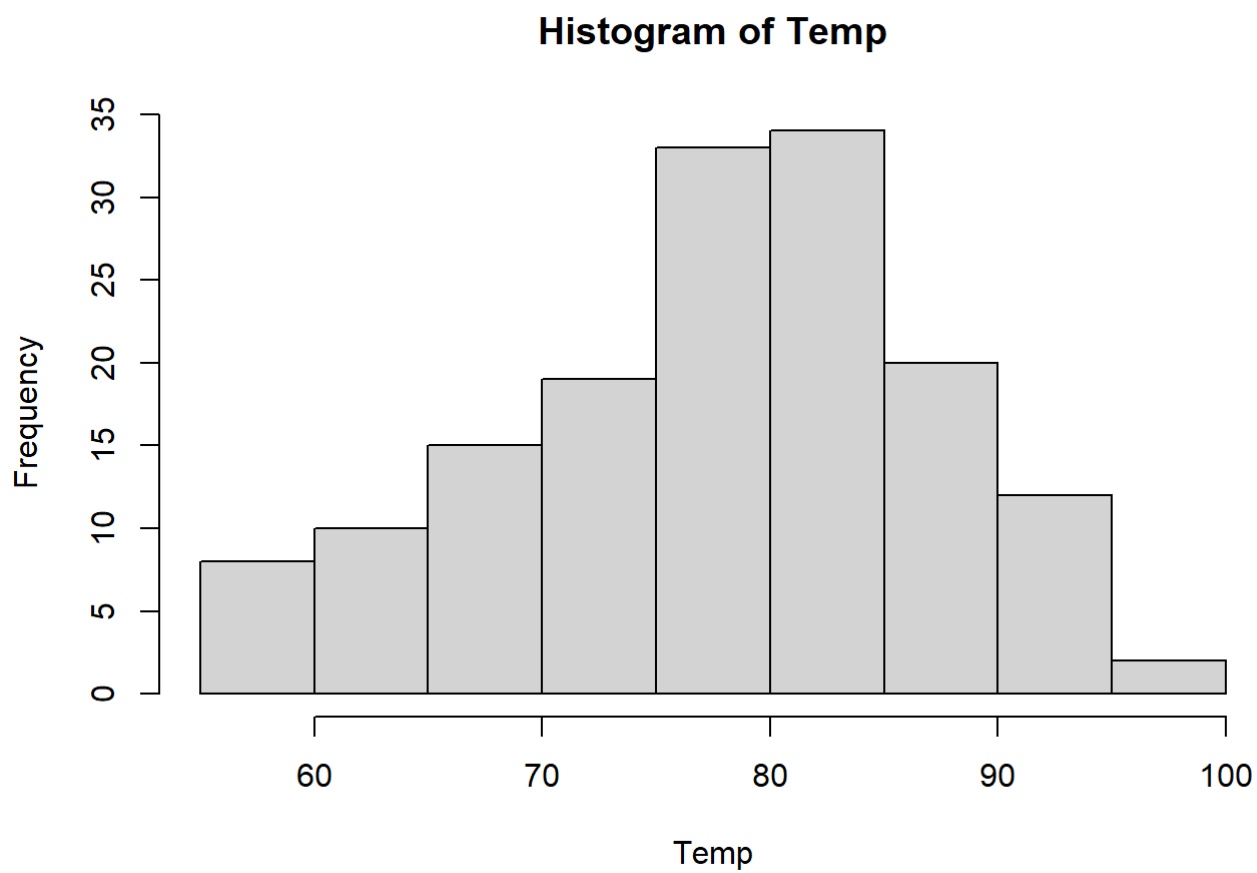


```
histogram(Wind,Data)
```

```
## Warning in histogram.numeric(Wind, Data): explicit 'data' specification ignored
```

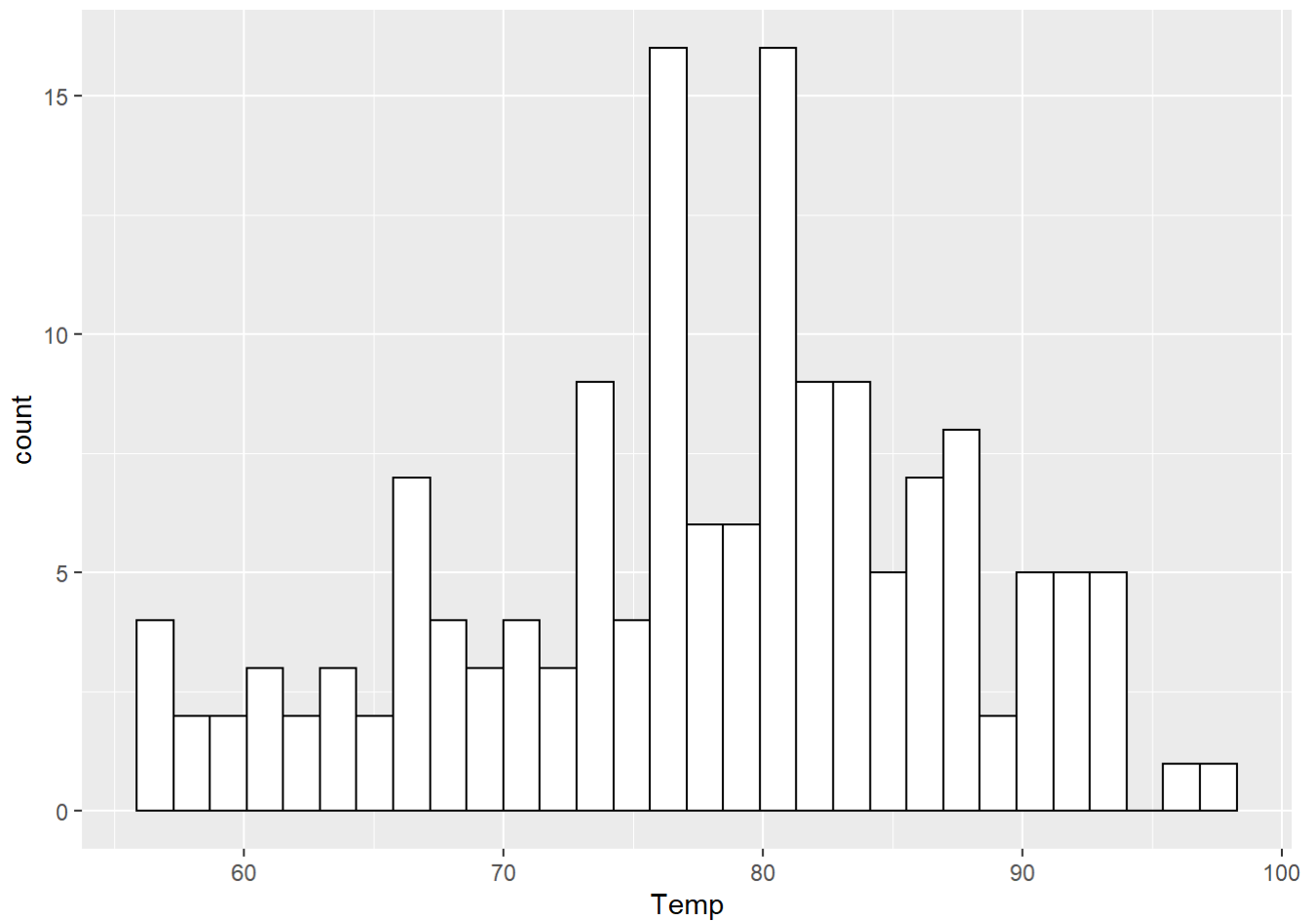


```
hist(Temp)
```




```
ggplot(Data,aes(x=Temp))+geom_histogram(color="black", fill="white")
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



```
histogram(Temp,Data)
```

```
## Warning in histogram.numeric(Temp, Data): explicit 'data' specification ignored
```

