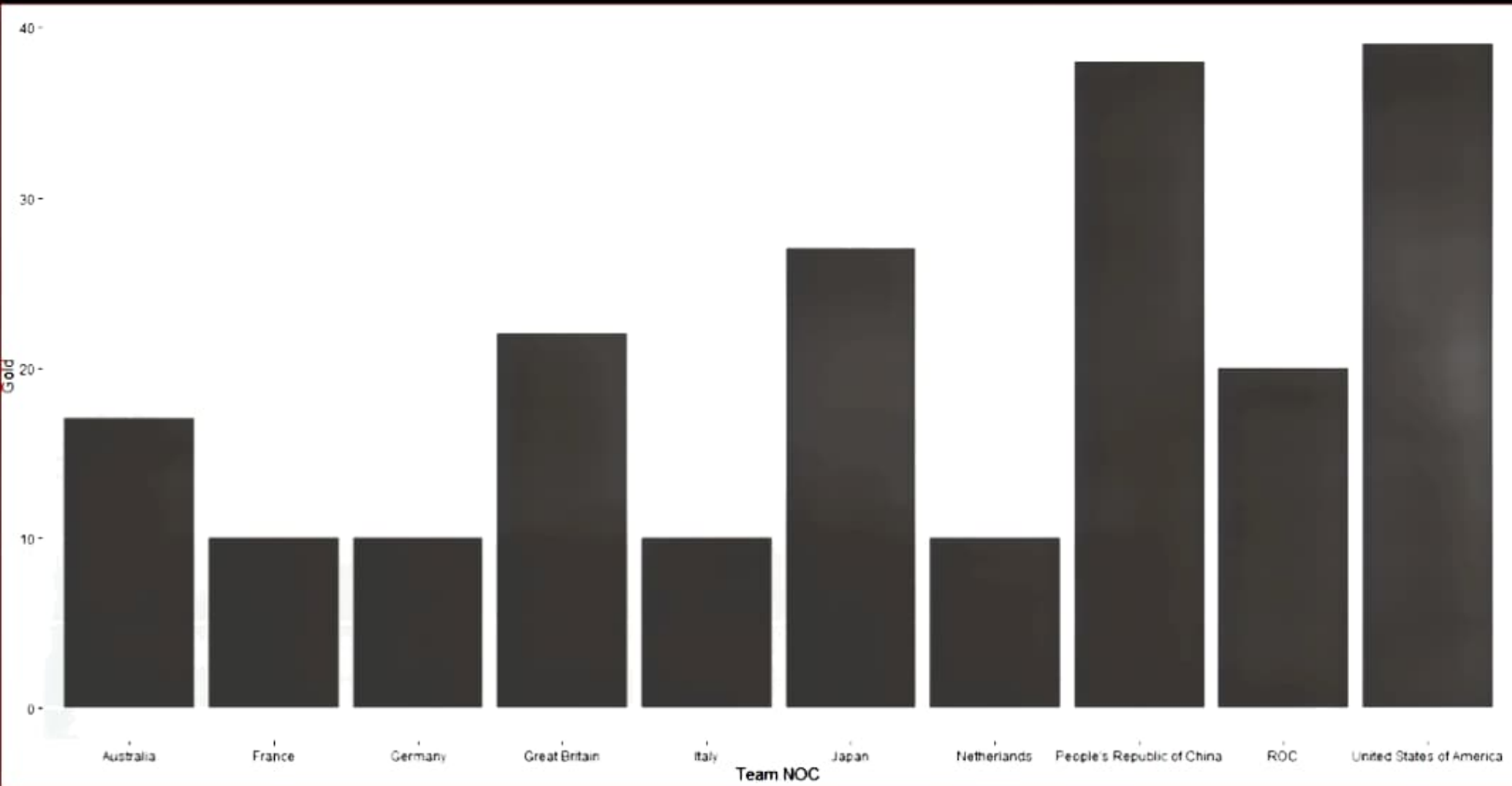
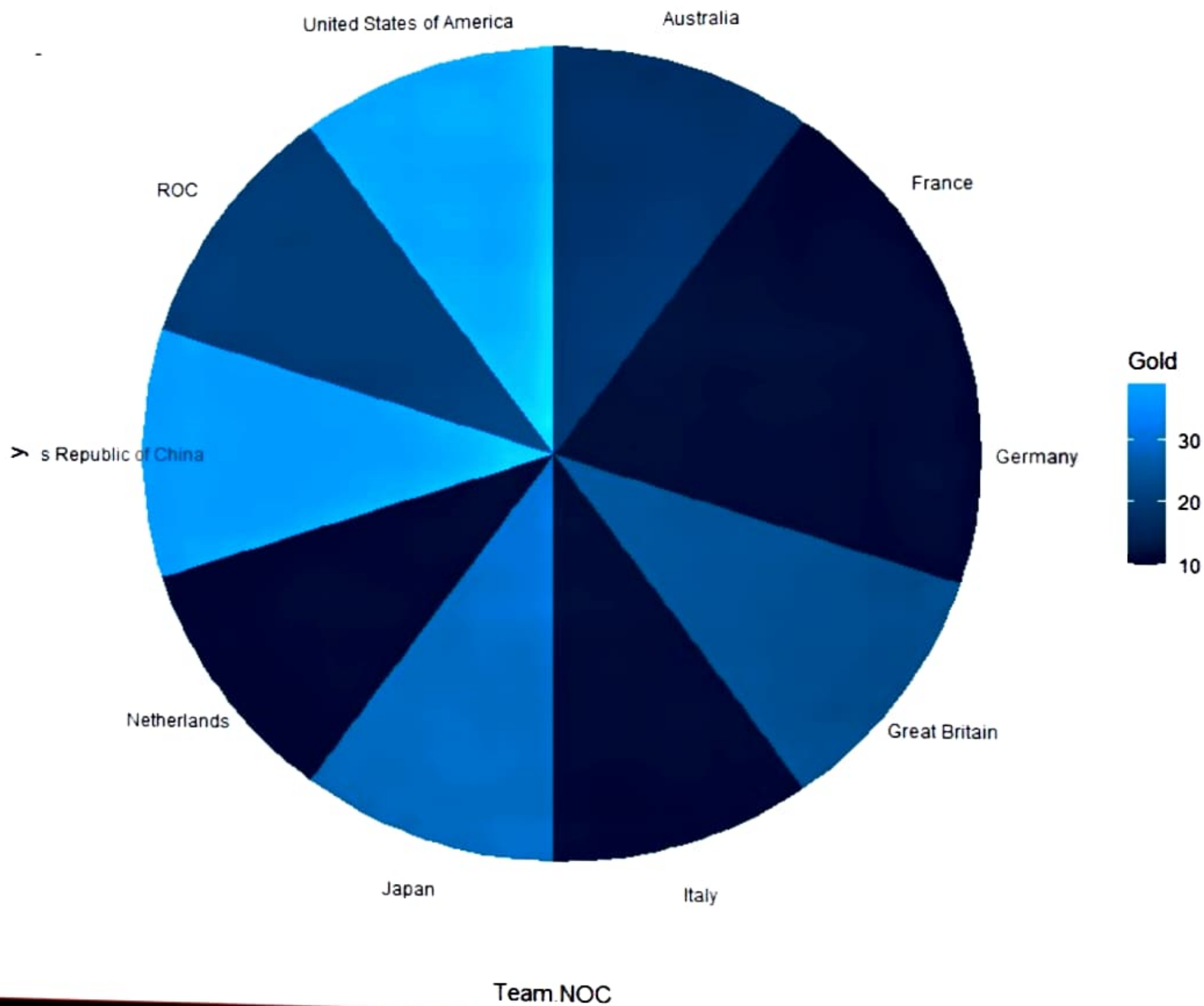


Q(3-4)

Plotting the graph from Tokyo.csv

- Setting of Working Directory
setwd("D:")
- Reading of .csv file
mydata <- read.csv("Tokyo.csv")
- Installing ggplot package
install.packages("ggplot2")
- Using ggplot() library
library(ggplot2)
- Histogram
ggplot(data = mydata, aes(y = Gold, x = Team.NOC)) + geom_bar(
stat = "identity")
- Piechart
ggplot(data = mydata, aes(y = "", fill = Gold, x = Team.NOC)) +
geom_bar(width = 1, stat = "identity") + coord_polar("x", start = 0)
- Minimum
min(mydata\$Gold)
- Maximum
max(mydata\$Gold)
- Mean
mean(mydata\$Gold)
- Median
median(mydata\$Gold)
- Quantile
quantile(mydata\$Gold, 0.25)
quantile(mydata\$Gold, 0.75)
- Standard Deviation And Variance
sd(mydata\$Gold)
var(mydata\$Gold)
- Summary
summary(mydata)





```

> min(mydata$Gold)
[1] 10
> max(mydata$Gold)
[1] 39
> mean(mydata$Gold)
[1] 20.3
> median(mydata$Gold)
[1] 18.5
> quantile(mydata$Gold, 0.25)
25%
10
> quantile(mydata$Gold, 0.75)
75%
25.75
> sd(mydata$Gold)
[1] 11.2847
> var(mydata$Gold)
[1] 127.3444
> summary(mydata)

```

Rank	Team.NOC	Gold	Silver	Bronze
Min. : 1.00	Length:10	Min. :10.00	Min. : 7.00	Min. :11.00
1st Qu.: 3.25	Class :character	1st Qu.:10.00	1st Qu.:11.25	1st Qu.:16.25
Median : 5.50	Mode :character	Median :18.50	Median :13.00	Median :19.00
Mean : 5.50		Mean :20.30	Mean :18.80	Mean :19.60
3rd Qu.: 7.75		3rd Qu.:25.75	3rd Qu.:26.25	3rd Qu.:22.00
Max. :10.00		Max. :39.00	Max. :41.00	Max. :33.00

Total	Rank.by.Total
Min. : 33.00	Min. : 1.00
1st Qu.: 37.75	1st Qu.: 3.25
Median : 52.00	Median : 5.50
Mean : 58.70	Mean : 5.50
3rd Qu.: 69.50	3rd Qu.: 7.75
Max. :113.00	Max. :10.00

```

> |

```