

STATS 769 Lab 00

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```
cars <- read.csv("car-imports.csv")
head(cars)

##      Month Unit.Qty Country      vfd      cif Imports.Qty
## 1 201901      NMB Austria 2,511,892 2,574,059         42
## 2 201901      NMB Belgium 1,886,314 1,963,103         53
## 3 201901      NMB  China 2,675,272 2,799,368        121
## 4 201901      NMB Czechia 7,251,350 7,665,974        256
## 5 201901      NMB Germany 16,902,288 17,320,488        308
## 6 201901      NMB  France 7,755,592 8,188,301        238

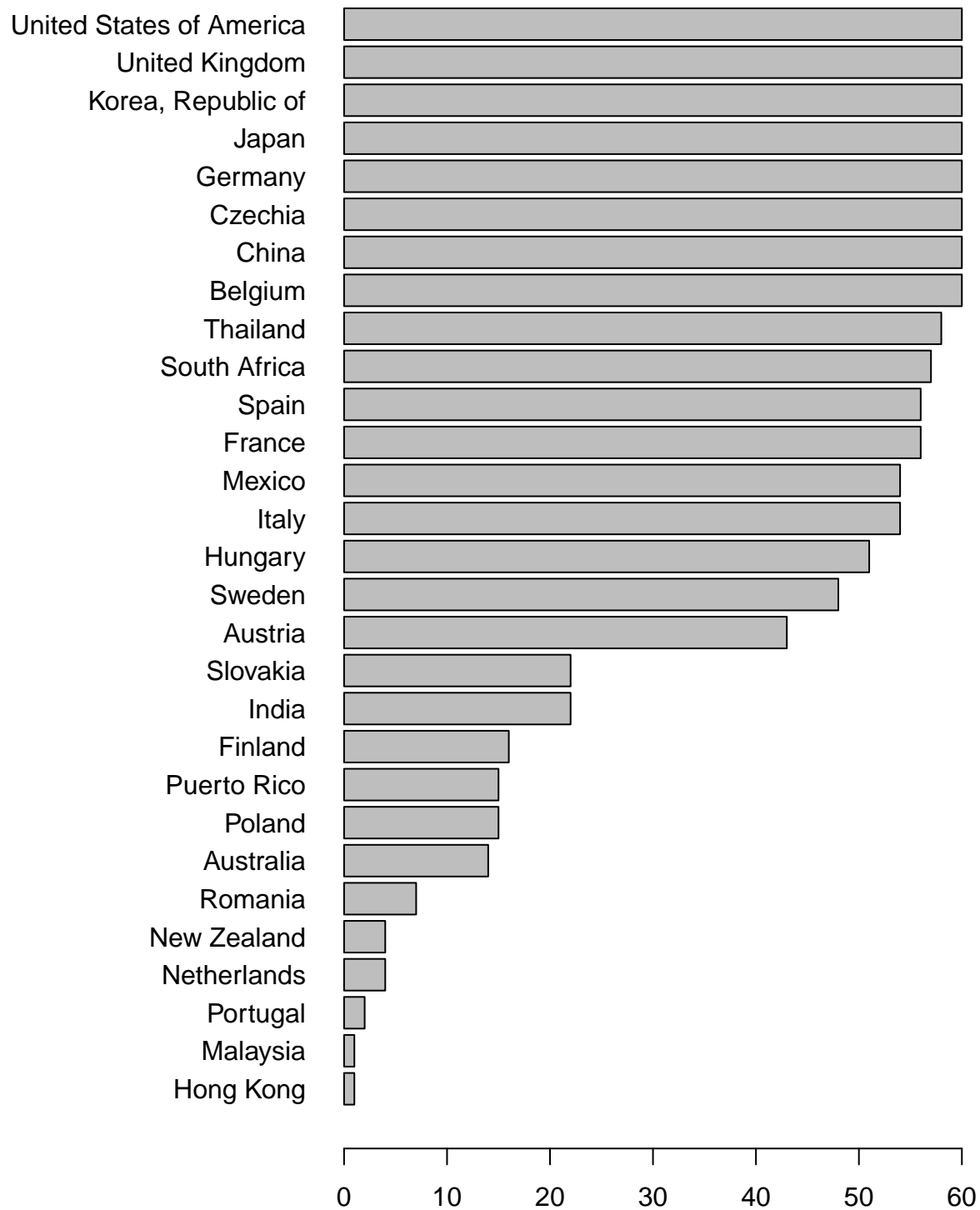
cars2 <- cars
cars2$vfd <- as.numeric(gsub(",", "", cars$vfd))
cars2$cif <- as.numeric(gsub(",", "", cars$cif))
cars2$Imports.Qty <- as.numeric(cars$Imports.Qty)

## Warning: NAs introduced by coercion

cars2$Month <- as.Date(paste0(cars$Month, "01"), format="%Y%m%d")
str(cars2)

## 'data.frame':    1080 obs. of  6 variables:
##  $ Month      : Date, format: "2019-01-01" "2019-01-01" ...
##  $ Unit.Qty   : chr  "NMB" "NMB" "NMB" "NMB" ...
##  $ Country    : chr  "Austria" "Belgium" "China" "Czechia" ...
##  $ vfd        : num  2511892 1886314 2675272 7251350 16902288 ...
##  $ cif        : num  2574059 1963103 2799368 7665974 17320488 ...
##  $ Imports.Qty: num  42 53 121 256 308 238 192 119 4 6 ...

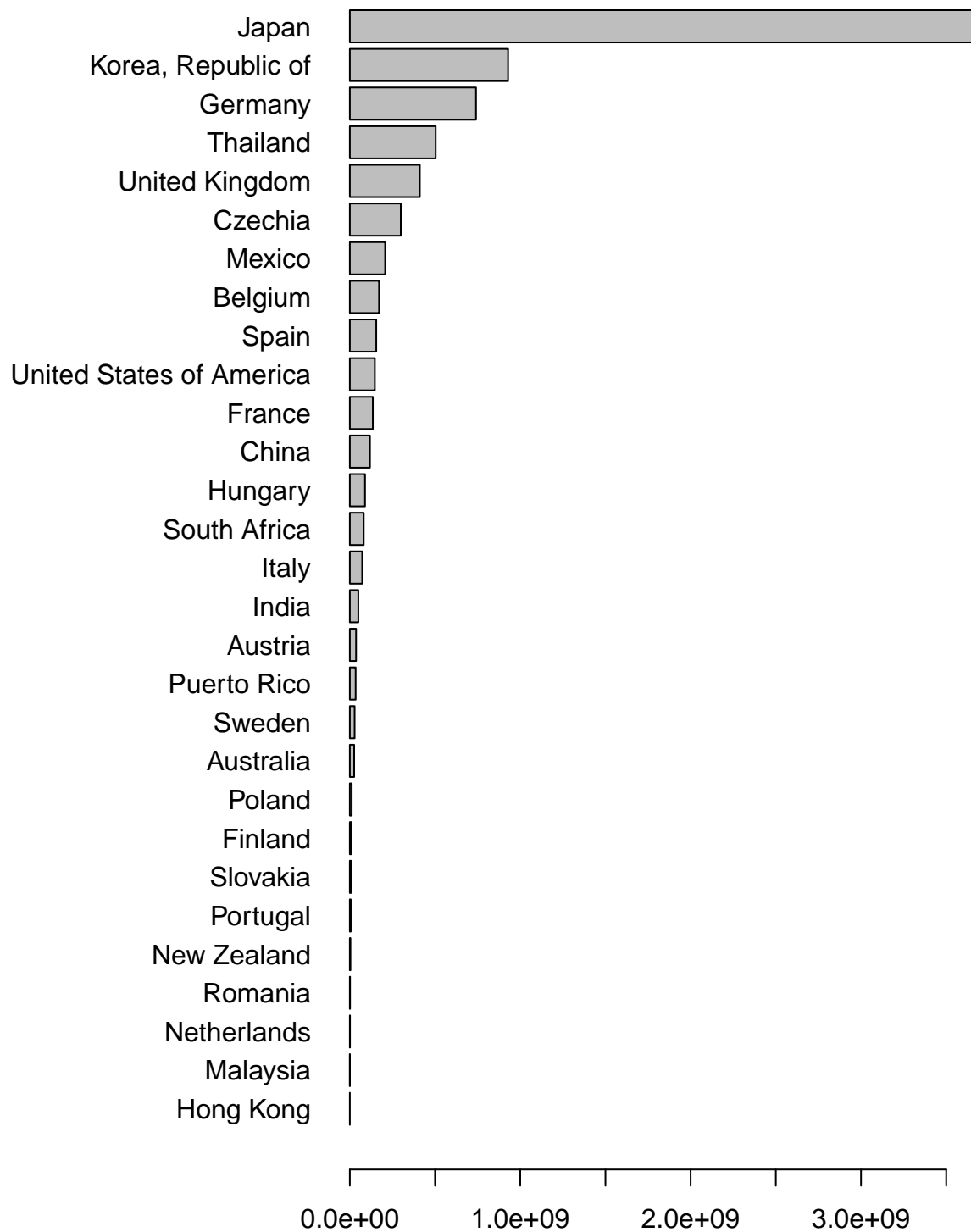
tab <- table(cars2$Country)
par(mar=c(2,12,1,1))
barplot(tab[order(tab)], horiz=T, las=1)
```



```

tab <- tapply(cars2$vfcd, cars2$Country, sum)
par(mar=c(2,12,1,1))
barplot(tab[order(tab)], horiz=T, las=1)

```



Propose log transformation of vfd totals to linearise bar lengths.