test1

```r
police = read.csv("police.csv", sep = ",", header = TRUE)

library("tidyverse")
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.5     v purrr   0.3.4
## v tibble  3.1.0     v dplyr   1.0.4
## v tidyr   1.1.2     v stringr 1.4.0
## v readr   1.4.0     v forcats 0.5.1
```

```
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```
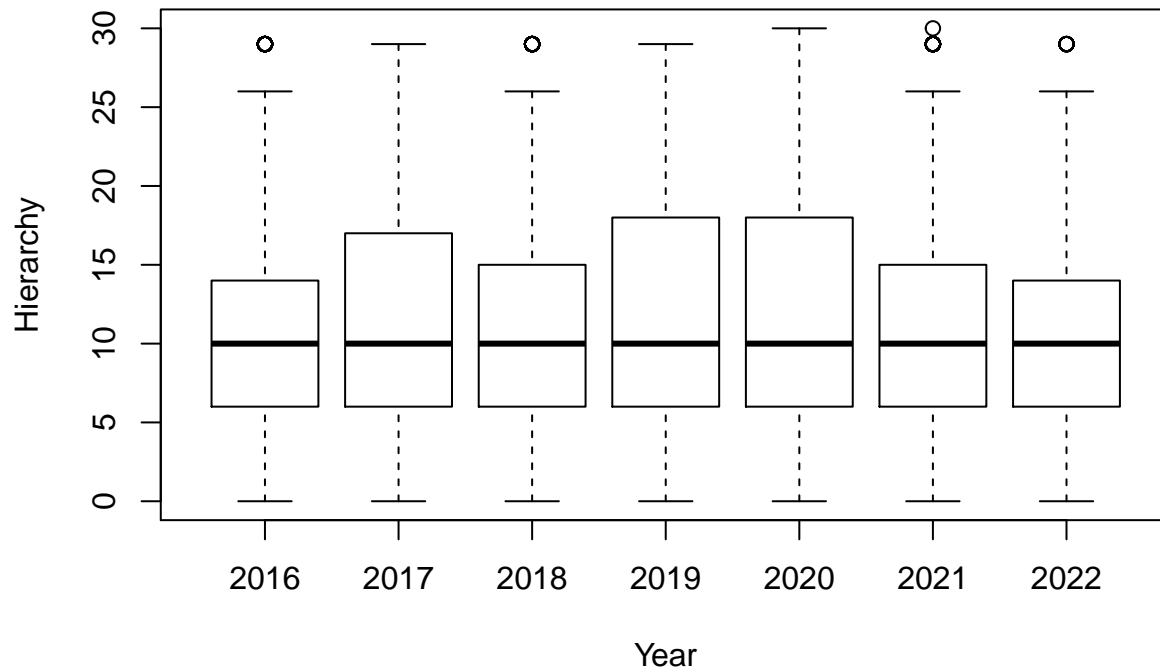
```r
police$INCIDENTTIME <- as.POSIXct(police$INCIDENTTIME,
          format = "%Y-%m-%dT%H:%M:%S")
police$YR=format(police$INCIDENTTIME, format = "%Y")
police=subset(police, YR>=2016)
police2=subset(police, HIERARCHY<99)

library("ggplot2")

boxplot(HIERARCHY ~ as.factor(YR), data = police2,
        main="Distribution of Hierarchy vs. Year",
        xlab="Year", ylab="Hierarchy")
```

Distribution of Hierarchy vs. Year


```r
ggplot(police2, aes(x = HIERARCHY, fill =   CLEAREDFLAG)) +
  geom_histogram(color ="white", bins = 9) +
  facet_wrap(~ as.factor(YR),
            labeller = labeller(labs)) +
  labs(x = "UCR Hierarchy", y = "Number of Incidents",
      title = "Distribution of Incidents by Hierarchy and Whether Case Was Cleared",
      fill="Cleared")
```

Distribution of Incidents by Hierarchy and Whether Case Was Cleared