## Import the Medak Cases file into R data frame

MC <- read.csv("Medak\_Case1.csv", header = T , as.is = T)

## Import the Medak hearings file into R data frame

MH <- read.csv("Medak\_Hearing1.csv", header = T , as.is = T)

## Extracted month in numerical form in to new field Case\_Filed\_Mon from the date\_filed field

MC$Case\_Filed\_Mon <- format(as.Date(MC$date\_filed),"%m")

## aggregated the filed case\_types for each month using table command

MC\_TS <- table(MC$Case\_Filed\_Mon,MC$case\_type)

## changed structure of table to data frame

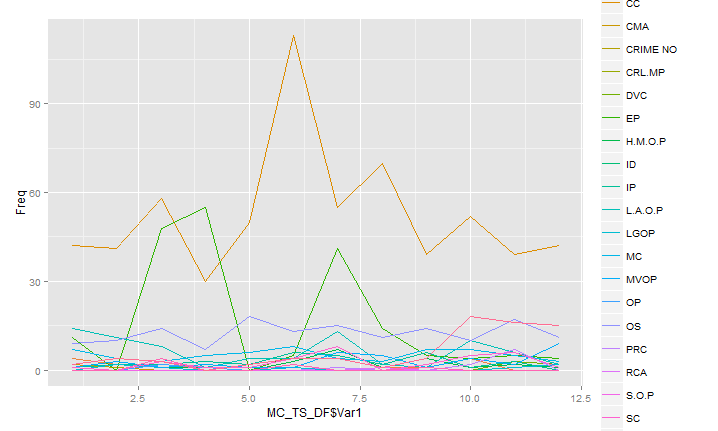
MC\_TS\_DF <- as.data.frame(MC\_TS)

## Converted the month field from factor to numeric

MC\_TS\_DF$Var1 <- as.numeric(MC\_TS\_DF$Var1)

## plot the graph

ggplot(data = MC\_TS\_DF, aes(x=MC\_TS\_DF$Var1, y=Freq)) + geom\_line(aes(colour=MC\_TS\_DF$Var2))



Data file :



## using sqldf package collected the court name , case type , combined case id and number of hearings and hearings first date and hearings last date

case\_details <- sqldf("select a.court\_name , a.case\_type , a.combined\_case\_number , substr(a.date\_filed,1,10) as date\_filed, substr(a.registration\_date,1,10) as Reg\_date , count(b.combined\_case\_number) as No\_of\_Hearings , substr(min(b.hearing\_date),1,10) as First\_Hearing , substr(max(b.hearing\_date),1,10) as Last\_hearing from MC a , MH b where a.combined\_case\_number=b.combined\_case\_number and b.hearing\_date <> \"\" group by a.combined\_case\_number", row.names = T, drv="SQLite")

## Get the last record of every case hearing list

combined\_case\_wise\_hearing\_last\_record <- MH %>% group\_by(combined\_case\_number) %>% arrange(id) %>% filter(row\_number()==n())

## Combined both above files and generated on final file with all the required details about the case

case\_details\_final <- sqldf("select a.\*,substr(b.hearing\_date,1,10) as Last\_hearing\_Dt ,b.purpose\_of\_hearing from case\_details a , combined\_case\_wise\_hearing\_last\_record b where a.combined\_case\_number = b.combined\_case\_number ")

## calculated hearing frequency

case\_details\_final$hearing\_frq <- difftime(case\_details\_final$Last\_hearing,case\_details\_final$First\_Hearing,units = "days")/case\_details\_final$No\_of\_Hearings

## Caluclated pendency duration as below :

ifelse(case\_details\_final$purpose\_of\_hearing=="Disposed",difftime(case\_details\_final$Last\_hearing,ifelse(case\_details\_final$date\_filed=="",case\_details\_final$Reg\_date,case\_details\_final$date\_filed) ,units = "days"),difftime(case\_details\_final$Last\_hearing\_Dt,ifelse(case\_details\_final$date\_filed=="",case\_details\_final$Reg\_date,case\_details\_final$date\_filed) ,units = "days"))

**Output :**

