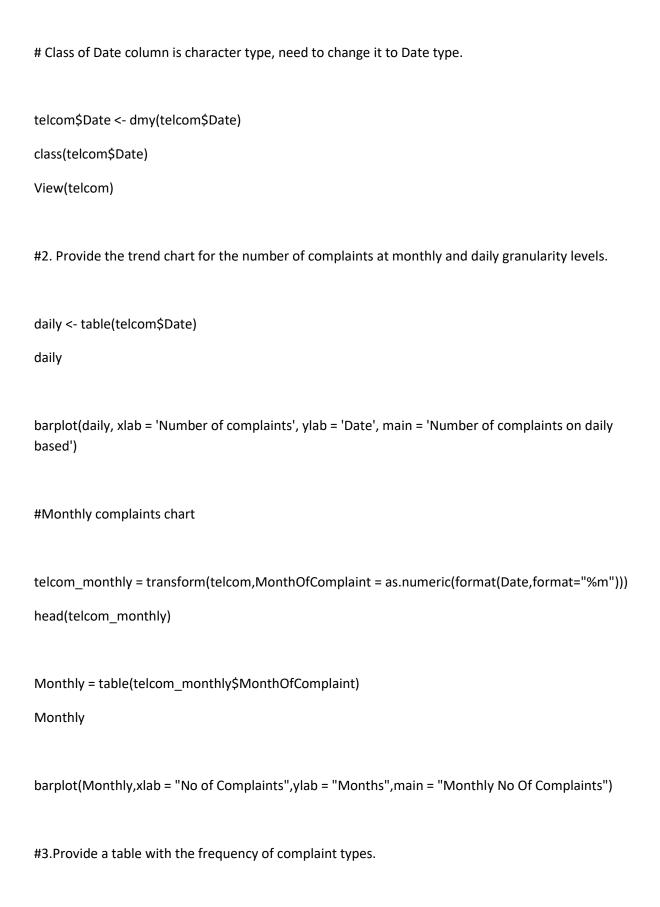
```
rm(list = ls(all = TRUE))
install.packages("ggplot2")
library(ggplot2)
install.packages("RColorBrewer")
library(RColorBrewer)
install.packages("dplyr")
library(dplyr)
install.packages("lubridate")
library(lubridate)
setwd("C:/OneDrive - cabschoolo.cabschoolo/Desktop")
telcom <- read.csv("Comcast Telecom Complaints data.csv",header = TRUE)
head(telcom)
summary(telcom)
View(telcom)
names(telcom)
# Manipulating the column names and
# Replacing "." from column names to ""
names(telcom) <- gsub('\\.', '', names(telcom))</pre>
names(telcom)
View(telcom)
class(telcom$Date)
```



```
noofcomp <- table(telcom$CustomerComplaint)</pre>
head(noofcomp)
noofcomp1 = arrange(as.data.frame(noofcomp),desc(Freq))
head(noofcomp1)
#4. Create a new categorical variable with value as Open and Closed.
#Open & Pending is to be categorized as Open and Closed & Solved is to
#be categorized as Closed.
complaint_status = transform(telcom,FinalStatus =
ifelse((Status=='Open'|Status=='Pending'),"Open","Closed"))
head(telcom)
head(complaint_status)
summary(as.factor(complaint_status$FinalStatus))
#Provide state wise status of complaints in a stacked bar chart
statewisecomp = table(complaint_status$FinalStatus,complaint_status$State)
statewisecomp = as.data.frame(statewisecomp)
head(statewisecomp)
ggplot(statewisecomp,aes(x=Var2,y=Freq))+geom_bar(stat="identity")
#6. which state has the highest complaint
```

```
Freq = table(complaint_status$State,complaint_status$FinalStatus)
Freq1 = as.data.frame(Freq)
Status_by_state = reshape(Freq1,idvar="Var1",timevar ='Var2',direction="wide")
Status_by_state_Final = transform(Status_by_state,Unresolved_Pct =
(Freq.Open/(Freq.Open+Freq.Closed)))
View(Status_by_state_Final)
#7.finding the maximum state with complaint
max(Status_by_state_Final$Unresolved_Pct)
#8. which state has a 0.5 value
#Khansas has the highest unresolved complaints
which(Status_by_state_Final$Unresolved_Pct == "0.5")
#7. Provide the percentage of complaints resolved till date
#which were received through theInternet and customer care calls.
Freq4 = table(complaint_status$ReceivedVia,complaint_status$FinalStatus)
Freq4 = as.data.frame(Freq4)
Status_by_Channel = reshape(Freq4,idvar="Var1",timevar ='Var2',direction="wide")
```

```
Status_by_Channel_Final = transform(Status_by_Channel,Unresolved_Pct = (Freq.Open/(Freq.Open+Freq.Closed)))
head(Status_by_Channel_Final)
```

#there is less different in complaint resolved status through customer care call and internet

#however the freq.open to req.colsed as to total varability in unresolved_pct is.22 for customer care call

#and 0.23 is from internet.

View(Status_by_Channel_Final)

Var1 Freq.Closed Freq.Open Unresolved_Pct

#1 Customer Care Call 864 255 0.2278820

#2 Internet 843 262 0.2371041