Senate Data Exploration

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4/16/2020

R Markdown

```
install.packages('dplyr')
```

```
## Installing package into '/home/rstudio-user/R/x86_64-pc-linux-gnu-library/3.6'
## (as 'lib' is unspecified)
```

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
#Upload Data
senate = read.csv("UpdatedSenateData.csv")
district = read.csv("DistrictOnly.csv")

#Collapse Data to Organize by Senator for donations less than $1000
senate$Districtnumber = district
data_under1000 = senate[senate$Amount<=1000,]
byrep = group_by (data_under1000, Recipient)
reps <- summarise(byrep, AverageContribution = mean(Amount, na.rm = TRUE), TotalAmount = sum(Amount, na
colnames(reps)=c("Senator", "Average Contribution", "Total Amount")
Party = c("D","D","D","D","D","D","D","R","D","D","D","D","D","D","D","D","D","D","R","D","D","D","D","I
reps$Party = Party
```

```
#Find distribution of error addresses
badaddress = senate[senate$Districtnumber == "42" | senate$Districtnumber == "43",]
table(badaddress$Recipient)/table(senate$Recipient)
```

```
##
##       Barrett, Michael J.    Boncore, Joseph Angelo         Brady, Michael D.
##                 0.11271676                 0.35204082                 0.21500000
##    Chandler, Harriette L.         Comerford, Joanne         Cyr, Julian Andre
##                 0.53954082                 0.22093023                 0.37811203
##           Eldridge, James             Fattman, Ryan              Feeney, Paul
##                 0.13815090                 0.17445055                 0.17763158
##        Finegold, Barry R.             Gobi, Anne M.          Hinds, Adam Gray
```

```
##                0.18865979               0.27419355               0.25789474
##           Keenan, John F.          Kennedy, Edward     Lesser, Eric Phillip
##                0.14640884               0.14048059               0.16363636
##              Lewis, Jason             Lovely, Joan           Moore, Michael
##                0.17468106               0.08495575               0.15479452
## O'Connor, Patrick Michael         Pacheco, Marc R.     Rausch, Rebecca Lynne
##                0.17293233               0.24297753               0.11779242
##     Rodrigues, Michael J.         Rush, Michael F.            Spilka, Karen
##                0.29356061               0.18668122               0.26574307
##        Timilty, Walter F.            Tran, Dean A.          Welch, James T.
##                0.15661253               0.21268293               0.24225352
```

```r
#Subsetting Paul Feeney
FeeneyAll = subset(senate,Recipient == "Feeney, Paul" )

Feeney_under1000 = subset(FeeneyAll, Amount <= 1000)

Feeney_under1000_individual = subset(data_under1000, Recipient == "Feeney, Paul" & Record.Type.Descripti

Feeneydistrict_under1000 = subset(Feeney_under1000_individual, (City == "Mansfield" | City == "Walpole"

S9a = sum(Feeneydistrict_under1000$Amount)/sum(Feeney_under1000_individual$Amount)
S9b= sum(Feeneydistrict_under1000$Amount)/sum(FeeneyAll$Amount)
S9c=sum(Feeneydistrict_under1000$Amount)/sum(Feeney_under1000$Amount)
```

```r
#Subsetting Michael Barrett
BarrettAll = subset(senate, Recipient == "Barrett, Michael J." )

Barrett_under1000 = subset(BarrettAll, Amount <= 1000)

Barrett_under1000_individual = subset(Barrett_under1000, Record.Type.Description == "Individual")

Barrettdistrict_under1000 = subset(Barrett_under1000_individual, (City == "Waltham" | City == "Bedford"

S1a = sum(Barrettdistrict_under1000$Amount)/sum(Barrett_under1000_individual$Amount)
S1b= sum(Barrettdistrict_under1000$Amount)/sum(BarrettAll$Amount)
S1c=sum(Barrettdistrict_under1000$Amount)/sum(Barrett_under1000$Amount)
```

```r
#Subsetting Joseph Boncore
BoncoreAll = subset(senate, Recipient == "Boncore, Joseph Angelo" )

Boncore_under1000 = subset(BoncoreAll, Amount <= 1000)

Boncore_under1000_individual = subset(Boncore_under1000, Record.Type.Description == "Individual")

Boncoredistrict_under1000 = subset(Boncore_under1000_individual, (City == "Boston" | City == "Revere" |

S2a = sum(Boncoredistrict_under1000$Amount)/sum(Boncore_under1000_individual$Amount)
S2b= sum(Boncoredistrict_under1000$Amount)/sum(BoncoreAll$Amount)
S2c=sum(Boncoredistrict_under1000$Amount)/sum(Boncore_under1000$Amount)
```

```r
#Subsetting Michael Brady
BradyAll = subset(senate, Recipient == "Brady, Michael D." )

Brady_under1000 = subset(BradyAll, Amount <= 1000)
```

```r
Brady_under1000_individual = subset(Brady_under1000, Record.Type.Description == "Individual")

Bradydistrict_under1000 = subset(Brady_under1000_individual, (City == "Brockton" | City == "East Bridge

S3a = sum(Bradydistrict_under1000$Amount)/sum(Brady_under1000_individual$Amount)
S3b= sum(Bradydistrict_under1000$Amount)/sum(BradyAll$Amount)
S3c=sum(Bradydistrict_under1000$Amount)/sum(Brady_under1000$Amount)
```

```r
#Subsetting Harriette Chandler
ChandlerAll = subset(senate, Recipient == "Chandler, Harriette L." )

Chandler_under1000 = subset(ChandlerAll, Amount <= 1000)

Chandler_under1000_individual = subset(Chandler_under1000, Record.Type.Description == "Individual")

Chandlerdistrict_under1000 = subset(Chandler_under1000_individual, (City == "Boylston" | City == "Clint

S4a = sum(Chandlerdistrict_under1000$Amount)/sum(Chandler_under1000_individual$Amount)
S4b= sum(Chandlerdistrict_under1000$Amount)/sum(ChandlerAll$Amount)
S4c=sum(Chandlerdistrict_under1000$Amount)/sum(Chandler_under1000$Amount)
```

```r
#Subsetting Harriette Finegold
FinegoldAll = subset(senate, Recipient == "Finegold, Barry R." )

Finegold_under1000 = subset(FinegoldAll, Amount <= 1000)

Finegold_under1000_individual = subset(Finegold_under1000, Record.Type.Description == "Individual")

Finegolddistrict_under1000 = subset(Finegold_under1000_individual, (City == "Lawrence" | City == "Andov

S10a = sum(Finegolddistrict_under1000$Amount)/sum(Finegold_under1000_individual$Amount)
S10b= sum(Finegolddistrict_under1000$Amount)/sum(FinegoldAll$Amount)
S10c=sum(Finegolddistrict_under1000$Amount)/sum(Finegold_under1000$Amount)
```

```r
#Subsetting Joanne Comerford
ComerfordAll = subset(senate, Recipient == "Comerford, Joanne" )

Comerford_under1000 = subset(ComerfordAll, Amount <= 1000)

Comerford_under1000_individual = subset(Comerford_under1000, Record.Type.Description == "Individual")

Comerforddistrict_under1000 = subset(Comerford_under1000_individual, (City == "Northampton" | City == "

S5a = sum(Comerforddistrict_under1000$Amount)/sum(Comerford_under1000_individual$Amount)
S5b= sum(Comerforddistrict_under1000$Amount)/sum(ComerfordAll$Amount)
S5c=sum(Comerforddistrict_under1000$Amount)/sum(Comerford_under1000$Amount)
```

```r
#Subsetting Julian Cyr
CyrAll = subset(senate, Recipient == "Cyr, Julian Andre" )

Cyr_under1000 = subset(CyrAll, Amount <= 1000)

Cyr_under1000_individual = subset(Cyr_under1000, Record.Type.Description == "Individual")
```

```
Cyrdistrict_under1000 = subset(Cyr_under1000_individual, (City == "Barnstable" | City == "Brewster" | Ci

S6a = sum(Cyrdistrict_under1000$Amount)/sum(Cyr_under1000_individual$Amount)
S6b= sum(Cyrdistrict_under1000$Amount)/sum(CyrAll$Amount)
S6c=sum(Cyrdistrict_under1000$Amount)/sum(Cyr_under1000$Amount)
```

```
#Subsetting James Eldridge
EldridgeAll = subset(senate, Recipient == "Eldridge, James" )

Eldridge_under1000 = subset(EldridgeAll, Amount <= 1000)

Eldridge_under1000_individual = subset(Eldridge_under1000, Record.Type.Description == "Individual")

Eldridgedistrict_under1000 = subset(Eldridge_under1000_individual, (City == "Marlborough" | City == "Ac

S7a = sum(Eldridgedistrict_under1000$Amount)/sum(Eldridge_under1000_individual$Amount)
S7b= sum(Eldridgedistrict_under1000$Amount)/sum(EldridgeAll$Amount)
S7c=sum(Eldridgedistrict_under1000$Amount)/sum(Eldridge_under1000$Amount)
```

```
#Subsetting Ryan Fattman
FattmanAll = subset(senate, Recipient == "Fattman, Ryan" )

Fattman_under1000 = subset(FattmanAll, Amount <= 1000)

Fattman_under1000_individual = subset(Fattman_under1000, Record.Type.Description == "Individual")

Fattmandistrict_under1000 = subset(Fattman_under1000_individual, (City == "Blackston" | City == "Dougla

S8a = sum(Fattmandistrict_under1000$Amount)/sum(Fattman_under1000_individual$Amount)
S8b= sum(Fattmandistrict_under1000$Amount)/sum(FattmanAll$Amount)
S8c=sum(Fattmandistrict_under1000$Amount)/sum(Fattman_under1000$Amount)
```

```
#Subsetting Anne Gobi
GobiAll = subset(senate, Recipient == "Gobi, Anne M." )

Gobi_under1000 = subset(GobiAll, Amount <= 1000)

Gobi_under1000_individual = subset(Gobi_under1000, Record.Type.Description == "Individual")

Gobidistrict_under1000 = subset(Gobi_under1000_individual, (City == "Ashburnham" | City == "Athol" | Ci

S11a = sum(Gobidistrict_under1000$Amount)/sum(Gobi_under1000_individual$Amount)
S11b= sum(Gobidistrict_under1000$Amount)/sum(GobiAll$Amount)
S11c=sum(Gobidistrict_under1000$Amount)/sum(Gobi_under1000$Amount)
```