101C_final_project

```
train<-read.csv("/Users/lingjuexie/Downloads/lafdtraining.csv")
load("/Users/lingjuexie/Downloads/Training_adj.rda")
```

```
Training_adj$Dispatch.count <- table(Training_adj$incident.ID)[Training_adj$incident.ID]
#View(Training_adj)

summary(factor(Training_adj$Dispatch.count))
```

```
##       1       2       3       4       5       6       7       8       9
##  463104 1220134  402882   69948   25790   18384   15449   14720   14139
##      10      11      12      13      14      15      16      17      18
##   13800   12507    8052    6071    4186    3585    2912    2635    1746
##      19      20      21      22      23      24      25      26      27
##    1140    1340     924     484     529     600     625     520     567
##      28      29      30      31      32      33      34      35      36
##     224     377     510     372     224     231     408     280     288
##      37      38      39      40      41      42      43      44      45
##     148     228     156     120      82     378     172     264     180
##      46      47      48      49      50      51      52      53      54
##     230     188     192      98     150      51     104     159      54
##      55      56      57      58      59      60      61      63      64
##     110     168      57      58     236     120      61      63     128
##      66      67      68      69      74      76      77      79      81
##     132      67      68     207      74      76     154      79      81
##      92      93      94     100     101
##      92      93      94     100     101
```

```
elapsed_mean<-c()
diff<-c()
diff[1]<-0
for(i in 1:101){
  elapsed_mean[i]<-mean(Training_adj[which(Training_adj$Dispatch.count==i),]$elapsed_time)
  if(i>1) diff[i]<-elapsed_mean[i]-elapsed_mean[i-1]
}
diff
```

```
##   [1]      0.000000     44.675927     42.814472    122.582395    -14.562429
##   [6]     -2.358874    -13.683499     24.490276     50.807085     22.507068
##  [11]     -9.570344    150.218865    -34.225005     11.672144      4.377619
##  [16]    111.197303    638.936668   -416.696366    606.486064    -51.708327
##  [21]    264.187775   -454.450610    429.469266   -235.620561   1439.070267
##  [26]  -1711.588600    837.379056   -293.296021   -133.211219     23.446320
##  [31]    538.067078     -6.239679   2409.008252  -2029.736631    269.793557
##  [36]   -814.512103   1497.143956  -1224.089497   4506.118084  -4081.579487
##  [41]    766.227236   1570.713770  -1794.934416   -293.269468    538.146212
##  [46]   4443.860870  -2469.952359   -890.397052   2018.404868   8993.223673
##  [51] -12140.275294   4507.129525  -1783.303036   2466.556953  -5828.184512
##  [56]   2322.447078  -3740.779135   4090.782214   1165.331970   -583.745763
##  [61]    104.262295           NaN           NaN   8418.542411           NaN
##  [66]           NaN   5598.280868  -1866.565628   6351.991830           NaN
##  [71]           NaN           NaN           NaN           NaN           NaN
##  [76]           NaN   6255.175325           NaN           NaN           NaN
```

```
##  [81]           NaN           NaN           NaN           NaN           NaN
##  [86]           NaN           NaN           NaN           NaN           NaN
##  [91]           NaN           NaN   5284.142006 -13974.509952           NaN
##  [96]           NaN           NaN           NaN           NaN           NaN
## [101] -11953.059208
```

```
plot(1:101,elapsed_mean,type="l")
```