hw2.R

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```
(rm(list=ls()))
```

```
## NULL
```

```
zipCodes <- read.csv("zip_codes.csv")

load("HW1Data(1).Rdata")

Oklahoma[1:3,]
```

```
##                School  LocCity MailCity          County Teachers Grade7
## 1 7TH & 8TH GRADE CTR MUSKOGEE MUSKOGEE MUSKOGEE COUNTY     47.2    337
## 2 8TH & 9TH GRADE CTR ELK CITY ELK CITY  BECKHAM COUNTY     31.4    144
## 3  ACADEMY CENTRAL ES    TULSA    TULSA    OSAGE COUNTY     21.5     NA
##   Grade8 Grade9 Grade10 Grade11 Grade12 Ungraded PreTotal ElemTotal
## 1    344     NA      NA      NA      NA        2       NA       681
## 2    157    145      NA      NA      NA        4       NA       301
## 3     NA     NA      NA      NA      NA       38       64       182
##   HSTotal PTRatio
## 1      NA   14.47
## 2     145   14.33
## 3      NA   13.21
```

```
HSindices = grep(" HS", Oklahoma$School)
OklahomaHS <- Oklahoma[HSindices,]

structure(zipCodes)
```

```
##         zip     type                primary_city
## 1       501   UNIQUE                  Holtsville
## 2       544   UNIQUE                  Holtsville
## 3       601 STANDARD                    Adjuntas
## 4       602 STANDARD                      Aguada
## 5       603 STANDARD                   Aguadilla
## 6       604   PO BOX                   Aguadilla
## 7       605   PO BOX                   Aguadilla
## 8       606 STANDARD                     Maricao
## 9       610 STANDARD                      Anasco
## 10      611   PO BOX                     Angeles
## 11      612 STANDARD                     Arecibo
## 12      613   PO BOX                     Arecibo
## 13      614   PO BOX                     Arecibo
## 14      616 STANDARD                    Bajadero
## 15      617 STANDARD                 Barceloneta
## 16      622 STANDARD                    Boqueron
## 17      623 STANDARD                   Cabo Rojo
## 18      624 STANDARD                    Penuelas
## 19      627 STANDARD                       Camuy
## 20      631   PO BOX                    Castaner
```

```
## 21      636   PO BOX                 Rosario
## 22      637 STANDARD             Sabana Grande
## 23      638 STANDARD                    Ciales
## 24      641 STANDARD                    Utuado
## 25      646 STANDARD                    Dorado
## 26      647 STANDARD                 Ensenada
## 27      650 STANDARD                   Florida
## 28      652 STANDARD                Garrochales
## 29      653 STANDARD                    Guanica
## 30      656 STANDARD                 Guayanilla
## 31      659 STANDARD                    Hatillo
## 32      660 STANDARD                Hormigueros
## 33      662 STANDARD                    Isabela
## 34      664 STANDARD                     Jayuya
## 35      667 STANDARD                      Lajas
## 36      669 STANDARD                      Lares
## 37      670 STANDARD                 Las Marias
## 38      674 STANDARD                     Manati
## 39      676 STANDARD                       Moca
## 40      677 STANDARD                     Rincon
## 41      678 STANDARD                Quebradillas
## 42      680 STANDARD                  Mayaguez
## 43      681   PO BOX                  Mayaguez
## 44      682 STANDARD                  Mayaguez
## 45      683 STANDARD                San German
## 46      685 STANDARD             San Sebastian
## 47      687 STANDARD                   Morovis
## 48      688 STANDARD                Sabana Hoyos
## 49      690 STANDARD                San Antonio
## 50      692 STANDARD                  Vega Alta
## 51      693 STANDARD                  Vega Baja
## 52      694   PO BOX                  Vega Baja
## 53      698 STANDARD                      Yauco
## 54      703 STANDARD                Aguas Buenas
## 55      704 STANDARD                     Aguirre
## 56      705 STANDARD                   Aibonito
## 57      707 STANDARD                    Maunabo
## 58      714 STANDARD                     Arroyo
## 59      715 STANDARD                  Mercedita
## 60      716 STANDARD                      Ponce
## 61      717 STANDARD                      Ponce
## 62      718 STANDARD                    Naguabo
##
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## 56
```

```
## 57
## 58
## 59
## 60
## 61
## 62
##       state                              county
## 1        NY                      Suffolk County
## 2        NY                      Suffolk County
## 3        PR                            Adjuntas
## 4        PR
## 5        PR                           Aguadilla
## 6        PR
## 7        PR
## 8        PR                             Maricao
## 9        PR
## 10       PR
## 11       PR                             Arecibo
## 12       PR
## 13       PR
## 14       PR                             Arecibo
## 15       PR                          Barceloneta
## 16       PR
## 17       PR
## 18       PR
## 19       PR
## 20       PR
## 21       PR
## 22       PR
## 23       PR
## 24       PR
## 25       PR
## 26       PR
## 27       PR
## 28       PR                             Arecibo
## 29       PR
## 30       PR
## 31       PR
## 32       PR
## 33       PR
## 34       PR
## 35       PR
## 36       PR
## 37       PR
## 38       PR
## 39       PR
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## 45       PR
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## 47       PR
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## 48       PR
## 49       PR
## 50       PR
## 51       PR
## 52       PR
## 53       PR
## 54       PR
## 55       PR
## 56       PR
## 57       PR
## 58       PR
## 59       PR
## 60       PR
## 61       PR
## 62       PR
##                        timezone                                area_codes
## 1                 America/New_York                                   631
## 2                 America/New_York                                   631
## 3               America/Puerto_Rico                                787,939
## 4                                                                    787
## 5               America/Puerto_Rico                                  787
## 6
## 7
## 8               America/Puerto_Rico                                787,939
## 9                                                                    787
## 10
## 11              America/Puerto_Rico                                  787
## 12
## 13
## 14              America/Puerto_Rico
## 15              America/Puerto_Rico                                  787
## 16                                                                   787
## 17                                                                   787
## 18                                                                   787
## 19                                                                   787
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## 21
## 22                                                                   787
## 23                                                                   787
## 24                                                                   787
## 25                                                                   787
## 26
## 27                                                                 787,939
## 28              America/Puerto_Rico                                  787
## 29                                                                   787
## 30                                                                   787
## 31
## 32                                                                   787
## 33                                                                   787
## 34                                                                   787
## 35                                                                 787,939
## 36                                                                   787
## 37                                                                 787,939
## 38                                                                   787
```

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## 39                                                                    787
## 40                                                                787,939
## 41                                                                    787
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## 45                                                                    787
## 46                                                                    787
## 47                                                                    787
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## 51                                                                    787
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## 53                                                                    787
## 54                                                                    787
## 55
## 56                                                                    787
## 57                                                                787,939
## 58                                                                787,939
## 59                                                                    787
## 60                                                                    787
## 61
## 62                                                                    787
##       latitude longitude world_region country decommissioned
## 1        40.81    -73.04         <NA>      US              0
## 2        40.81    -73.04         <NA>      US              0
## 3        18.16    -66.72         <NA>      US              0
## 4        18.38    -67.18         <NA>      US              0
## 5        18.43    -67.15         <NA>      US              0
## 6        18.43    -67.15         <NA>      US              0
## 7        18.43    -67.15         <NA>      US              0
## 8        18.18    -66.98         <NA>      US              0
## 9        18.28    -67.14         <NA>      US              0
## 10       18.28    -66.79         <NA>      US              0
## 11       18.45    -66.73         <NA>      US              0
## 12       18.45    -66.73         <NA>      US              0
## 13       18.45    -66.73         <NA>      US              0
## 14       18.40    -66.66         <NA>      US              0
## 15       18.45    -66.53         <NA>      US              0
## 16       17.99    -67.15         <NA>      US              0
## 17       18.08    -67.14         <NA>      US              0
## 18       18.06    -66.72         <NA>      US              0
## 19       18.48    -66.84         <NA>      US              0
## 20       18.19    -66.82         <NA>      US              0
## 21       18.15    -67.06         <NA>      US              0
## 22       18.08    -66.96         <NA>      US              0
## 23       18.33    -66.47         <NA>      US              0
## 24       18.27    -66.70         <NA>      US              0
## 25       18.47    -66.27         <NA>      US              0
## 26       17.96    -66.94         <NA>      US              0
## 27       18.36    -66.56         <NA>      US              0
## 28       18.45    -66.60         <NA>      US              0
## 29       17.97    -66.93         <NA>      US              0
```

```
## 30       18.02    -66.79         <NA>      US               0
## 31       18.48    -66.82         <NA>      US               0
## 32       18.14    -67.12         <NA>      US               0
## 33       18.50    -67.02         <NA>      US               0
## 34       18.22    -66.59         <NA>      US               0
## 35       18.04    -67.06         <NA>      US               0
## 36       18.29    -66.88         <NA>      US               0
## 37       18.27    -67.06         <NA>      US               0
## 38       18.43    -66.48         <NA>      US               0
## 39       18.39    -67.11         <NA>      US               0
## 40       18.34    -67.25         <NA>      US               0
## 41       18.47    -66.93         <NA>      US               0
## 42       18.20    -67.14         <NA>      US               0
## 43       18.20    -67.14         <NA>      US               0
## 44       18.20    -67.14         <NA>      US               0
## 45       18.08    -67.04         <NA>      US               0
## 46       18.33    -66.99         <NA>      US               0
## 47       18.32    -66.40         <NA>      US               0
## 48       18.38    -66.62         <NA>      US               0
## 49       18.49    -67.09         <NA>      US               0
## 50       18.41    -66.32         <NA>      US               0
## 51       18.44    -66.39         <NA>      US               0
## 52       18.44    -66.39         <NA>      US               0
## 53       18.03    -66.86         <NA>      US               0
## 54       18.25    -66.10         <NA>      US               0
## 55       17.96    -66.22         <NA>      US               0
## 56       18.14    -66.26         <NA>      US               0
## 57       18.00    -65.90         <NA>      US               0
## 58       17.97    -66.06         <NA>      US               0
## 59       18.00    -66.56         <NA>      US               0
## 60       17.98    -66.60         <NA>      US               0
## 61       17.98    -66.60         <NA>      US               0
## 62       18.21    -65.73         <NA>      US               0
##       estimated_population
## 1                      384
## 2                        0
## 3                        0
## 4                        0
## 5                        0
## 6                        0
## 7                        0
## 8                        0
## 9                        0
## 10                       0
## 11                       0
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## 21                    0
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## 52                    0
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## 59                    0
## 60                    0
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## 62
##  [ reached getOption("max.print") -- omitted 42460 rows ]
```

```
zipIndices = grep('OK', zipCodes$state)

zipOK = zipCodes[zipIndices,]

zipOK = as.data.frame(zipOK[,c('zip','primary_city','county','estimated_population')])

names(zipOK)[2] <- "MailCity"

zipOK$MailCity <- toupper(zipOK["MailCity"])

OKHSzips <- merge(zipOK, OklahomaHS, all = TRUE)

dim(OKHSzips)
```

```
## [1] 3118   19
```

```
OKHSzips[1:3,]
```

```
##   MailCity   zip          county estimated_population     School LocCity
## 1  ACHILLE 74720    Bryan County                    0 ACHILLE HS ACHILLE
## 2      ADA 74820 Pontotoc County                21190    BYNG HS     ADA
## 3      ADA 74820 Pontotoc County                21190   LATTA HS     ADA
##            County Teachers Grade7 Grade8 Grade9 Grade10 Grade11 Grade12
## 1    BRYAN COUNTY      7.6     NA     NA     30      31      31      34
## 2 PONTOTOC COUNTY     26.9     NA     NA     NA     116      88      98
## 3 PONTOTOC COUNTY     10.7     NA     NA     NA      62      42      45
##   Ungraded PreTotal ElemTotal HSTotal PTRatio
## 1       NA       NA        NA     126   16.58
## 2       NA       NA        NA     302   11.23
## 3       NA       NA        NA     149   13.93
```

```
uniqueSchools <- (!duplicated(OKHSzips$School))
uniqueOKHS <- OKHSzips[uniqueSchools,]

structure(uniqueOKHS)
```

```
##           MailCity   zip              county estimated_population
## 1          ACHILLE 74720       Bryan County                    0
## 2              ADA 74820    Pontotoc County                21190
## 3              ADA 74820    Pontotoc County                21190
## 4              ADA 74820    Pontotoc County                21190
## 5              ADA 74820    Pontotoc County                21190
## 10           ADAIR 74330       Mayes County                 2224
## 11           ADAMS 73901       Texas County                    0
## 13           AFTON 74331    Delaware County                 4536
## 14            AGRA 74824     Lincoln County                  998
## 19            ALEX 73002       Grady County                  910
## 20           ALINE 73716     Alfalfa County                    0
## 21           ALLEN 74825    Pontotoc County                 1644
## 22           ALTUS 73521     Jackson County                15986
## 23           ALTUS 73521     Jackson County                15986
## 27            ALVA 73717       Woods County                 4738
## 28           AMBER 73004       Grady County                  743
## 31        ANADARKO 73005       Caddo County                 6595
## 32         ANTLERS 74523  Pushmataha County                 4535
```

```
## 33          APACHE 73006        Caddo County                2723
## 34        ARAPAHO 73620       Custer County                 854
## 36        ARDMORE 73402       Carter County                1523
## 37        ARDMORE 73402       Carter County                1523
## 38        ARDMORE 73402       Carter County                1523
## 51         ARKOMA 74901     Le Flore County                1344
## 52         ARNETT 73832        Ellis County                 815
## 53          ASHER 74826 Pottawatomie County                 799
## 54          ATOKA 74525        Atoka County                6690
## 55          ATOKA 74525        Atoka County                6690
## 60          BALKO 73931       Beaver County                   0
## 61       BARNSDALL 74002        Osage County                1708
## 62    BARTLESVILLE 74005   Washington County                 923
## 66        BATTIEST 74722    McCurtain County                   0
## 67          BEAVER 73932       Beaver County                1800
## 68           BEGGS 74421     Okmulgee County                3511
## 69      BENNINGTON 74723        Bryan County                1018
## 71         BETHANY 73008     Oklahoma County               15228
## 74        BILLINGS 74630        Noble County                 473
## 75          BINGER 73009        Caddo County                1039
## 77           BIXBY 74008        Tulsa County               17939
## 78       BLACKWELL 74631          Kay County                5866
## 79           BLAIR 73526      Jackson County                1769
## 80       BLANCHARD 73010      McClain County               13603
## 81       BLANCHARD 73010      McClain County               13603
## 84      BLUEJACKET 74333        Craig County                 924
## 85      BOISE CITY 73933     Cimarron County                1404
## 86        BOKCHITO 74726        Bryan County                1654
## 87         BOKOSHE 74930     Le Flore County                1291
## 89         BOSWELL 74727      Choctaw County                1512
## 90         BOWLEGS 74830     Seminole County                   0
## 91         BOYNTON 74422     Muskogee County                 607
## 93          BRAGGS 74439     Muskogee County                   0
## 96         BRISTOW 74010        Creek County                7714
##                            School           LocCity              County
## 1                     ACHILLE HS           ACHILLE        BRYAN COUNTY
## 2                        BYNG HS               ADA     PONTOTOC COUNTY
## 3                      LATTA HS               ADA     PONTOTOC COUNTY
## 4                     VANOSS HS               ADA     PONTOTOC COUNTY
## 5                        ADA HS               ADA     PONTOTOC COUNTY
## 10                     ADAIR HS             ADAIR        MAYES COUNTY
## 11                         <NA>              <NA>               <NA>
## 13                     AFTON HS             AFTON       OTTAWA COUNTY
## 14                      AGRA HS              AGRA      LINCOLN COUNTY
## 19                      ALEX HS              ALEX        GRADY COUNTY
## 20                ALINE-CLEO HS             ALINE      ALFALFA COUNTY
## 21                     ALLEN HS             ALLEN     PONTOTOC COUNTY
## 22                     ALTUS HS             ALTUS      JACKSON COUNTY
## 23                    NAVAJO HS             ALTUS      JACKSON COUNTY
## 27                      ALVA HS              ALVA        WOODS COUNTY
## 28            AMBER-POCASSET HS             AMBER        GRADY COUNTY
## 31                  ANADARKO HS          ANADARKO        CADDO COUNTY
## 32                   ANTLERS HS           ANTLERS   PUSHMATAHA COUNTY
## 33                    APACHE HS            APACHE        CADDO COUNTY
```

```
## 34                ARAPAHO-BUTLER HS           ARAPAHO       CUSTER COUNTY
## 36                       ARDMORE HS           ARDMORE       CARTER COUNTY
## 37                     PLAINVIEW HS           ARDMORE       CARTER COUNTY
## 38                       DICKSON HS           ARDMORE       CARTER COUNTY
## 51                        ARKOMA HS            ARKOMA     LE FLORE COUNTY
## 52                        ARNETT HS            ARNETT        ELLIS COUNTY
## 53                         ASHER HS             ASHER POTTAWATOMIE COUNTY
## 54                         ATOKA HS             ATOKA        ATOKA COUNTY
## 55                        TUSHKA HS            TUSHKA        ATOKA COUNTY
## 60                         BALKO HS             BALKO       BEAVER COUNTY
## 61                      BARNSDALL HS         BARNSDALL        OSAGE COUNTY
## 62                   BARTLESVILLE HS      BARTLESVILLE   WASHINGTON COUNTY
## 66                      BATTIEST HS          BATTIEST    MCCURTAIN COUNTY
## 67                        BEAVER HS            BEAVER       BEAVER COUNTY
## 68                         BEGGS HS             BEGGS     OKMULGEE COUNTY
## 69                    BENNINGTON HS        BENNINGTON        BRYAN COUNTY
## 71                      BETHANY HS           BETHANY     OKLAHOMA COUNTY
## 74                     BILLINGS HS          BILLINGS        NOBLE COUNTY
## 75                   BINGER-ONEY HS            BINGER        CADDO COUNTY
## 77                         BIXBY HS             BIXBY        TULSA COUNTY
## 78                    BLACKWELL HS         BLACKWELL          KAY COUNTY
## 79                         BLAIR HS             BLAIR      JACKSON COUNTY
## 80                    BLANCHARD HS         BLANCHARD      MCCLAIN COUNTY
## 81                  BRIDGE CREEK HS         BLANCHARD        GRADY COUNTY
## 84                    BLUEJACKET HS        BLUEJACKET        CRAIG COUNTY
## 85                    BOISE CITY HS        BOISE CITY     CIMARRON COUNTY
## 86                    ROCK CREEK HS          BOKCHITO        BRYAN COUNTY
## 87                       BOKOSHE HS           BOKOSHE     LE FLORE COUNTY
## 89                       BOSWELL HS           BOSWELL      CHOCTAW COUNTY
## 90                       BOWLEGS HS           BOWLEGS     SEMINOLE COUNTY
## 91                  BOYNTON-MOTON HS           BOYNTON     MUSKOGEE COUNTY
## 93                        BRAGGS HS            BRAGGS     MUSKOGEE COUNTY
## 96                       BRISTOW HS           BRISTOW        CREEK COUNTY
##      Teachers Grade7 Grade8 Grade9 Grade10 Grade11 Grade12 Ungraded
## 1         7.6     NA     NA     30      31      31      34       NA
## 2        26.9     NA     NA     NA     116      88      98       NA
## 3        10.7     NA     NA     NA      62      42      45       NA
## 4        11.0     NA     NA     33      49      43      46       NA
## 5        40.5     NA     NA     NA     168     186     148       NA
## 10       19.6     NA     NA     82      62      65      76       NA
## 11         NA     NA     NA     NA      NA      NA      NA       NA
## 13       10.6     NA     NA     32      30      31      28       NA
## 14        9.0     NA     NA     25      27      27      19       NA
## 19        7.6     NA     NA     38      25      20      23       NA
## 20        5.0     NA     NA      7      14       5      12       NA
## 21       10.0     NA     NA     28      34      40      26       NA
## 22       66.3     NA     NA    269     266     239     264       NA
## 23       10.6     NA     NA     NA      36      32      28       NA
## 27       21.8     NA     NA     64      69      46      61       NA
## 28        8.4     NA     NA     NA      36      33      24       NA
## 31       40.2     NA     NA    137     149     129     116       NA
## 32       20.7     NA     NA     78      74      70      68       NA
## 33       15.4     NA     NA     38      37      36      51       NA
## 34        9.0     NA     NA     23      24      23      21       NA
```

```
## 36       41.5     NA     NA    193     198     209     180       NA
## 37       21.4     NA     NA    105      95      88      76       NA
## 38       23.4     NA     NA    107     110      97      92        1
## 51        7.0     NA     NA     23      26      16      19       NA
## 52        8.5     NA     NA     18      16      18      12       NA
## 53        7.4     NA     NA     15      21      23      10       NA
## 54       26.2     NA     NA     72      82      87      95       NA
## 55       11.5     NA     NA     54      47      43      42       NA
## 60        5.9     NA     NA     13      10      11      12       NA
## 61       10.0     NA     NA     NA      32      27      33       NA
## 62       49.3     NA     NA     NA      NA     399     427       NA
## 66        7.7     NA     NA     12      11      17      26       NA
## 67       12.4     NA     NA     32      26      29      28       NA
## 68       26.1     NA     NA     88      81     100      76       NA
## 69        6.9     NA     NA     14      22      14      19        1
## 71       28.2     NA     NA    126     115     129      92       NA
## 74        7.0     NA     NA      5       9       4      13       NA
## 75        8.5     NA     NA     23      25      30      20       NA
## 77       76.5     NA     NA    351     324     328     336       NA
## 78       25.8     NA     NA     86      98      98     114       NA
## 79        7.4     NA     NA     25      24      21      19       NA
## 80       31.9     NA     NA    131     127     130      94       NA
## 81       23.7     NA     NA    117      98     110     101       NA
## 84        5.9     NA     NA     20      21      13      12       NA
## 85        9.2     NA     NA     16      22      22      14       NA
## 86       10.7     NA     NA     35      29      36      36       NA
## 87        4.9     NA     NA     NA      13      21      16       NA
## 89        7.9     NA     NA     25      25      19      30       NA
## 90        7.9     NA     NA     25      25      24      24       NA
## 91        1.1     NA     NA      0       0       0       0       NA
## 93        6.0     NA     NA     16      22      15      15       NA
## 96       31.6     NA     NA    128     137     106     120       NA
##      PreTotal ElemTotal HSTotal PTRatio
## 1          NA        NA     126   16.58
## 2          NA        NA     302   11.23
## 3          NA        NA     149   13.93
## 4          NA        NA     171   15.55
## 5          NA        NA     502   12.40
## 10         NA        NA     285   14.54
## 11         NA        NA      NA      NA
## 13         NA        NA     121   11.42
## 14         NA        NA      98   10.89
## 19         NA        NA     106   13.95
## 20         NA        NA      38    7.60
## 21         NA        NA     128   12.80
## 22         NA        NA    1038   15.66
## 23         NA        NA      96    9.06
## 27         NA        NA     240   11.01
## 28         NA        NA      93   11.07
## 31         NA        NA     531   13.21
## 32         NA        NA     290   14.01
## 33         NA        NA     162   10.52
## 34         NA        NA      91   10.11
## 36         NA        NA     780   18.80
```

```
## 37         NA        NA     364   17.01
## 38         NA        NA     406   17.39
## 51         NA        NA      84   12.00
## 52         NA        NA      64    7.53
## 53         NA        NA      69    9.32
## 54         NA        NA     336   12.82
## 55         NA        NA     186   16.17
## 60         NA        NA      46    7.80
## 61         NA        NA      92    9.20
## 62         NA        NA     826   16.75
## 66         NA        NA      66    8.57
## 67         NA        NA     115    9.27
## 68         NA        NA     345   13.22
## 69         NA        NA      69   10.14
## 71         NA        NA     462   16.38
## 74         NA        NA      31    4.43
## 75         NA        NA      98   11.53
## 77         NA        NA    1339   17.50
## 78         NA        NA     396   15.35
## 79         NA        NA      89   12.03
## 80         NA        NA     482   15.11
## 81         NA        NA     426   17.97
## 84         NA        NA      66   11.19
## 85         NA        NA      74    8.04
## 86         NA        NA     136   12.71
## 87         NA        NA      50   10.20
## 89         NA        NA      99   12.53
## 90         NA        NA      98   12.41
## 91         NA        NA       0    0.00
## 93         NA        NA      68   11.33
## 96         NA        NA     491   15.54
##  [ reached getOption("max.print") -- omitted 404 rows ]
```

```r
#remove duplicate columns
uniqueOKHS <- subset(uniqueOKHS, select = -LocCity)
uniqueOKHS <- subset(uniqueOKHS, select = -County)

teachAsec <- uniqueOKHS[order(uniqueOKHS$Teachers),]

teachDesc <- uniqueOKHS[order(-uniqueOKHS$Teachers),]

teachAsec <- teachAsec[1:25,]
teachDesc <- teachDesc[1:25,]

OklahomaHSTeachers <- merge(teachAsec, teachDesc, all = TRUE)
time <- Sys.time()
time <- toString(time)
filename <- paste(c('OklahomaHSTeachers', time), sep = "-", collapse = " ")

write.csv(OklahomaHSTeachers, file = "OklahomaHSTeachers 2017-09-28 15-57-44")
```