

```

##importing libraries
library(dplyr)

## Warning: package 'dplyr' was built under R version 3.2.5

##
## 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

library(reshape)

## Warning: package 'reshape' was built under R version 3.2.5

##
## Attaching package: 'reshape'

## The following object is masked from 'package:dplyr':
##
##   rename

setwd("C:\\Users\\neoistheone\\Documents\\Capstone\\DISE")

## Functions
asNumeric <- function(x) as.numeric(as.character(x))
factorsNumeric <- function(d) modifyList(d, lapply(d[, sapply(d, is.factor)],
                                                    asNumeric))

# Cleaning data
basicData_13_14 <- read.csv("DRC_Raw_Data_13_14_1.csv")
basicData_13_14 <- slice(basicData_13_14, 11:674)
basicData_13_14 <- sapply(basicData_13_14, as.character)
colnames(basicData_13_14) <- c(basicData_13_14[2,])
basicData_13_14 <- as.data.frame(basicData_13_14[-(1:2),])
# Cleaning data

#removed columns
basicData_13_14$p_06_pop <- NULL
basicData_13_14$sexratio_06 <- NULL
#add columns
basicData_13_14 <- cbind(Year=2014, basicData_13_14)
basicData_13_14 <- basicData_13_14[-c(18:165)]
head(basicData_13_14)

```

```
##      Year statedcd                                statename distcd
## 1 2014          35 ANDAMAN & NICOBAR ISLANDS                3501
## 2 2014          35 ANDAMAN & NICOBAR ISLANDS                3503
## 3 2014          35 ANDAMAN & NICOBAR ISLANDS                3502
## 4 2014          28 ANDHRA PRADESH                          2801
## 5 2014          28 ANDHRA PRADESH                          2822
## 6 2014          28 ANDHRA PRADESH                          2823
##
##                                distname blocks clusters
## 1 ANDAMANS                                3         16
## 2 MIDDLE AND NORTH ANDAMANS                3         13
## 3 NICOBARS                                3          8
## 4 ADILABAD                               52        352
## 5 ANANTAPUR                               63        550
## 6 CHITTOOR                                66        558
## villages totschoools totpopulation p_urb_pop sexratio growthrate p_sc_pop
## 1         83          211          237586    55.89      874     13.97         0
## 2         76          186          105539     2.6       925     -0.07         0
## 3         42           57           36819      0        778    -12.48         0
## 4        1554         4899          2737738    27.68     1003     10.04     17.82
## 5         918         5065          4083315    28.09      977     12.16     14.29
## 6        1386         6304          4170468    29.47     1002     11.33     18.83
## p_st_pop overall_lit female_lit
## 1      1.72      88.49      84.52
## 2      0.72      84.25      79.39
## 3     64.28      77.5       70.7
## 4     18.09      61.55      51.99
## 5      3.78      64.28      54.31
## 6      3.81      72.36      63.65
```

#completely cleaned basic data

#school data

```
schoolData_13_14 <- read.csv("DRC_Raw_Data_13_14_2.csv")
schoolData_13_14 <- slice(schoolData_13_14,22:3773)
schoolData_13_14 <- slice(schoolData_13_14,1:664)
colnamesFinal_13_14 <- schoolData_13_14[2,6:229]
colnamesFinal_13_14 <- colnamesFinal_13_14[!is.na(colnamesFinal_13_14)]
colnamesInitial_13_14 <- c('statedcd','statename','distcd','distname','Year')
colnames(schoolData_13_14) <- c( colnamesInitial_13_14,colnamesFinal_13_14)
schoolDescription_13_14 <- schoolData_13_14[1:2,]
schoolData_13_14 <- as.data.frame(schoolData_13_14[-(1:2),])
schoolData_13_14$Year <- 2014
schoolData_13_14 <- as.data.frame(schoolData_13_14[,1:229])
```

#completed cleaned School Data

enrollment data

```
enrollmentData_13_14 <- read.csv("DRC_Raw_Data_13_14_3.csv")
enrollmentData_13_14 <- slice(enrollmentData_13_14,16:3764)
enrollmentData_13_14 <- slice(enrollmentData_13_14,1:664)
colnamesEnrollmentData_13_14 <- enrollmentData_13_14[2,1:165]
```

```

colnamesEnrollmentData_13_14 <-
colnamesEnrollmentData_13_14[!is.na(colnamesEnrollmentData_13_14)]
colnames(enrollmentData_13_14) <- c(colnamesEnrollmentData_13_14)
enrollmentDescription_13_14 <- enrollmentData_13_14[1:2,]
enrollmentData_13_14 <- as.data.frame(enrollmentData_13_14[-(1:2),])
enrollmentData_13_14 <- as.data.frame(enrollmentData_13_14[,1:165])
enrollmentData_13_14 <- cbind(Year = 2014,enrollmentData_13_14)
#completely cleaned Enrollment Data

```

#Teacher data

```

teacherData_13_14 <- read.csv("DRC_Raw_Data_13_14_4.csv")
teacherData_13_14 <- slice(teacherData_13_14,20:3770)
teacherData_13_14 <- slice(teacherData_13_14,1:664)
colnamesTeachersData_13_14 <- teacherData_13_14[2,1:181]
colnamesTeachersData_13_14 <-
colnamesTeachersData_13_14[!is.na(colnamesTeachersData_13_14)]
colnames(teacherData_13_14) <- c(colnamesTeachersData_13_14)
teacherDescription_13_14 <- teacherData_13_14[1:2,]
teacherData_13_14 <- as.data.frame(teacherData_13_14[-(1:2),])
teacherData_13_14$Year <- teacherData_13_14$ac_year
teacherData_13_14$ac_year <- NULL
teacherData_13_14$Year <- 2014
#Completely Cleaned Teacher data

```

#First File completed 2013-14

#Second File Cleaning started 2012-13

Cleaning data

```

basicData_12_13 <- read.csv("DRC_Raw_Data_12_13_1.csv")
basicData_12_13 <- slice(basicData_12_13,11:674)
basicData_12_13 <- sapply(basicData_12_13, as.character)
colnames(basicData_12_13) <- c(basicData_12_13[2,])
basicData_12_13 <- as.data.frame(basicData_12_13[-(1:2),])
# Cleaning data

```

#removed columns

```

basicData_12_13$p_06_pop <- NULL
basicData_12_13$sexratio_06 <- NULL

```

#add columns

```

basicData_12_13 <- cbind(Year=2013,basicData_12_13)
basicData_12_13 <- basicData_12_13[-c(18:165)]
head(basicData_12_13)

```

##	Year	Statecd	statename	distcd
## 1	2013	35	ANDAMAN & NICOBAR ISLANDS	3501
## 2	2013	35	ANDAMAN & NICOBAR ISLANDS	3503
## 3	2013	35	ANDAMAN & NICOBAR ISLANDS	3502
## 4	2013	28	ANDHRA PRADESH	2801
## 5	2013	28	ANDHRA PRADESH	2822
## 6	2013	28	ANDHRA PRADESH	2823

```
##                                distname blocks clusters
## 1 ANDAMANS                                3      16
## 2 MIDDLE AND NORTH ANDAMANS              3      13
## 3 NICOBARS                              3       8
## 4 ADILABAD                             52     356
## 5 ANANTAPUR                             63     564
## 6 CHITTOOR                             66     571
## villages totschools totpopulation p_urb_pop sexratio growthrate p_sc_pop
## 1      83      212      237586      55.89      874      13.97      0
## 2      76      181      105539       2.6      925      -0.07      0
## 3      42       58       36819       0      778     -12.48      0
## 4     1576     4983     2737738     27.68     1003     10.04     17.82
## 5      929     5188     4083315     28.09      977     12.16     14.29
## 6     1404     6590     4170468     29.47     1002     11.33     18.83
## p_st_pop overall_lit female_lit
## 1      1.72      88.49      84.52
## 2       0.72      84.25      79.39
## 3     64.28      77.5       70.7
## 4     18.09      61.55      51.99
## 5       3.78      64.28      54.31
## 6       3.81      72.36      63.65
```

#completely cleaned basic data

#school data

```
schoolData_12_13 <- read.csv("DRC_Raw_Data_12_13_2.csv")
schoolData_12_13 <- slice(schoolData_12_13,22:3773)
schoolData_12_13 <- slice(schoolData_12_13,1:664)
colnamesFinal_12_13 <- schoolData_12_13[2,6:229]
colnamesFinal_12_13 <- colnamesFinal_12_13[!is.na(colnamesFinal_12_13)]
colnamesInitial_12_13 <- c('statedcd', 'statename', 'distcd', 'distname', 'Year')
colnames(schoolData_12_13) <- c( colnamesInitial_12_13, colnamesFinal_12_13)
schoolDescription_12_13 <- schoolData_12_13[1:2,]
schoolData_12_13 <- as.data.frame(schoolData_12_13[-(1:2),])
schoolData_12_13$Year <- 2013
schoolData_12_13 <- as.data.frame(schoolData_12_13[,1:229])
```

#completed cleaned School Data

enrollment data

```
enrollmentData_12_13 <- read.csv("DRC_Raw_Data_12_13_3.csv")
enrollmentData_12_13 <- slice(enrollmentData_12_13,16:3764)
enrollmentData_12_13 <- slice(enrollmentData_12_13,1:664)
colnamesenrollmentData_12_13 <- enrollmentData_12_13[2,1:165]
colnamesenrollmentData_12_13 <-
colnamesenrollmentData_12_13[!is.na(colnamesenrollmentData_12_13)]
colnames(enrollmentData_12_13) <- c(colnamesenrollmentData_12_13)
enrollmentDescription_12_13 <- enrollmentData_12_13[1:2,]
enrollmentData_12_13 <- as.data.frame(enrollmentData_12_13[-(1:2),])
enrollmentData_12_13 <- as.data.frame(enrollmentData_12_13[,1:165])
enrollmentData_12_13 <- cbind(Year = 2013, enrollmentData_12_13)
```

#completely cleaned Enrollment Data

#Teacher data

```
teacherData_12_13 <- read.csv("DRC_Raw_Data_12_13_4.csv")
teacherData_12_13 <- slice(teacherData_12_13,19:3770)
teacherData_12_13 <- slice(teacherData_12_13,1:664)
colnamesTeachersData_12_13 <- teacherData_12_13[2,1:181]
colnamesTeachersData_12_13 <-
colnamesTeachersData_12_13[!is.na(colnamesTeachersData_12_13)]
colnames(teacherData_12_13) <- c(colnamesTeachersData_12_13)
teacherDescription_12_13 <- teacherData_12_13[1:2,]
teacherData_12_13 <- as.data.frame(teacherData_12_13[-(1:2),])
teacherData_12_13$Year <- teacherData_12_13$ac_year
teacherData_12_13$ac_year <- NULL
teacherData_12_13$Year <- 2013
```

#Completely Cleaned Teacher data

#Completed cleaned data for the year 2012-13

#Second File Cleaning started 2011-12

Cleaning data

```
basicData_11_12 <- read.csv("DRC_Raw_Data_11_12_1.csv")
basicData_11_12 <- slice(basicData_11_12,11:674)
basicData_11_12 <- apply(basicData_11_12, as.character)
colnames(basicData_11_12) <- c(basicData_11_12[2,])
basicData_11_12 <- as.data.frame(basicData_11_12[-(1:2),])
```

Cleaning data

#removed columns

```
basicData_11_12$p_06_pop <- NULL
basicData_11_12$sexratio_06 <- NULL
```

#add columns

```
basicData_11_12 <- cbind(Year=2012,basicData_11_12)
basicData_11_12 <- basicData_11_12[-c(18:165)]
head(basicData_11_12)
```

```
##      Year Statecd                                statename distcd
## 1 2012      01 Jammu & Kashmir                                0106
## 2 2012      01 Jammu & Kashmir                                0104
## 3 2012      01 Jammu & Kashmir                                0116
## 4 2012      01 Jammu & Kashmir                                0102
## 5 2012      01 Jammu & Kashmir                                0109
## 6 2012      01 Jammu & Kashmir                                0119
##
##                                distname blocks clusters
## 1 ANANTNAG                                12          96
## 2 BADGAM                                12          97
## 3 BANDIPORA                                5          42
## 4 BARAMULA                                18         150
## 5 DODA                                10          81
## 6 GANDERBAL                                4          32
```

```
## villages totschools totpopulation p_urb_pop sexratio growthrate p_sc_pop
## 1      521      1787      1070144      26.04      937      37.48      0
## 2      521      1441      735753      11.74      883      21.18      0.1
## 3      204       811      385099      16.89      911      26.31      0
## 4      697      2213      1015503      17.19      873      20.34      0
## 5      377      1400      409576      7.95      922      27.89      9.1
## 6      151       665      297003      15.76      869      36.3       0
## p_st_pop overall_lit female_lit
## 1      8.6      64.32      54.15
## 2      2.3      57.98      46.6
## 3      0       57.82      46.24
## 4      7.2      66.93      55.01
## 5     11.5      65.97      50.34
## 6      0       59.99      47.62
```

#completely cleaned basic data

##TODO issue in school data

#school data

```
schoolData_11_12 <- read.csv("DRC_Raw_Data_11_12_2.csv")
schoolData_11_12 <- slice(schoolData_11_12,22:3773)
colnameschoolData_11_12 <- schoolData_11_12[2,1:203]
colnames(schoolData_11_12) <- c(colnameschoolData_11_12)
schooldescription_11_12 <- schoolData_11_12[1:2,]
schoolData_11_12 <- as.data.frame(schoolData_11_12[-(1:2),])
schoolData_11_12 <- as.data.frame(schoolData_11_12[,1:203])
```

#Not completed cleaned School Data

enrollment data

```
enrollmentData_11_12 <- read.csv("DRC_Raw_Data_11_12_3.csv")
enrollmentData_11_12 <- slice(enrollmentData_11_12,16:3764)
enrollmentData_11_12 <- slice(enrollmentData_11_12,1:664)
colnamesenrollmentData_11_12 <- enrollmentData_11_12[2,1:161]
colnamesenrollmentData_11_12 <-
colnamesenrollmentData_11_12[!is.na(colnamesenrollmentData_11_12)]
colnames(enrollmentData_11_12) <- c(colnamesenrollmentData_11_12)
enrollmentDescription_11_12 <- enrollmentData_11_12[1:2,]
enrollmentData_11_12 <- as.data.frame(enrollmentData_11_12[-(1:2),])
enrollmentData_11_12 <- as.data.frame(enrollmentData_11_12[,1:161])
enrollmentData_11_12 <- cbind(Year = 2012,enrollmentData_11_12)
```

#completely cleaned Enrollment Data

#Teacher data

```
teacherData_11_12 <- read.csv("DRC_Raw_Data_11_12_4.csv")
teacherData_11_12 <- slice(teacherData_11_12,19:3770)
teacherData_11_12 <- slice(teacherData_11_12,1:664)
colnamesTeachersData_11_12 <- teacherData_11_12[2,1:134]
colnamesTeachersData_11_12 <-
colnamesTeachersData_11_12[!is.na(colnamesTeachersData_11_12)]
colnames(teacherData_11_12) <- c(colnamesTeachersData_11_12)
```

```

teacherDescription_11_12 <- teacherData_11_12[1:2,]
teacherData_11_12 <- as.data.frame(teacherData_11_12[-(1:2),])
teacherData_11_12 <- as.data.frame(teacherData_11_12[,1:134])
teacherData_11_12$Year <- teacherData_11_12$ac_year
teacherData_11_12$ac_year <- NULL
teacherData_11_12$Year <- 2012
#Completely Cleaned Teacher data

colnames(basicData_12_13) <- tolower(colnames(basicData_12_13))
colnames(basicData_13_14) <- tolower(colnames(basicData_13_14))
basicDataConsolidated <- rbind(basicData_12_13,basicData_13_14)

corrplotData <- basicDataConsolidated
corrplotData$blocks <- as.numeric(corrplotData$blocks)
corrplotData$clusters <- as.numeric(corrplotData$clusters)
corrplotData$villages <- as.numeric(corrplotData$villages)
corrplotData$totschools <- as.numeric(corrplotData$totschools)
corrplotData$totpopulation <- as.numeric(corrplotData$totpopulation)
corrplotData$p_urb_pop <- as.numeric(corrplotData$p_urb_pop)
corrplotData$sexratio <- as.numeric(corrplotData$sexratio)
corrplotData$growthrate <- as.numeric(corrplotData$growthrate)
corrplotData$p_sc_pop <- as.numeric(corrplotData$p_sc_pop)
corrplotData$p_st_pop <- as.numeric(corrplotData$p_st_pop)
corrplotData$overall_lit <- as.numeric(corrplotData$overall_lit)
corrplotData$female_lit <- as.numeric(corrplotData$female_lit)

cor(corrplotData[,6:17])

##                blocks      clusters      villages      totschoools
## blocks          1.000000000    0.231575240    0.052133896    0.01640398
## clusters        0.231575240    1.000000000    0.078963164    0.09666306
## villages        0.052133896    0.078963164    1.000000000    0.35556751
## totschoools     0.016403979    0.096663061    0.355567507    1.00000000
## totpopulation  -0.163890600   -0.015513699    0.043107752    0.09104167
## p_urb_pop       -0.096298983   -0.041069978    0.017422127    0.01700318
## sexratio        0.052728963   -0.027015030    0.042715847    0.05295010
## growthrate      0.001871453   -0.029984733    0.040390084    0.06465639
## p_sc_pop        -0.015893113   -0.005986934    0.013320335   -0.01189802
## p_st_pop        0.089612859    0.046487375   -0.010496225    0.02374375
## overall_lit     -0.080819586   -0.026821223    0.006777156    0.04560028
## female_lit      -0.071686713   -0.034107365    0.018499999    0.04483137
##                totpopulation    p_urb_pop      sexratio    growthrate
## blocks          -0.163890600   -0.096298983    0.052728963    0.001871453
## clusters        -0.015513699   -0.041069978   -0.027015030   -0.029984733
## villages         0.043107752    0.017422127    0.042715847    0.040390084
## totschoools     0.091041665    0.017003176    0.052950104    0.064656392
## totpopulation   1.000000000    0.032374975    0.036769094    0.153214001
## p_urb_pop        0.032374975    1.000000000   -0.009464043    0.045611227
## sexratio         0.036769094   -0.009464043    1.000000000    0.159069218

```



```
## growthrate      0.153214001  0.045611227  0.159069218  1.000000000
## p_sc_pop        -0.005780892  0.143297254 -0.021377380 -0.143337599
## p_st_pop        0.038286649  0.025491885  0.146274732  0.040861232
## overall_lit     0.152925446  0.097950516  0.029384426 -0.001347424
## female_lit      0.179931035  0.097206536  0.040632729  0.010107623
##                p_sc_pop  p_st_pop  overall_lit  female_lit
## blocks          -0.015893113  0.08961286 -0.080819586 -0.07168671
## clusters        -0.005986934  0.04648738 -0.026821223 -0.03410736
## villages         0.013320335 -0.01049622  0.006777156  0.01850000
## totschoools     -0.011898021  0.02374375  0.045600284  0.04483137
## totpopulation   -0.005780892  0.03828665  0.152925446  0.17993103
## p_urb_pop        0.143297254  0.02549189  0.097950516  0.09720654
## sexratio         -0.021377380  0.14627473  0.029384426  0.04063273
## growthrate      -0.143337599  0.04086123 -0.001347424  0.01010762
## p_sc_pop         1.000000000 -0.11496019  0.029184164  0.02371966
## p_st_pop         -0.114960187  1.00000000 -0.129262565 -0.10187890
## overall_lit      0.029184164 -0.12926257  1.000000000  0.97780774
## female_lit       0.023719658 -0.10187890  0.977807738  1.00000000
```

No Multi collinearity problem in this fields. Overall literacy and Female literacy are highly correlated

```
colnames(schoolData_12_13) <- tolower(colnames(schoolData_12_13))
colnames(schoolData_13_14) <- tolower(colnames(schoolData_13_14))
```

```
View(enrollmentData_12_13)
View(enrollmentData_13_14)
basicEnrollmentDataConsolidated <-
rbind(enrollmentData_12_13,enrollmentData_13_14)
```

#some data is lost in this merge

```
cols <- intersect(colnames(schoolData_12_13),colnames(schoolData_13_14))
basicSchoolDataConsolidated <-
rbind(schoolData_12_13[,cols],schoolData_13_14[,cols])
basicSchoolDataConsolidated$schgovt_total <-
as.numeric(basicSchoolDataConsolidated$schgovt1)+
```

```
as.numeric(basicSchoolDataConsolidated$schgovt2)+as.numeric(basicSchoolDataCo
nsolidated$schgovt3)+as.numeric(basicSchoolDataConsolidated$schgovt4)+
```

```
as.numeric(basicSchoolDataConsolidated$schgovt5)+as.numeric(basicSchoolDataCo
nsolidated$schgovt6)+as.numeric(basicSchoolDataConsolidated$schgovt7)+
  as.numeric(basicSchoolDataConsolidated$schgovt9)
```

```
basicSchoolDataConsolidated$schgovt1<- NULL
basicSchoolDataConsolidated$schgovt2<- NULL
basicSchoolDataConsolidated$schgovt3<- NULL
basicSchoolDataConsolidated$schgovt4<- NULL
basicSchoolDataConsolidated$schgovt5<- NULL
basicSchoolDataConsolidated$schgovt6<- NULL
```



```
basicSchoolDataConsolidated$schgovt7<- NULL
basicSchoolDataConsolidated$schgovt9<- NULL
```

```
basicSchoolDataConsolidated$schpvt_total <-
as.numeric(basicSchoolDataConsolidated$schpvt1)+as.numeric(basicSchoolDataCon
solidated$schpvt2)+
```

```
as.numeric(basicSchoolDataConsolidated$schpvt3)+as.numeric(basicSchoolDataCon
solidated$schpvt4)+as.numeric(basicSchoolDataConsolidated$schpvt5)
+as.numeric(basicSchoolDataConsolidated$schpvt6)
```

```
##      [1] 63  3  2 45 33 33 85 43  9 17 33  3 109  3  2 44 85
##     [18] 75  2  2 75  4 47  2  2 85  2 33  2  3  2  3 85 33
##    [35] 63 23  2 49  2 33 75 75 31 76  4 17 63 50 51 77 82
##    [52] 24 20 76 17 55  9 59 103 41 50 49 31 50  9 88 51 78
##    [69] 102  3  2 33 49  2 49 49 63  3  2  2 94 33 33  2  3
##   [86]  2  2  2  2 63 33  2  2 63 63 85  2 33  3  2 85  2
##  [103]  2  3  2  2 75 24 33  2  2 85 63  2 58 33 23  9  2
##  [120]  9  2 20  3 33 102 75 33 75  2 41 88 41  2  2  2 109
##  [137] 33  3 63 15 75 63 57 79 39 82 88 92 99 61 35  4 35
##  [154] 73 45  3 34 86 84 51 94 37 49 63  4 33 94 80 57 99
##  [171] 20 75  2 100 24 34 16 14 92 117  5 95 10 79 83 79  2
##  [188] 70  7 46 34 34 106 79 111 111 67 31 89 26 75 76 49 11
##  [205] 110 73 67 56 76 65  4 68 43 50 48 94 80 33 23 50 12
##  [222] 92 63 77  4 17 31 58 18 70 23 49  4  9 12 33 49 37
##  [239] 49 85 63 49  2 33 63  3 27 12 71 63 98 33 63 49 23
##  [256] 50 81 13 109 67 73 61 47  2 46 39 20 85 44 114 75 98
##  [273] 55 54 35 93 59 68 77 89 17 57 64 24 94 102 85 33 27
##  [290] 96 43 61 102 39 58 56 100 61 41 46 37  4  2 33 45 41
##  [307]  2 63 33 39 43  4 50 53 27 41 35 75 33 55 16 63 54
##  [324] 69 31 85 34 37 27  2 37 71 39 23 39 33 77  3  4 87
##  [341] 15 67 33  2 64 109 67 15 33  2 65  4 20 20 31 53 71
##  [358] 27 27 20 54 61 102 17 63 47 109 34 15  2 107 80 44 51
##  [375] 66 63 33 11 69 33  9 47 12 44 115 43 12 44 69 31 68
##  [392] 105 112 74 20 97 43  4 64 33 85  3  4  2  2  2  2  2
##  [409]  2  2  2  2 112 109 68 94 31 39 15 34 17 35 45  4 75
##  [426] 34 12 37 33 35 33 63 75 59 109 34 102 15 94 12 41 39
##  [443] 34 94 79 63  4 75  4 15 12 94 55 35 33 101 94  8 73
##  [460] 104 109 37 102 76 34 64 43 58 52 27 91 96 53 63 49 108
##  [477]  9 21 39 28 72 65 10  6 42 90 30  5 71 36 32 114 35
##  [494] 22 32 113 23 99 111 40 25 29 38 60  7 45 46 116 62 50
##  [511] 19 104 109  2 49 63  2  2  2  2  2  2  2  2  2  2
##  [528]  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2
##  [545]  2  2 49 109 63 102 63 63 49  9 47 59 73 85  3 49  3
##  [562]  3 33 102  3 85 75 63  3 33  3 12 47 75  3 63  9 94
##  [579] 33 33 85 15 102  3  3 41 102  9  2 35 102  2 102 45 24
##  [596]  3 85  3 63 33 33 85 33 110  3 33 75 94  9 46 12 67
##  [613]  3 94 94  3  3 85 15 94 85  2  2  2  3 75 94 109 39
##  [630] 102  2 49  2 47 49 37  9  3 49 85  9 75  3  2 33  2
##  [647]  9  3 63 24  2 94 49 109  3  2 33  2  2 17  2 33 75
```

```
## [664] 3 2 59 102 109 61 77 168 166 74 56 106 33 66 83 20 102
## [681] 102 46 126 50 5 63 65 59 2 109 2 33 2 3 63 33 94
## [698] 23 2 49 3 33 75 85 37 84 23 27 45 61 55 80 88 27
## [715] 20 157 43 80 34 68 110 34 51 53 41 46 9 163 57 89 41
## [732] 3 3 33 75 2 63 102 49 4 3 2 75 33 33 2 3 33
## [749] 3 3 2 85 75 2 33 75 75 49 3 75 2 3 49 3 2
## [766] 3 33 2 85 37 85 109 49 85 49 49 61 75 20 58 33 46
## [783] 20 24 4 75 44 9 9 24 49 45 162 51 2 9 37 109 49
## [800] 33 63 12 75 75 58 68 35 71 86 96 164 59 44 15 23 65
## [817] 65 85 50 84 71 64 4 23 49 75 15 3 75 158 56 112 20
## [834] 63 2 101 17 79 30 136 84 103 133 112 123 82 162 157 166 64
## [851] 124 43 89 97 112 82 116 166 65 23 77 135 75 77 49 93 161
## [868] 74 23 46 104 71 24 97 41 61 148 102 100 109 55 50 17 90
## [885] 37 80 12 15 87 64 138 71 34 33 102 9 23 102 85 17 3
## [902] 20 75 49 49 49 49 2 12 9 59 35 5 33 49 49 31 64
## [919] 159 153 24 68 68 65 53 2 44 39 20 109 43 167 37 103 59
## [936] 57 34 91 66 51 158 162 34 61 59 24 12 23 75 85 68 168
## [953] 53 80 39 57 93 76 165 70 46 86 84 24 2 49 51 24 61
## [970] 37 37 69 129 23 91 69 35 44 164 114 2 61 131 27 89 140
## [987] 23 44 9 31 71 2 56 69 50 54 37 76 66 55 160 83 111
## [1004] 88 43 2 161 102 77 15 9 2 125 9 68 39 43 66 45 34
## [1021] 41 27 82 12 58 39 75 39 4 50 34 2 114 91 44 54 59
## [1038] 4 102 127 65 49 12 55 23 46 105 35 27 55 70 35 67 106
## [1055] 115 158 27 96 41 15 59 33 63 33 23 3 2 2 2 2 2
## [1072] 2 2 2 108 102 68 94 31 41 15 34 20 34 45 4 15 23
## [1089] 20 31 49 35 2 3 63 65 12 23 102 109 109 23 41 47 24
## [1106] 94 4 75 109 75 2 20 9 75 51 43 33 108 94 14 80 104
## [1123] 55 67 160 160 26 137 109 75 155 61 86 10 66 93 95 145 66
## [1140] 132 110 139 156 87 128 120 149 164 143 121 162 144 36 130 51 141
## [1157] 147 122 20 107 168 151 150 142 146 152 8 53 74 139 154 58 134
## [1174] 13 109 3 49 85 2 2 2 2 2 2 2 2 2 2 2 2
## [1191] 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
## [1208] 2 33 94 63 102 63 85 49 9 55 59 78 102 33 33 49 3
## [1225] 75 4 49 94 49 31 3 33 102 9 24 2 94 85 102 102 3
## [1242] 63 63 31 109 23 102 39 75 33 49 15 75 2 17 47 24 3
## [1259] 63 3 3 33 3 9 3 43 3 63 102 27 9 45 9 58 4
## [1276] 23 63 17 49 49 27 33 102 49 2 2 3 3 85 33 43 2
## [1293] 2 63 2 67 94 44 17 63 49 75 37 75 3 49 49 2 37
## [1310] 49 102 31 3 12 109 12 85 39 9 102 33 12 63 33
```

```
+as.numeric(basicSchoolDataConsolidated$schpvt7)+as.numeric(basicSchoolDataCo
nsolidated$schpvt9)
```

```
## [1] 4 4 4 57 89 70 95 80 27 105 54 32 78 84 61 52 45
## [18] 64 46 12 97 102 81 24 59 42 4 4 4 4 4 4 4 4
## [35] 4 4 4 4 4 4 4 4 4 4 42 63 63 4 5 27 21 106
## [52] 5 94 85 45 27 102 27 38 106 5 77 94 21 92 16 92 102
## [69] 63 5 4 63 4 4 5 102 92 4 5 41 5 94 4 4 4
## [86] 4 63 4 5 4 75 4 5 85 66 5 4 63 4 5 75 4
## [103] 4 63 4 4 12 4 5 4 4 4 4 4 5 4 4 4 4
```

##	[120]	5	4	5	4	4	4	4	5	41	4	41	5	5	4	4	4	4
##	[137]	4	4	85	63	4	75	41	4	5	5	94	10	74	102	5	41	75
##	[154]	5	75	45	63	5	5	4	5	75	41	63	12	94	4	85	24	24
##	[171]	63	16	4	102	41	94	106	4	4	63	45	5	5	4	4	92	4
##	[188]	4	4	4	5	4	12	5	4	4	4	4	4	4	4	4	4	5
##	[205]	5	4	4	5	4	4	4	4	4	4	4	5	4	4	4	4	4
##	[222]	4	4	4	4	4	4	4	4	4	32	63	102	41	16	75	53	6
##	[239]	42	27	75	32	4	5	94	5	27	24	74	41	98	4	75	74	75
##	[256]	63	75	41	32	16	75	5	102	41	92	4	5	5	5	92	75	102
##	[273]	4	75	4	41	94	75	12	102	5	85	5	4	5	106	5	63	72
##	[290]	88	32	102	92	54	77	21	24	16	54	34	38	41	4	4	4	4
##	[307]	4	4	85	4	4	4	75	5	5	4	4	4	4	4	85	5	75
##	[324]	41	4	4	63	63	75	4	4	85	41	4	4	4	5	4	5	85
##	[341]	4	5	5	4	85	4	4	4	4	4	5	92	41	68	19	39	37
##	[358]	107	51	33	8	53	86	87	77	73	13	62	44	4	104	65	43	103
##	[375]	67	18	9	82	35	7	58	56	93	71	60	9	99	26	75	5	4
##	[392]	16	27	41	4	32	5	102	79	106	92	75	45	32	4	4	4	4
##	[409]	4	4	4	4	63	5	4	4	5	4	4	4	4	4	4	17	55
##	[426]	28	23	29	61	30	81	15	45	50	20	47	83	14	96	28	49	11
##	[443]	78	45	40	88	100	96	31	61	101	90	25	4	4	4	4	92	4
##	[460]	63	4	5	41	41	75	92	21	4	75	5	4	4	4	94	5	5
##	[477]	63	63	5	32	6	41	5	94	16	75	92	5	85	106	102	41	5
##	[494]	12	41	102	94	48	5	94	48	92	85	102	48	41	75	12	21	5
##	[511]	92	75	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
##	[528]	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
##	[545]	4	4	4	4	4	4	4	4	4	5	69	22	92	27	75	45	66
##	[562]	75	94	66	5	6	34	16	102	6	13	36	61	42	5	38	93	76
##	[579]	12	16	102	64	92	41	92	83	24	24	63	79	37	46	72	45	16
##	[596]	27	46	6	66	28	94	38	106	109	27	75	21	108	88	83	66	21
##	[613]	5	12	89	6	24	27	38	27	85	4	106	36	11	94	32	63	59
##	[630]	34	102	92	63	85	45	21	85	6	21	32	48	75	4	4	5	4
##	[647]	92	7	5	41	41	85	63	92	41	4	4	4	9	102	41	4	4
##	[664]	4	4	56	145	154	148	151	58	171	161	129	147	146	73	128	160	137
##	[681]	58	142	174	114	140	120	163	144	4	4	4	5	4	4	4	4	4
##	[698]	4	4	4	4	4	4	4	4	24	5	41	5	5	94	27	92	4
##	[715]	6	75	32	16	92	85	21	12	5	16	92	16	5	106	63	94	5
##	[732]	5	4	41	5	4	92	102	63	4	41	5	4	85	4	4	4	4
##	[749]	5	4	4	4	5	4	5	85	45	4	41	102	4	4	4	4	4
##	[766]	41	5	4	16	4	4	5	4	4	4	4	85	5	4	5	4	41
##	[783]	41	4	5	5	4	4	63	5	4	41	5	5	5	4	41	4	4
##	[800]	4	85	41	4	75	41	4	5	5	92	9	81	75	4	41	5	4
##	[817]	5	5	75	4	41	4	5	41	41	4	92	41	5	63	106	5	5
##	[834]	63	4	106	41	92	92	4	5	5	32	41	5	4	63	92	4	4
##	[851]	4	4	5	41	16	4	4	5	4	4	63	4	4	4	4	75	4
##	[868]	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4
##	[885]	4	4	4	4	4	4	4	4	5	92	106	102	24	12	59	4	54
##	[902]	136	63	32	63	94	94	75	46	12	81	16	169	12	92	76	41	63
##	[919]	75	41	21	32	85	5	12	4	5	4	41	5	5	92	75	102	4
##	[936]	85	4	4	94	41	75	46	4	85	5	4	5	12	5	75	89	166
##	[953]	135	42	32	156	166	54	46	32	87	61	156	94	4	4	5	5	4

```
## [970] 4 63 41 4 4 75 5 5 5 4 41 4 4 41 4 5 4
## [987] 5 4 5 63 85 4 4 75 5 4 4 5 4 4 85 75 41
## [1004] 5 4 4 63 4 5 4 4 4 41 85 4 150 19 124 125 173
## [1021] 133 117 110 134 159 89 79 152 111 141 126 4 168 143 132 30 68
## [1038] 113 112 155 123 7 138 138 166 153 139 7 167 25 75 41 4 16
## [1055] 32 4 4 32 5 6 10 12 92 63 48 66 4 4 4 4 4
## [1072] 4 4 4 41 4 4 4 5 4 4 4 4 4 4 18 138 118
## [1089] 115 116 135 119 83 111 53 127 113 130 81 112 95 31 131 15 77
## [1106] 48 137 88 165 95 33 61 170 91 172 4 4 4 4 92 4 4
## [1123] 4 4 5 4 92 92 21 4 92 4 4 4 4 94 5 4 75
## [1140] 4 5 6 12 85 5 75 45 6 6 5 63 102 12 75 41 46
## [1157] 92 24 6 53 5 21 32 75 94 85 136 41 63 6 36 5 92
## [1174] 75 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
## [1191] 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
## [1208] 4 4 4 4 4 4 4 4 5 78 121 175 70 6 42 59 21
## [1225] 54 70 5 21 92 61 38 106 149 42 89 16 92 46 110 66 24
## [1242] 34 39 64 32 21 122 162 42 54 102 81 76 45 91 46 27 61
## [1259] 54 6 77 32 53 135 6 96 102 75 54 81 164 157 64 48 6
## [1276] 32 86 158 94 106 46 70 21 63 6 59 41 21 48 63 61 36
## [1293] 94 85 92 75 27 94 92 75 21 24 46 75 4 4 4 4 106
## [1310] 5 41 5 4 92 94 94 75 107 63 94 4 6 106 5
```

```
basicSchoolDataConsolidated$schpvt1 <- NULL
basicSchoolDataConsolidated$schpvt2 <- NULL
basicSchoolDataConsolidated$schpvt3 <- NULL
basicSchoolDataConsolidated$schpvt4 <- NULL
basicSchoolDataConsolidated$schpvt5 <- NULL
basicSchoolDataConsolidated$schpvt6 <- NULL
basicSchoolDataConsolidated$schpvt7 <- NULL
basicSchoolDataConsolidated$schpvt9 <- NULL
```

```
basicSchoolDataConsolidated$`sch_r_govt_total` <-
as.numeric(basicSchoolDataConsolidated$`sch r
govt1`)+as.numeric(basicSchoolDataConsolidated$`sch r
govt2`)+as.numeric(basicSchoolDataConsolidated$`sch r govt3`)+
  as.numeric(basicSchoolDataConsolidated$`sch r
govt4`)+as.numeric(basicSchoolDataConsolidated$`sch r govt5`)+
as.numeric(basicSchoolDataConsolidated$`sch r
govt6`)+as.numeric(basicSchoolDataConsolidated$`sch r govt7`)+
  as.numeric(basicSchoolDataConsolidated$`sch r govt9`)
```

```
basicSchoolDataConsolidated$`sch r govt1` <- NULL
basicSchoolDataConsolidated$`sch r govt2` <- NULL
basicSchoolDataConsolidated$`sch r govt3` <- NULL
basicSchoolDataConsolidated$`sch r govt4` <- NULL
basicSchoolDataConsolidated$`sch r govt5` <- NULL
basicSchoolDataConsolidated$`sch r govt6` <- NULL
basicSchoolDataConsolidated$`sch r govt7` <- NULL
basicSchoolDataConsolidated$`sch r govt9` <- NULL
```

```
basicSchoolDataConsolidated$`sch_r_pvt_total` <-  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt1`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt2`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt3`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt4`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt5`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt6`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt7`)+  
as.numeric(basicSchoolDataConsolidated$`sch_r_pvt9`)
```

```
basicSchoolDataConsolidated$`sch_r_pvt1` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt2` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt3` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt4` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt5` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt6` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt7` <- NULL  
basicSchoolDataConsolidated$`sch_r_pvt9` <- NULL
```

```
basicSchoolDataConsolidated$`cls1_school1` <- NULL  
basicSchoolDataConsolidated$`cls1_school2` <- NULL  
basicSchoolDataConsolidated$`cls1_school3` <- NULL  
basicSchoolDataConsolidated$`cls1_school4` <- NULL  
basicSchoolDataConsolidated$`cls1_school5` <- NULL  
basicSchoolDataConsolidated$`cls1_school6` <- NULL  
basicSchoolDataConsolidated$`cls1_school7` <- NULL
```

```
basicSchoolDataConsolidated$`tch1_school1` <-NULL  
basicSchoolDataConsolidated$`tch1_school2` <-NULL  
basicSchoolDataConsolidated$`tch1_school3` <-NULL  
basicSchoolDataConsolidated$`tch1_school4` <-NULL  
basicSchoolDataConsolidated$`tch1_school5` <-NULL  
basicSchoolDataConsolidated$`tch1_school6` <-NULL  
basicSchoolDataConsolidated$`tch1_school7` <-NULL
```

```
basicSchoolDataConsolidated$`pp_sch1` <- NULL  
basicSchoolDataConsolidated$`pp_sch2` <- NULL  
basicSchoolDataConsolidated$`pp_sch3` <- NULL  
basicSchoolDataConsolidated$`pp_sch6` <- NULL
```

```
basicSchoolDataConsolidated$`gtoilet_sch1` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch2` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch3` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch4` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch5` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch6` <- NULL  
basicSchoolDataConsolidated$`gtoilet_sch7` <- NULL
```

```
basicSchoolDataConsolidated$`water_sch1` <- NULL
```

```

basicSchoolDataConsolidated$`water sch2` <- NULL
basicSchoolDataConsolidated$`water sch3` <- NULL
basicSchoolDataConsolidated$`water sch4` <- NULL
basicSchoolDataConsolidated$`water sch5` <- NULL
basicSchoolDataConsolidated$`water sch6` <- NULL
basicSchoolDataConsolidated$`water sch7` <- NULL

basicSchoolDataConsolidated$`enr stch sch1` <- NULL
basicSchoolDataConsolidated$`enr stch sch2` <- NULL
basicSchoolDataConsolidated$`enr stch sch3` <- NULL
basicSchoolDataConsolidated$`enr stch sch4` <- NULL
basicSchoolDataConsolidated$`enr stch sch5` <- NULL
basicSchoolDataConsolidated$`enr stch sch6` <- NULL
basicSchoolDataConsolidated$`enr stch sch7` <- NULL

basicSchoolDataConsolidated$`no fem sch1` <- NULL
basicSchoolDataConsolidated$`no fem sch2` <- NULL
basicSchoolDataConsolidated$`no fem sch3` <- NULL
basicSchoolDataConsolidated$`no fem sch4` <- NULL
basicSchoolDataConsolidated$`no fem sch5` <- NULL
basicSchoolDataConsolidated$`no fem sch6` <- NULL
basicSchoolDataConsolidated$`no fem sch7` <- NULL

basicSchoolDataConsolidated$`sch 50enr1` <- NULL
basicSchoolDataConsolidated$`sch 50enr2` <- NULL
basicSchoolDataConsolidated$`sch 50enr3` <- NULL
basicSchoolDataConsolidated$`sch 50enr4` <- NULL
basicSchoolDataConsolidated$`sch 50enr5` <- NULL
basicSchoolDataConsolidated$`sch 50enr6` <- NULL
basicSchoolDataConsolidated$`sch 50enr7` <- NULL

basicSchoolDataConsolidated$`sch since 2003 1_total` <-
as.numeric(basicSchoolDataConsolidated$`sch since 2003 1`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 2`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 3`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 4`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 5`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 6`)+
  as.numeric(basicSchoolDataConsolidated$`sch since 2003 7`)

basicSchoolDataConsolidated$`sch since 2003 1` <- NULL
basicSchoolDataConsolidated$`sch since 2003 2` <- NULL
basicSchoolDataConsolidated$`sch since 2003 3` <- NULL
basicSchoolDataConsolidated$`sch since 2003 4` <- NULL
basicSchoolDataConsolidated$`sch since 2003 5` <- NULL
basicSchoolDataConsolidated$`sch since 2003 6` <- NULL
basicSchoolDataConsolidated$`sch since 2003 7` <- NULL

basicSchoolDataConsolidated$kitshed_total <-

```

```
as.numeric(basicSchoolDataConsolidated$kitshed1)+
  as.numeric(basicSchoolDataConsolidated$kitshed2)+
  as.numeric(basicSchoolDataConsolidated$kitshed3)+
  as.numeric(basicSchoolDataConsolidated$kitshed4)+
  as.numeric(basicSchoolDataConsolidated$kitshed5)+
  as.numeric(basicSchoolDataConsolidated$kitshed6)+
  as.numeric(basicSchoolDataConsolidated$kitshed7)
```

```
basicSchoolDataConsolidated$kitshed1 <- NULL
basicSchoolDataConsolidated$kitshed2 <- NULL
basicSchoolDataConsolidated$kitshed3 <- NULL
basicSchoolDataConsolidated$kitshed4 <- NULL
basicSchoolDataConsolidated$kitshed5 <- NULL
basicSchoolDataConsolidated$kitshed6 <- NULL
basicSchoolDataConsolidated$kitshed7 <- NULL
```

```
basicSchoolDataConsolidated$`tot cls` <-
as.numeric(basicSchoolDataConsolidated$`tot cls1`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls2`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls3`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls4`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls5`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls6`)+
  as.numeric(basicSchoolDataConsolidated$`tot cls7`)
```

```
basicSchoolDataConsolidated$`tot cls1` <- NULL
basicSchoolDataConsolidated$`tot cls2` <- NULL
basicSchoolDataConsolidated$`tot cls3` <- NULL
basicSchoolDataConsolidated$`tot cls4` <- NULL
basicSchoolDataConsolidated$`tot cls5` <- NULL
basicSchoolDataConsolidated$`tot cls6` <- NULL
basicSchoolDataConsolidated$`tot cls7` <- NULL
```

```
basicSchoolDataConsolidated$`cls good` <-
as.numeric(basicSchoolDataConsolidated$`cls good1`)+
  as.numeric(basicSchoolDataConsolidated$`cls good2`)+
  as.numeric(basicSchoolDataConsolidated$`cls good3`)+
  as.numeric(basicSchoolDataConsolidated$`cls good4`)+
  as.numeric(basicSchoolDataConsolidated$`cls good5`)+
  as.numeric(basicSchoolDataConsolidated$`cls good6`)+
  as.numeric(basicSchoolDataConsolidated$`cls good7`)
```

```
basicSchoolDataConsolidated$`cls good1` <- NULL
basicSchoolDataConsolidated$`cls good2` <- NULL
basicSchoolDataConsolidated$`cls good3` <- NULL
basicSchoolDataConsolidated$`cls good4` <- NULL
basicSchoolDataConsolidated$`cls good5` <- NULL
basicSchoolDataConsolidated$`cls good6` <- NULL
```



```
basicSchoolDataConsolidated$`cls good7` <- NULL
```

```
basicSchoolDataConsolidated$`cls major` <-  
as.numeric(basicSchoolDataConsolidated$`cls major1`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major2`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major3`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major4`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major5`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major6`)+  
  as.numeric(basicSchoolDataConsolidated$`cls major7`)
```

```
basicSchoolDataConsolidated$`cls major1` <- NULL  
basicSchoolDataConsolidated$`cls major2` <- NULL  
basicSchoolDataConsolidated$`cls major3` <- NULL  
basicSchoolDataConsolidated$`cls major4` <- NULL  
basicSchoolDataConsolidated$`cls major5` <- NULL  
basicSchoolDataConsolidated$`cls major6` <- NULL  
basicSchoolDataConsolidated$`cls major7` <- NULL
```

```
basicSchoolDataConsolidated$`cls minor` <-  
as.numeric(basicSchoolDataConsolidated$`cls minor1`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor2`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor3`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor4`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor5`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor6`)+  
  as.numeric(basicSchoolDataConsolidated$`cls minor7`)
```

```
basicSchoolDataConsolidated$`cls minor1` <- NULL  
basicSchoolDataConsolidated$`cls minor2` <- NULL  
basicSchoolDataConsolidated$`cls minor3` <- NULL  
basicSchoolDataConsolidated$`cls minor4` <- NULL  
basicSchoolDataConsolidated$`cls minor5` <- NULL  
basicSchoolDataConsolidated$`cls minor6` <- NULL  
basicSchoolDataConsolidated$`cls minor7` <- NULL
```

```
basicSchoolDataConsolidated$`cls other` <-  
as.numeric(basicSchoolDataConsolidated$`cls other1`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other2`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other3`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other4`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other5`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other6`)+  
  as.numeric(basicSchoolDataConsolidated$`cls other7`)
```

```
basicSchoolDataConsolidated$`cls other1` <- NULL  
basicSchoolDataConsolidated$`cls other2` <- NULL
```

```

basicSchoolDataConsolidated$`cls other3` <- NULL
basicSchoolDataConsolidated$`cls other4` <- NULL
basicSchoolDataConsolidated$`cls other5` <- NULL
basicSchoolDataConsolidated$`cls other6` <- NULL
basicSchoolDataConsolidated$`cls other7` <- NULL

basicSchoolDataConsolidated$`btoilet sch_total` <-
as.numeric(basicSchoolDataConsolidated$`btoilet sch1`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch2`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch3`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch4`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch5`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch6`)+
  as.numeric(basicSchoolDataConsolidated$`btoilet sch7`)

basicSchoolDataConsolidated$`btoilet sch1` <- NULL
basicSchoolDataConsolidated$`btoilet sch2` <- NULL
basicSchoolDataConsolidated$`btoilet sch3` <- NULL
basicSchoolDataConsolidated$`btoilet sch4` <- NULL
basicSchoolDataConsolidated$`btoilet sch5` <- NULL
basicSchoolDataConsolidated$`btoilet sch6` <- NULL
basicSchoolDataConsolidated$`btoilet sch7` <- NULL

basicSchoolDataConsolidated$`electric sch_total` <-
as.numeric(basicSchoolDataConsolidated$`electric sch1`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch2`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch3`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch4`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch5`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch6`)+
  as.numeric(basicSchoolDataConsolidated$`electric sch7`)

basicSchoolDataConsolidated$`electric sch1` <- NULL
basicSchoolDataConsolidated$`electric sch2` <- NULL
basicSchoolDataConsolidated$`electric sch3` <- NULL
basicSchoolDataConsolidated$`electric sch4` <- NULL
basicSchoolDataConsolidated$`electric sch5` <- NULL
basicSchoolDataConsolidated$`electric sch6` <- NULL
basicSchoolDataConsolidated$`electric sch7` <- NULL

basicSchoolDataConsolidated$`computer sch_total` <-
as.numeric(basicSchoolDataConsolidated$`computer sch1`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch2`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch3`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch4`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch5`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch6`)+
  as.numeric(basicSchoolDataConsolidated$`computer sch7`)

```

```
basicSchoolDataConsolidated$`computer sch1` <- NULL
basicSchoolDataConsolidated$`computer sch2` <- NULL
basicSchoolDataConsolidated$`computer sch3` <- NULL
basicSchoolDataConsolidated$`computer sch4` <- NULL
basicSchoolDataConsolidated$`computer sch5` <- NULL
basicSchoolDataConsolidated$`computer sch6` <- NULL
basicSchoolDataConsolidated$`computer sch7` <- NULL
```

```
basicSchoolDataConsolidated$mdm_total <-
as.numeric(basicSchoolDataConsolidated$`mdm 1`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 2`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 3`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 4`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 5`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 6`)+
  as.numeric(basicSchoolDataConsolidated$`mdm 7`)
```

```
basicSchoolDataConsolidated$`mdm 1` <- NULL
basicSchoolDataConsolidated$`mdm 2` <- NULL
basicSchoolDataConsolidated$`mdm 3` <- NULL
basicSchoolDataConsolidated$`mdm 4` <- NULL
basicSchoolDataConsolidated$`mdm 5` <- NULL
basicSchoolDataConsolidated$`mdm 6` <- NULL
basicSchoolDataConsolidated$`mdm 7` <- NULL
```

```
basicSchoolDataConsolidated$smc_total <-
as.numeric(basicSchoolDataConsolidated$`smc 1`)+
  as.numeric(basicSchoolDataConsolidated$`smc 2`)+
as.numeric(basicSchoolDataConsolidated$`smc 3`)+
  as.numeric(basicSchoolDataConsolidated$`smc 4`)
```

```
basicSchoolDataConsolidated$`smc 1` <- NULL
basicSchoolDataConsolidated$`smc 2` <- NULL
basicSchoolDataConsolidated$`smc 3` <- NULL
basicSchoolDataConsolidated$`smc 4` <- NULL
```

```
basicSchoolDataConsolidated$sch_un_total <-
as.numeric(basicSchoolDataConsolidated$`sch un1`) +
  as.numeric(basicSchoolDataConsolidated$`sch un2`)+
  as.numeric(basicSchoolDataConsolidated$`sch un3`)+
  as.numeric(basicSchoolDataConsolidated$`sch un4`)+
  as.numeric(basicSchoolDataConsolidated$`sch un5`)+
  as.numeric(basicSchoolDataConsolidated$`sch un6`)+
  as.numeric(basicSchoolDataConsolidated$`sch un7`)+
  as.numeric(basicSchoolDataConsolidated$`sch un9`)
```

```
basicSchoolDataConsolidated$`sch un1` <- NULL
basicSchoolDataConsolidated$`sch un2` <- NULL
basicSchoolDataConsolidated$`sch un3` <- NULL
```

```

basicSchoolDataConsolidated$`sch un4` <- NULL
basicSchoolDataConsolidated$`sch un5` <- NULL
basicSchoolDataConsolidated$`sch un6` <- NULL
basicSchoolDataConsolidated$`sch un7` <- NULL
basicSchoolDataConsolidated$`sch un8` <- NULL
basicSchoolDataConsolidated$`sch un9` <- NULL

basicSchoolDataConsolidated$books_total <-
as.numeric(basicSchoolDataConsolidated$`book p b`)+
  as.numeric(basicSchoolDataConsolidated$`book p g`)+
  as.numeric(basicSchoolDataConsolidated$`book up b`)+
  as.numeric(basicSchoolDataConsolidated$`book up g`)

basicSchoolDataConsolidated$`book p b` <- NULL
basicSchoolDataConsolidated$`book p g` <- NULL
basicSchoolDataConsolidated$`book up b` <- NULL
basicSchoolDataConsolidated$`book up g` <- NULL

basicSchoolDataConsolidated$uniform_total <-
as.numeric(basicSchoolDataConsolidated$`uniform p b`)+
  as.numeric(basicSchoolDataConsolidated$`uniform p g`)+
  as.numeric(basicSchoolDataConsolidated$`uniform up b`)+
  as.numeric(basicSchoolDataConsolidated$`uniform up g`)

basicSchoolDataConsolidated$`uniform p b` <- NULL
basicSchoolDataConsolidated$`uniform p g` <- NULL
basicSchoolDataConsolidated$`uniform up b` <- NULL
basicSchoolDataConsolidated$`uniform up g` <- NULL

```

After aggregation of school data there are 45 columns still few more columns left

##

```
basicTeacherdataConsolidated <- rbind(teacherData_12_13,teacherData_13_14)
```

```
basicTeacherdataConsolidated[,5:180]<-
factorsNumeric(basicTeacherdataConsolidated[,5:180])
```

```

basicTeacherdataConsolidated$tch_govt_total <-
basicTeacherdataConsolidated$tch_govt1+
  basicTeacherdataConsolidated$tch_govt2+
  basicTeacherdataConsolidated$tch_govt3+
  basicTeacherdataConsolidated$tch_govt4+
  basicTeacherdataConsolidated$tch_govt5+
  basicTeacherdataConsolidated$tch_govt6+
  basicTeacherdataConsolidated$tch_govt7+
  basicTeacherdataConsolidated$tch_govt9

```

```
basicTeacherdataConsolidated$tch_govt1 <- NULL
basicTeacherdataConsolidated$tch_govt2 <- NULL
basicTeacherdataConsolidated$tch_govt3 <- NULL
basicTeacherdataConsolidated$tch_govt4 <- NULL
basicTeacherdataConsolidated$tch_govt5 <- NULL
basicTeacherdataConsolidated$tch_govt6 <- NULL
basicTeacherdataConsolidated$tch_govt7 <- NULL
basicTeacherdataConsolidated$tch_govt9 <- NULL
```

```
basicTeacherdataConsolidated$tch_pvt_total <-
basicTeacherdataConsolidated$tch_pvt1+
  basicTeacherdataConsolidated$tch_pvt2+
  basicTeacherdataConsolidated$tch_pvt3+
  basicTeacherdataConsolidated$tch_pvt4+
  basicTeacherdataConsolidated$tch_pvt5+
  basicTeacherdataConsolidated$tch_pvt6+
  basicTeacherdataConsolidated$tch_pvt7+
  basicTeacherdataConsolidated$tch_pvt9
```

```
basicTeacherdataConsolidated$tch_pvt1 <- NULL
basicTeacherdataConsolidated$tch_pvt2 <- NULL
basicTeacherdataConsolidated$tch_pvt3 <- NULL
basicTeacherdataConsolidated$tch_pvt4 <- NULL
basicTeacherdataConsolidated$tch_pvt5 <- NULL
basicTeacherdataConsolidated$tch_pvt6 <- NULL
basicTeacherdataConsolidated$tch_pvt7 <- NULL
basicTeacherdataConsolidated$tch_pvt9 <- NULL
```

```
basicTeacherdataConsolidated$tch_un_total <-
basicTeacherdataConsolidated$tch_un1+
  basicTeacherdataConsolidated$tch_un2+
  basicTeacherdataConsolidated$tch_un3+
  basicTeacherdataConsolidated$tch_un4+
  basicTeacherdataConsolidated$tch_un5+
  basicTeacherdataConsolidated$tch_un6+
  basicTeacherdataConsolidated$tch_un7+
  basicTeacherdataConsolidated$tch_un9
```

```
basicTeacherdataConsolidated$tch_un1 <- NULL
basicTeacherdataConsolidated$tch_un2 <- NULL
basicTeacherdataConsolidated$tch_un3 <- NULL
basicTeacherdataConsolidated$tch_un4 <- NULL
basicTeacherdataConsolidated$tch_un5 <- NULL
basicTeacherdataConsolidated$tch_un6 <- NULL
basicTeacherdataConsolidated$tch_un7 <- NULL
basicTeacherdataConsolidated$tch_un9 <- NULL
```

```
basicTeacherdataConsolidated$tch_bs_total <-  
basicTeacherdataConsolidated$tch_bs1+  
  basicTeacherdataConsolidated$tch_bs2+  
  basicTeacherdataConsolidated$tch_bs3+  
  basicTeacherdataConsolidated$tch_bs4+  
  basicTeacherdataConsolidated$tch_bs5+  
  basicTeacherdataConsolidated$tch_bs6+  
  basicTeacherdataConsolidated$tch_bs7
```

```
basicTeacherdataConsolidated$tch_bs1 <- NULL  
basicTeacherdataConsolidated$tch_bs2 <- NULL  
basicTeacherdataConsolidated$tch_bs3 <- NULL  
basicTeacherdataConsolidated$tch_bs4 <- NULL  
basicTeacherdataConsolidated$tch_bs5 <- NULL  
basicTeacherdataConsolidated$tch_bs6 <- NULL  
basicTeacherdataConsolidated$tch_bs7 <- NULL
```

```
basicTeacherdataConsolidated$tch_s_total <-  
basicTeacherdataConsolidated$tch_s1+  
  basicTeacherdataConsolidated$tch_s2+  
  basicTeacherdataConsolidated$tch_s3+  
  basicTeacherdataConsolidated$tch_s4+  
  basicTeacherdataConsolidated$tch_s5+  
  basicTeacherdataConsolidated$tch_s6+  
  basicTeacherdataConsolidated$tch_s7
```

```
basicTeacherdataConsolidated$tch_s1 <- NULL  
basicTeacherdataConsolidated$tch_s2 <- NULL  
basicTeacherdataConsolidated$tch_s3 <- NULL  
basicTeacherdataConsolidated$tch_s4 <- NULL  
basicTeacherdataConsolidated$tch_s5 <- NULL  
basicTeacherdataConsolidated$tch_s6 <- NULL  
basicTeacherdataConsolidated$tch_s7 <- NULL
```

```
basicTeacherdataConsolidated$tch_hs_total <-  
basicTeacherdataConsolidated$tch_hs1+  
  basicTeacherdataConsolidated$tch_hs2+  
  basicTeacherdataConsolidated$tch_hs3+  
  basicTeacherdataConsolidated$tch_hs4+  
  basicTeacherdataConsolidated$tch_hs5+  
  basicTeacherdataConsolidated$tch_hs6+  
  basicTeacherdataConsolidated$tch_hs7
```

```
basicTeacherdataConsolidated$tch_hs1 <- NULL  
basicTeacherdataConsolidated$tch_hs2 <- NULL  
basicTeacherdataConsolidated$tch_hs3 <- NULL  
basicTeacherdataConsolidated$tch_hs4 <- NULL
```

```
basicTeacherdataConsolidated$tch_hs5 <- NULL
basicTeacherdataConsolidated$tch_hs6 <- NULL
basicTeacherdataConsolidated$tch_hs7 <- NULL

basicTeacherdataConsolidated$tch_grad_total <-
basicTeacherdataConsolidated$tch_grad1+
  basicTeacherdataConsolidated$tch_grad2+
  basicTeacherdataConsolidated$tch_grad3+
  basicTeacherdataConsolidated$tch_grad4+
  basicTeacherdataConsolidated$tch_grad5+
  basicTeacherdataConsolidated$tch_grad6+
  basicTeacherdataConsolidated$tch_grad7

basicTeacherdataConsolidated$tch_grad1 <- NULL
basicTeacherdataConsolidated$tch_grad2 <- NULL
basicTeacherdataConsolidated$tch_grad3 <- NULL
basicTeacherdataConsolidated$tch_grad4 <- NULL
basicTeacherdataConsolidated$tch_grad5 <- NULL
basicTeacherdataConsolidated$tch_grad6 <- NULL
basicTeacherdataConsolidated$tch_grad7 <- NULL

basicTeacherdataConsolidated$tch_pgrad_total <-
basicTeacherdataConsolidated$tch_pgrad1+
  basicTeacherdataConsolidated$tch_pgrad2+
  basicTeacherdataConsolidated$tch_pgrad3+
  basicTeacherdataConsolidated$tch_pgrad4+
  basicTeacherdataConsolidated$tch_pgrad5+
  basicTeacherdataConsolidated$tch_pgrad6+
  basicTeacherdataConsolidated$tch_pgrad7

basicTeacherdataConsolidated$tch_pgrad1 <- NULL
basicTeacherdataConsolidated$tch_pgrad2 <- NULL
basicTeacherdataConsolidated$tch_pgrad3 <- NULL
basicTeacherdataConsolidated$tch_pgrad4 <- NULL
basicTeacherdataConsolidated$tch_pgrad5 <- NULL
basicTeacherdataConsolidated$tch_pgrad6 <- NULL
basicTeacherdataConsolidated$tch_pgrad7 <- NULL

basicTeacherdataConsolidated$tch_mph_total <-
basicTeacherdataConsolidated$tch_mph1+
  basicTeacherdataConsolidated$tch_mph2+
  basicTeacherdataConsolidated$tch_mph3+
  basicTeacherdataConsolidated$tch_mph4+
  basicTeacherdataConsolidated$tch_mph5+
  basicTeacherdataConsolidated$tch_mph6+
  basicTeacherdataConsolidated$tch_mph7
```



```
basicTeacherdataConsolidated$tch_mph1 <- NULL
basicTeacherdataConsolidated$tch_mph2 <- NULL
basicTeacherdataConsolidated$tch_mph3 <- NULL
basicTeacherdataConsolidated$tch_mph4 <- NULL
basicTeacherdataConsolidated$tch_mph5 <- NULL
basicTeacherdataConsolidated$tch_mph6 <- NULL
basicTeacherdataConsolidated$tch_mph7 <- NULL
```

```
basicTeacherdataConsolidated$tch_pd_total <-
basicTeacherdataConsolidated$tch_pd1+
  basicTeacherdataConsolidated$tch_pd2+
  basicTeacherdataConsolidated$tch_pd3+
  basicTeacherdataConsolidated$tch_pd4+
  basicTeacherdataConsolidated$tch_pd5+
  basicTeacherdataConsolidated$tch_pd6+
  basicTeacherdataConsolidated$tch_pd7
```

```
basicTeacherdataConsolidated$tch_pd1 <- NULL
basicTeacherdataConsolidated$tch_pd2 <- NULL
basicTeacherdataConsolidated$tch_pd3 <- NULL
basicTeacherdataConsolidated$tch_pd4 <- NULL
basicTeacherdataConsolidated$tch_pd5 <- NULL
basicTeacherdataConsolidated$tch_pd6 <- NULL
basicTeacherdataConsolidated$tch_pd7 <- NULL
```

```
basicTeacherdataConsolidated$tch_m_total <-
basicTeacherdataConsolidated$tch_m1+
  basicTeacherdataConsolidated$tch_m2+
  basicTeacherdataConsolidated$tch_m3+
  basicTeacherdataConsolidated$tch_m4+
  basicTeacherdataConsolidated$tch_m5+
  basicTeacherdataConsolidated$tch_m6+
  basicTeacherdataConsolidated$tch_m7
```

```
basicTeacherdataConsolidated$tch_m1 <- NULL
basicTeacherdataConsolidated$tch_m2 <- NULL
basicTeacherdataConsolidated$tch_m3 <- NULL
basicTeacherdataConsolidated$tch_m4 <- NULL
basicTeacherdataConsolidated$tch_m5 <- NULL
basicTeacherdataConsolidated$tch_m6 <- NULL
basicTeacherdataConsolidated$tch_m7 <- NULL
```

```
basicTeacherdataConsolidated$tch_f_total <-
basicTeacherdataConsolidated$tch_f1+
  basicTeacherdataConsolidated$tch_f2+
  basicTeacherdataConsolidated$tch_f3+
  basicTeacherdataConsolidated$tch_f4+
```

```
basicTeacherdataConsolidated$tch_f5+  
basicTeacherdataConsolidated$tch_f6+  
basicTeacherdataConsolidated$tch_f7
```

```
basicTeacherdataConsolidated$tch_f1 <- NULL  
basicTeacherdataConsolidated$tch_f2 <- NULL  
basicTeacherdataConsolidated$tch_f3 <- NULL  
basicTeacherdataConsolidated$tch_f4 <- NULL  
basicTeacherdataConsolidated$tch_f5 <- NULL  
basicTeacherdataConsolidated$tch_f6 <- NULL  
basicTeacherdataConsolidated$tch_f7 <- NULL
```

```
basicTeacherdataConsolidated$tch_nr_total <-  
basicTeacherdataConsolidated$tch_nr1+  
  basicTeacherdataConsolidated$tch_nr2+  
  basicTeacherdataConsolidated$tch_nr3+  
  basicTeacherdataConsolidated$tch_nr4+  
  basicTeacherdataConsolidated$tch_nr5+  
  basicTeacherdataConsolidated$tch_nr6+  
  basicTeacherdataConsolidated$tch_nr7
```

```
basicTeacherdataConsolidated$tch_nr1 <- NULL  
basicTeacherdataConsolidated$tch_nr2 <- NULL  
basicTeacherdataConsolidated$tch_nr3 <- NULL  
basicTeacherdataConsolidated$tch_nr4 <- NULL  
basicTeacherdataConsolidated$tch_nr5 <- NULL  
basicTeacherdataConsolidated$tch_nr6 <- NULL  
basicTeacherdataConsolidated$tch_nr7 <- NULL
```

```
basicTeacherdataConsolidated$tch_m_p_total <-  
basicTeacherdataConsolidated$tch_m_p1+  
  basicTeacherdataConsolidated$tch_m_p2+  
  basicTeacherdataConsolidated$tch_m_p3+  
  basicTeacherdataConsolidated$tch_m_p4+  
  basicTeacherdataConsolidated$tch_m_p5+  
  basicTeacherdataConsolidated$tch_m_p6+  
  basicTeacherdataConsolidated$tch_m_p7
```

```
basicTeacherdataConsolidated$tch_m_p1 <- NULL  
basicTeacherdataConsolidated$tch_m_p2 <- NULL  
basicTeacherdataConsolidated$tch_m_p3 <- NULL  
basicTeacherdataConsolidated$tch_m_p4 <- NULL  
basicTeacherdataConsolidated$tch_m_p5 <- NULL  
basicTeacherdataConsolidated$tch_m_p6 <- NULL  
basicTeacherdataConsolidated$tch_m_p7 <- NULL
```

```
basicTeacherdataConsolidated$tch_f_p_total <-  
basicTeacherdataConsolidated$tch_f_p1+
```

```
basicTeacherdataConsolidated$tch_f_p2+  
basicTeacherdataConsolidated$tch_f_p3+  
basicTeacherdataConsolidated$tch_f_p4+  
basicTeacherdataConsolidated$tch_f_p5+  
basicTeacherdataConsolidated$tch_f_p6+  
basicTeacherdataConsolidated$tch_f_p7
```

```
basicTeacherdataConsolidated$tch_f_p1 <- NULL  
basicTeacherdataConsolidated$tch_f_p2 <- NULL  
basicTeacherdataConsolidated$tch_f_p3 <- NULL  
basicTeacherdataConsolidated$tch_f_p4 <- NULL  
basicTeacherdataConsolidated$tch_f_p5 <- NULL  
basicTeacherdataConsolidated$tch_f_p6 <- NULL  
basicTeacherdataConsolidated$tch_f_p7 <- NULL
```

```
basicTeacherdataConsolidated$tch_nr_p1 <- NULL  
basicTeacherdataConsolidated$tch_nr_p2 <- NULL  
basicTeacherdataConsolidated$tch_nr_p3 <- NULL  
basicTeacherdataConsolidated$tch_nr_p4 <- NULL  
basicTeacherdataConsolidated$tch_nr_p5 <- NULL  
basicTeacherdataConsolidated$tch_nr_p6 <- NULL  
basicTeacherdataConsolidated$tch_nr_p7 <- NULL
```

```
basicTeacherdataConsolidated$tch_eduqual_nr1 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr2 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr3 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr4 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr5 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr6 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr7 <- NULL  
basicTeacherdataConsolidated$tch_eduqual_nr_p <- NULL
```

```
basicTeacherdataConsolidated$tch_sc_m_total <-  
basicTeacherdataConsolidated$tch_sc_m1+  
  basicTeacherdataConsolidated$tch_sc_m2+  
  basicTeacherdataConsolidated$tch_sc_m3+  
  basicTeacherdataConsolidated$tch_sc_m4+  
  basicTeacherdataConsolidated$tch_sc_m5+  
  basicTeacherdataConsolidated$tch_sc_m6+  
  basicTeacherdataConsolidated$tch_sc_m7
```

```
basicTeacherdataConsolidated$tch_sc_m1 <- NULL  
basicTeacherdataConsolidated$tch_sc_m2 <- NULL  
basicTeacherdataConsolidated$tch_sc_m3 <- NULL  
basicTeacherdataConsolidated$tch_sc_m4 <- NULL  
basicTeacherdataConsolidated$tch_sc_m5 <- NULL  
basicTeacherdataConsolidated$tch_sc_m6 <- NULL
```

```
basicTeacherdataConsolidated$tch_sc_m7 <- NULL
```

```
basicTeacherdataConsolidated$tch_sc_f_total <-  
basicTeacherdataConsolidated$tch_sc_f1+  
  basicTeacherdataConsolidated$tch_sc_f2+  
  basicTeacherdataConsolidated$tch_sc_f3+  
  basicTeacherdataConsolidated$tch_sc_f4+  
  basicTeacherdataConsolidated$tch_sc_f5+  
  basicTeacherdataConsolidated$tch_sc_f6+  
  basicTeacherdataConsolidated$tch_sc_f7
```

```
basicTeacherdataConsolidated$tch_sc_f1 <- NULL  
basicTeacherdataConsolidated$tch_sc_f2 <- NULL  
basicTeacherdataConsolidated$tch_sc_f3 <- NULL  
basicTeacherdataConsolidated$tch_sc_f4 <- NULL  
basicTeacherdataConsolidated$tch_sc_f5 <- NULL  
basicTeacherdataConsolidated$tch_sc_f6 <- NULL  
basicTeacherdataConsolidated$tch_sc_f7 <- NULL
```

```
basicTeacherdataConsolidated$tch_st_m_total <-  
basicTeacherdataConsolidated$tch_st_m1+  
  basicTeacherdataConsolidated$tch_st_m2+  
  basicTeacherdataConsolidated$tch_st_m3+  
  basicTeacherdataConsolidated$tch_st_m4+  
  basicTeacherdataConsolidated$tch_st_m5+  
  basicTeacherdataConsolidated$tch_st_m6+  
  basicTeacherdataConsolidated$tch_st_m7
```

```
basicTeacherdataConsolidated$tch_st_m1 <- NULL  
basicTeacherdataConsolidated$tch_st_m2 <- NULL  
basicTeacherdataConsolidated$tch_st_m3 <- NULL  
basicTeacherdataConsolidated$tch_st_m4 <- NULL  
basicTeacherdataConsolidated$tch_st_m5 <- NULL  
basicTeacherdataConsolidated$tch_st_m6 <- NULL  
basicTeacherdataConsolidated$tch_st_m7 <- NULL
```

```
basicTeacherdataConsolidated$tch_st_f_total <-  
basicTeacherdataConsolidated$tch_st_f1+  
  basicTeacherdataConsolidated$tch_st_f2+  
  basicTeacherdataConsolidated$tch_st_f3+  
  basicTeacherdataConsolidated$tch_st_f4+  
  basicTeacherdataConsolidated$tch_st_f5+  
  basicTeacherdataConsolidated$tch_st_f6+  
  basicTeacherdataConsolidated$tch_st_f7
```

```
basicTeacherdataConsolidated$tch_st_f1 <- NULL
```

```
basicTeacherdataConsolidated$tch_st_f2 <- NULL
basicTeacherdataConsolidated$tch_st_f3 <- NULL
basicTeacherdataConsolidated$tch_st_f4 <- NULL
basicTeacherdataConsolidated$tch_st_f5 <- NULL
basicTeacherdataConsolidated$tch_st_f6 <- NULL
basicTeacherdataConsolidated$tch_st_f7 <- NULL
```

```
basicTeacherdataConsolidated$tch_pd_p <- NULL
```

```
basicTeacherdataConsolidated$strn_tch_m_total <-
basicTeacherdataConsolidated$strn_tch_m1+
  basicTeacherdataConsolidated$strn_tch_m2+
  basicTeacherdataConsolidated$strn_tch_m3+
  basicTeacherdataConsolidated$strn_tch_m4+
  basicTeacherdataConsolidated$strn_tch_m5+
  basicTeacherdataConsolidated$strn_tch_m6+
  basicTeacherdataConsolidated$strn_tch_m7
```

```
basicTeacherdataConsolidated$strn_tch_m1 <- NULL
basicTeacherdataConsolidated$strn_tch_m2 <- NULL
basicTeacherdataConsolidated$strn_tch_m3 <- NULL
basicTeacherdataConsolidated$strn_tch_m4 <- NULL
basicTeacherdataConsolidated$strn_tch_m5 <- NULL
basicTeacherdataConsolidated$strn_tch_m6 <- NULL
basicTeacherdataConsolidated$strn_tch_m7 <- NULL
```

```
basicTeacherdataConsolidated$strn_tch_f_total <-
basicTeacherdataConsolidated$strn_tch_f1+
  basicTeacherdataConsolidated$strn_tch_f2+
  basicTeacherdataConsolidated$strn_tch_f3+
  basicTeacherdataConsolidated$strn_tch_f4+
  basicTeacherdataConsolidated$strn_tch_f5+
  basicTeacherdataConsolidated$strn_tch_f6+
  basicTeacherdataConsolidated$strn_tch_f7
```

```
basicTeacherdataConsolidated$strn_tch_f1 <- NULL
basicTeacherdataConsolidated$strn_tch_f2 <- NULL
basicTeacherdataConsolidated$strn_tch_f3 <- NULL
basicTeacherdataConsolidated$strn_tch_f4 <- NULL
basicTeacherdataConsolidated$strn_tch_f5 <- NULL
basicTeacherdataConsolidated$strn_tch_f6 <- NULL
basicTeacherdataConsolidated$strn_tch_f7 <- NULL
```

```
## Basic Enrollment Data cleaning
basicEnrollmentDataConsolidated[,6:166] =
factorsNumeric(basicEnrollmentDataConsolidated[,6:166])
```

```
basicEnrollmentDataConsolidated$Enr_Govt_total <-  
basicEnrollmentDataConsolidated$`Enr Govt1` +  
  basicEnrollmentDataConsolidated$`Enr Govt2` +  
  basicEnrollmentDataConsolidated$`Enr Govt3` +  
  basicEnrollmentDataConsolidated$`Enr Govt4` +  
  basicEnrollmentDataConsolidated$`Enr Govt5` +  
  basicEnrollmentDataConsolidated$`Enr Govt6` +  
  basicEnrollmentDataConsolidated$`Enr Govt7`
```

```
basicEnrollmentDataConsolidated$`Enr Govt1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Govt9` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_Pvt_total <-  
basicEnrollmentDataConsolidated$`Enr Pvt1` +  
  basicEnrollmentDataConsolidated$`Enr Pvt2` +  
  basicEnrollmentDataConsolidated$`Enr Pvt3` +  
  basicEnrollmentDataConsolidated$`Enr Pvt4` +  
  basicEnrollmentDataConsolidated$`Enr Pvt5` +  
  basicEnrollmentDataConsolidated$`Enr Pvt6` +  
  basicEnrollmentDataConsolidated$`Enr Pvt7`
```

```
basicEnrollmentDataConsolidated$`Enr Pvt1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Pvt9` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_Govt_R_total <-  
basicEnrollmentDataConsolidated$`Enr R Govt1` +  
  basicEnrollmentDataConsolidated$`Enr R Govt2` +  
  basicEnrollmentDataConsolidated$`Enr R Govt3` +  
  basicEnrollmentDataConsolidated$`Enr R Govt4` +  
  basicEnrollmentDataConsolidated$`Enr R Govt5` +  
  basicEnrollmentDataConsolidated$`Enr R Govt6` +  
  basicEnrollmentDataConsolidated$`Enr R Govt7`
```

```
basicEnrollmentDataConsolidated$`Enr R Govt1` <- NULL  
basicEnrollmentDataConsolidated$`Enr R Govt2` <- NULL  
basicEnrollmentDataConsolidated$`Enr R Govt3` <- NULL  
basicEnrollmentDataConsolidated$`Enr R Govt4` <- NULL
```

```
basicEnrollmentDataConsolidated$`Enr R Govt5` <- NULL
basicEnrollmentDataConsolidated$`Enr R Govt6` <- NULL
basicEnrollmentDataConsolidated$`Enr R Govt7` <- NULL
basicEnrollmentDataConsolidated$`Enr R Govt9` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_R_Pvt_total <-
basicEnrollmentDataConsolidated$`Enr R Pvt1` +
  basicEnrollmentDataConsolidated$`Enr R Pvt2` +
  basicEnrollmentDataConsolidated$`Enr R Pvt3` +
  basicEnrollmentDataConsolidated$`Enr R Pvt4` +
  basicEnrollmentDataConsolidated$`Enr R Pvt5` +
  basicEnrollmentDataConsolidated$`Enr R Pvt6` +
  basicEnrollmentDataConsolidated$`Enr R Pvt7`
```

```
basicEnrollmentDataConsolidated$`Enr R Pvt1` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt2` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt3` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt4` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt5` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt6` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt7` <- NULL
basicEnrollmentDataConsolidated$`Enr R Pvt9` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_py4_c1_total <-
basicEnrollmentDataConsolidated$`Enr Py4 C1` +
  basicEnrollmentDataConsolidated$`Enr Py4 C2` +
  basicEnrollmentDataConsolidated$`Enr Py4 C3` +
  basicEnrollmentDataConsolidated$`Enr Py4 C4` +
  basicEnrollmentDataConsolidated$`Enr Py4 C5` +
  basicEnrollmentDataConsolidated$`Enr Py4 C6` +
  basicEnrollmentDataConsolidated$`Enr Py4 C7` +
  basicEnrollmentDataConsolidated$`Enr Py4 C8`
```

```
basicEnrollmentDataConsolidated$`Enr Py4 C1` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C2` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C3` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C4` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C5` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C6` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C7` <- NULL
basicEnrollmentDataConsolidated$`Enr Py4 C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_py3_c1_total <-
basicEnrollmentDataConsolidated$`Enr Py3 C1` +
  basicEnrollmentDataConsolidated$`Enr Py3 C2` +
  basicEnrollmentDataConsolidated$`Enr Py3 C3` +
  basicEnrollmentDataConsolidated$`Enr Py3 C4` +
```



```
basicEnrollmentDataConsolidated$`Enr Py3 C5` +  
basicEnrollmentDataConsolidated$`Enr Py3 C6` +  
basicEnrollmentDataConsolidated$`Enr Py3 C7` +  
basicEnrollmentDataConsolidated$`Enr Py3 C8`
```

```
basicEnrollmentDataConsolidated$`Enr Py3 C1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py3 C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_py2_c1_total <-  
basicEnrollmentDataConsolidated$`Enr Py2 C1` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C2` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C3` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C4` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C5` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C6` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C7` +  
  basicEnrollmentDataConsolidated$`Enr Py2 C8`
```

```
basicEnrollmentDataConsolidated$`Enr Py2 C1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py2 C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_Py1_c1_total <-  
basicEnrollmentDataConsolidated$`Enr Py1 C1` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C2` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C3` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C4` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C5` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C6` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C7` +  
  basicEnrollmentDataConsolidated$`Enr Py1 C8`
```

```
basicEnrollmentDataConsolidated$`Enr Py1 C1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py1 C2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py1 C3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py1 C4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py1 C5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Py1 C6` <- NULL
```

```
basicEnrollmentDataConsolidated$`Enr Py1 C7` <- NULL
basicEnrollmentDataConsolidated$`Enr Py1 C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_Cy_c1_total <-
basicEnrollmentDataConsolidated$`Enr Cy C1` +
  basicEnrollmentDataConsolidated$`Enr Cy C2` +
  basicEnrollmentDataConsolidated$`Enr Cy C3` +
  basicEnrollmentDataConsolidated$`Enr Cy C4` +
  basicEnrollmentDataConsolidated$`Enr Cy C5` +
  basicEnrollmentDataConsolidated$`Enr Cy C6` +
  basicEnrollmentDataConsolidated$`Enr Cy C7` +
  basicEnrollmentDataConsolidated$`Enr Cy C8`
```

```
basicEnrollmentDataConsolidated$`Enr Cy C1` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C2` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C3` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C4` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C5` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C6` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C7` <- NULL
basicEnrollmentDataConsolidated$`Enr Cy C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_G_c_total <-
basicEnrollmentDataConsolidated$`Enr G C1` +
  basicEnrollmentDataConsolidated$`Enr G C2` +
  basicEnrollmentDataConsolidated$`Enr G C3` +
  basicEnrollmentDataConsolidated$`Enr G C4` +
  basicEnrollmentDataConsolidated$`Enr G C5` +
  basicEnrollmentDataConsolidated$`Enr G C6` +
  basicEnrollmentDataConsolidated$`Enr G C7` +
  basicEnrollmentDataConsolidated$`Enr G C8`
```

```
basicEnrollmentDataConsolidated$`Enr G C1` <- NULL
basicEnrollmentDataConsolidated$`Enr G C2` <- NULL
basicEnrollmentDataConsolidated$`Enr G C3` <- NULL
basicEnrollmentDataConsolidated$`Enr G C4` <- NULL
basicEnrollmentDataConsolidated$`Enr G C5` <- NULL
basicEnrollmentDataConsolidated$`Enr G C6` <- NULL
basicEnrollmentDataConsolidated$`Enr G C7` <- NULL
basicEnrollmentDataConsolidated$`Enr G C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_DIS_B_total <-
basicEnrollmentDataConsolidated$`Enr Dis B C1` +
  basicEnrollmentDataConsolidated$`Enr Dis B C2` +
  basicEnrollmentDataConsolidated$`Enr Dis B C3` +
  basicEnrollmentDataConsolidated$`Enr Dis B C4` +
  basicEnrollmentDataConsolidated$`Enr Dis B C5` +
```

```
basicEnrollmentDataConsolidated$`Enr Dis B C6` +  
basicEnrollmentDataConsolidated$`Enr Dis B C7` +  
basicEnrollmentDataConsolidated$`Enr Dis B C8`
```

```
basicEnrollmentDataConsolidated$`Enr Dis B C1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis B C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_DIS_G_total <-  
basicEnrollmentDataConsolidated$`Enr Dis G C1` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C2` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C3` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C4` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C5` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C6` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C7` +  
  basicEnrollmentDataConsolidated$`Enr Dis G C8`
```

```
basicEnrollmentDataConsolidated$`Enr Dis G C1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C7` <- NULL  
basicEnrollmentDataConsolidated$`Enr Dis G C8` <- NULL
```

```
basicEnrollmentDataConsolidated$Enr_Med1_total <-  
basicEnrollmentDataConsolidated$`Enr Med1 1` +  
  basicEnrollmentDataConsolidated$`Enr Med1 2` +  
  basicEnrollmentDataConsolidated$`Enr Med1 3` +  
  basicEnrollmentDataConsolidated$`Enr Med1 4` +  
  basicEnrollmentDataConsolidated$`Enr Med1 5` +  
  basicEnrollmentDataConsolidated$`Enr Med1 6` +  
  basicEnrollmentDataConsolidated$`Enr Med1 7`
```

```
basicEnrollmentDataConsolidated$`Enr Med1 1` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 2` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 3` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 4` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 5` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 6` <- NULL  
basicEnrollmentDataConsolidated$`Enr Med1 7` <- NULL
```

```

basicEnrollmentDataConsolidated$Enr_Med2_total <-
basicEnrollmentDataConsolidated$`Enr Med2 1` +
  basicEnrollmentDataConsolidated$`Enr Med2 2` +
  basicEnrollmentDataConsolidated$`Enr Med2 3` +
  basicEnrollmentDataConsolidated$`Enr Med2 4` +
  basicEnrollmentDataConsolidated$`Enr Med2 5` +
  basicEnrollmentDataConsolidated$`Enr Med2 6` +
  basicEnrollmentDataConsolidated$`Enr Med2 7`

basicEnrollmentDataConsolidated$`Enr Med2 1` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 2` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 3` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 4` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 5` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 6` <- NULL
basicEnrollmentDataConsolidated$`Enr Med2 7` <- NULL

basicEnrollmentDataConsolidated$Enr_Med3_total <-
basicEnrollmentDataConsolidated$`Enr Med3 1` +
  basicEnrollmentDataConsolidated$`Enr Med3 2` +
  basicEnrollmentDataConsolidated$`Enr Med3 3` +
  basicEnrollmentDataConsolidated$`Enr Med3 4` +
  basicEnrollmentDataConsolidated$`Enr Med3 5` +
  basicEnrollmentDataConsolidated$`Enr Med3 6` +
  basicEnrollmentDataConsolidated$`Enr Med3 7`

basicEnrollmentDataConsolidated$`Enr Med3 1` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 2` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 3` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 4` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 5` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 6` <- NULL
basicEnrollmentDataConsolidated$`Enr Med3 7` <- NULL

basicEnrollmentDataConsolidated$`Gerup Py1` <- NULL
basicEnrollmentDataConsolidated$`Gerup Py2` <- NULL

basicEnrollmentDataConsolidated$`Nerup Py1` <- NULL
basicEnrollmentDataConsolidated$`Nerup Py2` <- NULL

basicEnrollmentDataConsolidated$`Gerp Py1` <- NULL
basicEnrollmentDataConsolidated$`Gerp Py2` <- NULL

basicEnrollmentDataConsolidated$`Nerp Py1` <- NULL
basicEnrollmentDataConsolidated$`Nerp Py2` <- NULL

basicEnrollmentDataConsolidated$Rep_C_total <-
basicEnrollmentDataConsolidated$`Rep C1` +
  basicEnrollmentDataConsolidated$`Rep C2` +

```

```

basicEnrollmentDataConsolidated$`Rep C3` +
basicEnrollmentDataConsolidated$`Rep C4` +
basicEnrollmentDataConsolidated$`Rep C5` +
basicEnrollmentDataConsolidated$`Rep C6` +
basicEnrollmentDataConsolidated$`Rep C7` +
basicEnrollmentDataConsolidated$`Rep C8`

basicEnrollmentDataConsolidated$`Rep C1` <- NULL
basicEnrollmentDataConsolidated$`Rep C2` <- NULL
basicEnrollmentDataConsolidated$`Rep C3` <- NULL
basicEnrollmentDataConsolidated$`Rep C4` <- NULL
basicEnrollmentDataConsolidated$`Rep C5` <- NULL
basicEnrollmentDataConsolidated$`Rep C6` <- NULL
basicEnrollmentDataConsolidated$`Rep C7` <- NULL
basicEnrollmentDataConsolidated$`Rep C8` <- NULL

alldataconsolidated <-
merge(basicDataConsolidated,basicSchoolDataConsolidated,by.x=c('distcd','year',
', 'distname', 'statename', 'statecd'),by.y=c('distcd','year','distname','staten
ame','statecd'))

alldataconsolidated[,6:57] <- factorsNumeric(alldataconsolidated[,6:57])

write.csv(alldataconsolidated,file = "mergeddata1.csv")

# replaces na with '0'
alldataconsolidated[is.na(alldataconsolidated)] <- 0
data1 <- cor(alldataconsolidated[,6:57])
basicEnrollmentDataConsolidated$statecd <-
basicEnrollmentDataConsolidated$Statecd
basicEnrollmentDataConsolidated$statename <-
basicEnrollmentDataConsolidated$`State Name`
alldataconsolidated_2 <-
merge(basicEnrollmentDataConsolidated,basicTeacherdataConsolidated,
      by.x = c('Year','statename','distname'),
      by.y = c('Year','statename','distname'))

alldataconsolidated_2[,7:84] <- factorsNumeric(alldataconsolidated_2[,7:84])

#Unnecessary data
alldataconsolidated_2$`Gerp Cy` <- NULL
alldataconsolidated_2$`Gerup Cy` <- NULL
alldataconsolidated_2$`Nerp Cy` <- NULL
alldataconsolidated_2$`Nerup Cy` <- NULL
data <- cor(alldataconsolidated_2[,7:80])

```

```

##due to multi collinearity we are removing some fields
alldataconsolidated_2$`Sc Enrup Cy` <- NULL
alldataconsolidated_2$`Scg Enrp Cy` <- NULL
alldataconsolidated_2$`Scg Enrup Cy` <- NULL
data <- cor(alldataconsolidated_2[,7:77])
alldataconsolidated_2$`Grossness Up` <- NULL
alldataconsolidated_2$`Pc Girls` <- NULL
data <- cor(alldataconsolidated_2[,7:75])

alldataConsolidated_final <- merge(alldataconsolidated,alldataconsolidated_2,
                                   by.x = c('year','statename','distname')
                                   ,by.y = c('Year','statename','distname'))

alldataConsolidated_final$statedcd.x <- NULL
alldataConsolidated_final$statedcd.y <- NULL
alldataConsolidated_final$distcd.x <- NULL
alldataConsolidated_final$distcd.y <- NULL
alldataConsolidated_final$`State Name` <- NULL
alldataConsolidated_final[,6:124] <-
factorsNumeric(alldataConsolidated_final[,6:124])

alldataConsolidated_final$sdg_total <- alldataConsolidated_final$`sdg 1`+
  alldataConsolidated_final$`sdg 2`+
  alldataConsolidated_final$`sdg 3`+
  alldataConsolidated_final$`sdg 4`+
  alldataConsolidated_final$`sdg 5`+
  alldataConsolidated_final$`sdg 6`+
  alldataConsolidated_final$`sdg 7`

alldataConsolidated_final$`sdg 1` <- NULL
alldataConsolidated_final$`sdg 2` <- NULL
alldataConsolidated_final$`sdg 3` <- NULL
alldataConsolidated_final$`sdg 4` <- NULL
alldataConsolidated_final$`sdg 5` <- NULL
alldataConsolidated_final$`sdg 6` <- NULL
alldataConsolidated_final$`sdg 7` <- NULL

alldataConsolidated_final$t1m_total <- alldataConsolidated_final$`t1m 1`+
  alldataConsolidated_final$`t1m 2`+
  alldataConsolidated_final$`t1m 3`+
  alldataConsolidated_final$`t1m 4`+
  alldataConsolidated_final$`t1m 5`+
  alldataConsolidated_final$`t1m 6`+
  alldataConsolidated_final$`t1m 7`

alldataConsolidated_final$`t1m 1` <- NULL
alldataConsolidated_final$`t1m 2` <- NULL
alldataConsolidated_final$`t1m 3` <- NULL

```

```

alldataConsolidated_final$`t1m 4` <- NULL
alldataConsolidated_final$`t1m 5` <- NULL
alldataConsolidated_final$`t1m 6` <- NULL
alldataConsolidated_final$`t1m 7` <- NULL
alldataConsolidated_final$Statecd <- NULL

```

```

colSums(is.na(alldataConsolidated_final))

```

```

##          year          statename          distname
##          0              0              0
##          distcd          statecd          blocks
##          0              0              0
##          clusters        villages        totschools
##          0              0              0
##          totpopulation    p_urb_pop        sexratio
##          0              0              0
##          growthrate      p_sc_pop         p_st_pop
##          0              0              0
##          overall_lit     female_lit       cls1 school
##          0              0              0
##          tch1 school      gtoilet sch      water sch
##          0              0              0
##          enr stch sch     no fem sch      sch 50enr
##          0              0              0
##          tot cls         cls good         cls major
##          0              0              0
##          cls minor       cls other        schgovt_total
##          0              0              0
##          schpvt_total    sch_r_govt_total  sch_r_pvt_total
##          0              0              0
##          sch since 2003 1_total    kitshed_total    btoilet sch_total
##          0              0              0
##          electric sch_total    computer sch_total    mdm_total
##          0              0              0
##          smc_total           sch_un_total           books_total
##          0              0              0
##          uniform_total        Sc Enrp Cy           St Enrp Cy
##          0              0              0
##          Stg Enrp Cy         St Enrup Cy           Stg Enrup Cy
##          0              0              0
##          Pc Girls1          Pc Girls2           Pc Girls3
##          0              0              0
##          Pc Girls4          Pc Girls5           Grossness P
##          0              0              0
##          Muslim P           Muslim Up           Muslim G P
##          0              0              0
##          Muslim G Up        Obc P              Obc Up
##          0              0              0
##          Obc G P           Obc G Up           Enr_Govt_total
##          0              0              0

```


##	Enr_Pvt_total	Enr_Govt_R_total	Enr_R_Pvt_total
##	0	0	0
##	Enr_py4_c1_total	Enr_py3_c1_total	Enr_py2_c1_total
##	0	0	0
##	Enr_Py1_c1_total	Enr_Cy_c1_total	Enr_G_c_total
##	0	0	0
##	Enr_DIS_B_total	Enr_DIS_G_total	Enr_Med1_total
##	0	0	0
##	Enr_Med2_total	Enr_Med3_total	Rep_C_total
##	0	0	0
##	tch_bs_p	tch_s_p	tch_hs_p
##	0	0	0
##	tch_grad_p	tch_pgrad_p	tch_mph_p
##	0	0	0
##	prof_trn_tch_r	prof_trn_tch_p	days_nontch
##	0	0	0
##	tch_nontch	tch_govt_total	tch_pvt_total
##	0	0	0
##	tch_un_total	tch_bs_total	tch_s_total
##	0	0	0
##	tch_hs_total	tch_grad_total	tch_pgrad_total
##	0	0	0
##	tch_mph_total	tch_pd_total	tch_m_total
##	0	0	0
##	tch_f_total	tch_nr_total	tch_m_p_total
##	0	0	0
##	tch_f_p_total	tch_sc_m_total	tch_sc_f_total
##	0	0	0
##	tch_st_m_total	tch_st_f_total	trn_tch_m_total
##	0	0	0
##	trn_tch_f_total	sdg_total	t1m_total
##	0	0	0

no NAs are present

#write.csv(alldataConsolidated_final,file = "final_data.csv")