HH Class Sorting

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```
#set working directory
setwd("C:/Users/EMMANUEL/Documents/my projects")
#load readxl function
library(readxl)
#Import excel dataset
excel_sheets("listalphaorder2021.xlsx")
## [1] "Sheet1"
read_excel("listalphaorder2021.xlsx")
## New names:
## * '' -> ...1
## * ' ' -> ...2
## * '' -> ...4
## * ' ' -> ...5
## * '' -> ...6
## # A tibble: 423 x 6
                           'HONEY HOME CHILDREN'S NUR. AND~ ...4
##
      ...1 ...2
                                                                      ...5
##
      <chr> <chr>
                           <chr>>
                                                              <chr>
                                                                      <chr>
                                                                              <chr>
  1 <NA> <NA>
                           11 NURU ONIWO ST. AGUDA SURULER~ <NA>
                                                                              <NA>
##
                                                                      <NA>
  2 <NA>
           <NA>
                           <NA>
                                                              <NA>
                                                                      <NA>
                                                                              <NA>
##
##
    3 <NA>
           <NA>
                           LIST OF PUPILS FOR 1st TERM 202~ <NA>
                                                                      <NA>
                                                                              <NA>
##
   4 <NA>
           <NA>
                           <NA>
                                                              <NA>
                                                                      <NA>
                                                                              <NA>
   5 <NA>
           <NA>
                           <NA>
                                                              <NA>
                                                                      <NA>
                                                                              <NA>
##
  6 S/No NAME
                           CLASS
                                                              SCHOLA~ ON REB~ COMPUT~
   7 1
            ABAH CHIAMAKA NURSERY 2A -- CHIOMA
                                                                      <NA>
                                                                              KN0001~
            ABAH OGOCHUKWU PRIMARY 3C -- 00
## 8 2
                                                              NA
                                                                      <NA>
                                                                              BS0002~
            ADEBAYO AMIRA~ PRIMARY 5D -- 00
                                                              NA
                                                                      <NA>
                                                                              BS0001~
## 10 4
            ADEBOWALE OLA~ PRIMARY 5B -- ENIONG
                                                                      <NA>
                                                                              BS0001~
                                                              NA
## # ... with 413 more rows
alphaorderlist <- read_excel("listalphaorder2021.xlsx", skip = 8)</pre>
alphaorderlist
```

A tibble: 417 x 6

```
'S/No' NAME
                                              SCHOLARSHIP 'ON REBATE?' 'COMPUTER No'
##
                               CLASS
##
       <dbl> <chr>
                               <chr>>
                                              <chr>>
                                                           <lgl>
                                                                         <chr>
##
   1
           1 ABAH CHIAMAKA
                               NURSERY 2A --~ NA
                                                                        KN0001820
           2 ABAH OGOCHUKWU
                              PRIMARY 3C --~ NA
##
    2
                                                           NA
                                                                        BS0002110
##
           3 ADEBAYO AMIRAT ~ PRIMARY 5D --~ NA
                                                           NA
                                                                        BS0001910
##
   4
           4 ADEBOWALE OLAOL~ PRIMARY 5B --~ NA
                                                           NA
                                                                        BS0001871
           5 ADELEKE ADEDAYO~ PRIMARY 5C --~ NA
                                                                        BS0001842
##
                                                           NA
                               PRIMARY 6A --~ NA
           6 ADESANYA DAVID
##
   6
                                                           NA
                                                                        BS0001775
##
    7
           7 ADESOYE IBRAHEEM PRIMARY 1A --~ <NA>
                                                           NA
                                                                        BS0002221
##
   8
           8 ADETUNMBI DEMIL~ PRIMARY 5A --~ NA
                                                           NA
                                                                        BS0001900
   9
           9 ADETUNMBI FUNMI~ PRIMARY 3A --~ NA
                                                           NA
                                                                        BS0002038
          10 ADEWOLE DAVID
                               PRIMARY 6C --~ NA
                                                           NA
                                                                        BS0001735
## 10
## # ... with 407 more rows
#Load libraries
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
library(tidyr)
library(stringr)
#rename serial number column
alphaorderlist <- alphaorderlist %>% rename(s_no = 'S/No')
#separate the class teachers from the class
donn <- alphaorderlist %>%
  separate(CLASS, into = c("class", "teacher"), sep = "--")
donn
## # A tibble: 417 x 7
##
       s_no NAME
                           class
                                     teacher
                                              SCHOLARSHIP 'ON REBATE?'
                                                                        'COMPUTER No'
      <dbl> <chr>
##
                           <chr>
                                     <chr>>
                                              <chr>
                                                           <lgl>
                                                                         <chr>
##
          1 ABAH CHIAMAKA "NURSERY~ " CHIOM~ NA
                                                           NA
                                                                        KN0001820
    1
##
   2
          2 ABAH OGOCHUK~ "PRIMARY~ " 00"
                                              NA
                                                           NA
                                                                        BS0002110
##
          3 ADEBAYO AMIR~ "PRIMARY~ " 00"
                                              NA
                                                           NA
                                                                        BS0001910
##
   4
          4 ADEBOWALE OL~ "PRIMARY~ " ENION~ NA
                                                           NA
                                                                        BS0001871
   5
          5 ADELEKE ADED~ "PRIMARY~ " BAMID~ NA
##
                                                           NA
                                                                        BS0001842
##
          6 ADESANYA DAV~ "PRIMARY~ " AYO"
                                                                        BS0001775
                                                           NA
   7
          7 ADESOYE IBRA~ "PRIMARY~ " SHOGB~ <NA>
                                                                        BS0002221
##
                                                           NA
##
    8
          8 ADETUNMBI DE~ "PRIMARY~ " SALAM~ NA
                                                           NA
                                                                        BS0001900
  9
##
          9 ADETUNMBI FU~ "PRIMARY~ " OPARA" NA
                                                           NA
                                                                        BS0002038
         10 ADEWOLE DAVID "PRIMARY~ " 00"
                                                                        BS0001735
## 10
                                                           NA
## # ... with 407 more rows
```

```
#Remove class alphabets from classes
alphaorderclassonly <-donn %>%
  mutate(class = str remove(class, "[A-Z]\\s$"))
alphaorderclassonly
## # A tibble: 417 x 7
                                             SCHOLARSHIP 'ON REBATE?' 'COMPUTER No'
##
       s no NAME
                           class
                                   teacher
##
      <dbl> <chr>
                           <chr>
                                   <chr>>
                                              <chr>
                                                          <1g1>
                                                                       <chr>
##
   1
          1 ABAH CHIAMAKA NURSER~ " CHIOMA" NA
                                                          NA
                                                                       KN0001820
##
          2 ABAH OGOCHUKWU PRIMAR~ " 00"
                                             NA
                                                         NA
                                                                       BS0002110
## 3
          3 ADEBAYO AMIRA~ PRIMAR~ " OO"
                                             NA
                                                         NA
                                                                       BS0001910
## 4
          4 ADEBOWALE OLA~ PRIMAR~ " ENIONG" NA
                                                         NΑ
                                                                       BS0001871
## 5
          5 ADELEKE ADEDA~ PRIMAR~ " BAMIDE~ NA
                                                                       BS0001842
## 6
          6 ADESANYA DAVID PRIMAR~ " AYO"
                                                                       BS0001775
                                                         NΑ
## 7
         7 ADESOYE IBRAH~ PRIMAR~ " SHOGBE~ <NA>
                                                         NA
                                                                       BS0002221
## 8
          8 ADETUNMBI DEM~ PRIMAR~ " SALAMI" NA
                                                         NA
                                                                       BS0001900
## 9
          9 ADETUNMBI FUN~ PRIMAR~ " OPARA"
                                                         NA
                                                                       BS0002038
         10 ADEWOLE DAVID PRIMAR~ " 00"
## 10
                                             NA
                                                         NA
                                                                       BS0001735
## # ... with 407 more rows
alphaorderclassonly <- alphaorderclassonly %>%
 separate(NAME, into = c("Surname", "First_name", "Other_names"), sep = " ")
## Warning: Expected 3 pieces. Additional pieces discarded in 10 rows [71, 72, 73,
## 143, 182, 349, 381, 413, 414, 415].
## Warning: Expected 3 pieces. Missing pieces filled with 'NA' in 315 rows [1, 2,
## 4, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, ...].
alphaorderclassonly
## # A tibble: 417 x 9
       s no Surname First name Other names class teacher SCHOLARSHIP 'ON REBATE?'
##
      <dbl> <chr>
                               <chr>
                                           <chr> <chr>
                                                                      <1g1>
                    <chr>
                                                          <chr>
##
   1
          1 ABAH
                    CHIAMAKA
                               <NA>
                                           NURS~ " CHIO~ NA
                                                                      NA
                                                                      NA
##
  2
          2 ABAH
                    OGOCHUKWU <NA>
                                           PRIM~ " 00"
          3 ADEBAYO AMIRAT
                               OLATOKUNBO PRIM~ " 00"
                                                                      NA
                                           PRIM~ " ENIO~ NA
## 4
          4 ADEBOW~ OLAOLUWA
                               <NA>
                                                                      NA
                                           PRIM~ " BAMI~ NA
## 5
         5 ADELEKE ADEDAYO
                               ODINAKA
                                                                      NA
## 6
                               <NA>
                                           PRIM~ " AYO" NA
                                                                      NA
          6 ADESAN~ DAVID
                               <NA>
                                           PRIM~ " SHOG~ <NA>
  7
          7 ADESOYE IBRAHEEM
                                                                      NA
                                           PRIM~ " SALA~ NA
## 8
          8 ADETUN~ DEMILADE
                               <NA>
                                                                      NA
## 9
          9 ADETUN~ FUNMILADE
                               <NA>
                                           PRIM~ " OPAR~ NA
                                                                      NA
                                           PRIM~ " 00"
## 10
         10 ADEWOLE DAVID
                               < NA >
                                                         NA
                                                                      NA
## # ... with 407 more rows, and 1 more variable: 'COMPUTER No' <chr>
#check for distinct classes
alphaorderclassonly %>%
 count(class)
```

```
## # A tibble: 10 x 2
     class
##
      <chr>
               <int>
##
## 1 KG 1
                  7
## 2 KG 2
                  23
## 3 NURSERY 1
                  23
## 4 NURSERY 2
## 5 PRIMARY 1
                 51
## 6 PRIMARY 2
## 7 PRIMARY 3
                  59
## 8 PRIMARY 4
                  41
## 9 PRIMARY 5
                  75
## 10 PRIMARY 6
#gets the count of people whose surname appear more than once(they are most likely siblings)
same_surname <- alphaorderclassonly %>%
  count(Surname) %>%
 filter(n > 1) %>%
  arrange(desc(n))
same_surname
## # A tibble: 111 x 2
##
     Surname
##
      <chr>
                  <int>
## 1 OKAFOR
                     12
## 2 OKEKE
                      7
## 3 OKONKWO
## 4 ETONIRU
                      5
## 5 ENIKANLOGBON
                      4
## 6 NWACHUKWU
                      4
## 7 NWAOKOLO
## 8 NWODOH
                      4
## 9 OKOYE
                      4
## 10 OLUFEMI
## # ... with 101 more rows
#Creates a new column to initialize grouping
same_surname$groups <- NA</pre>
#Assigns numbers to the respective distinct surnames
same_surname$groups <- 1:nrow(same_surname)</pre>
same_surname
## # A tibble: 111 x 3
##
     Surname
                      n groups
##
      <chr>
                  <int> <int>
## 1 OKAFOR
                     12
                             1
## 2 OKEKE
                      7
                             2
## 3 OKONKWO
                      6
                             3
## 4 ETONIRU
                      5
                             4
## 5 ENIKANLOGBON
                      4
                             5
## 6 NWACHUKWU
                             6
## 7 NWAOKOLO
                      4
                             7
```

```
## 8 NWODOH
## 9 OKOYE
                               9
## 10 OLUFEMI
                              10
## # ... with 101 more rows
#sort into group a or b
same_surname$groups_alpha <- NA</pre>
i <- 1
for(i in same_surname$groups){
  if(same_surname$groups[i] %% 2 == 0){
    same_surname$groups_alpha[i] <- "group a"</pre>
  }else{
    same_surname$groups_alpha[i] <- "group b"</pre>
 }
  i <- i + 1
}
same_surname
## # A tibble: 111 x 4
##
      Surname
                       n groups groups_alpha
##
      <chr>
                   <int> <int> <chr>
##
   1 OKAFOR
                       12
                               1 group b
   2 OKEKE
                       7
                               2 group a
   3 OKONKWO
##
                        6
                               3 group b
##
   4 ETONIRU
                        5
                               4 group a
## 5 ENIKANLOGBON
                        4
                               5 group b
## 6 NWACHUKWU
                               6 group a
## 7 NWAOKOLO
                        4
                               7 group b
## 8 NWODOH
                        4
                               8 group a
## 9 OKOYE
                               9 group b
## 10 OLUFEMI
                              10 group a
## # ... with 101 more rows
#this shows(filters) the students with siblings
siblings <- alphaorderclassonly %>%
  filter(Surname %in% same_surname$Surname)
siblings
## # A tibble: 293 x 9
##
       s_no Surname First_name Other_names class teacher SCHOLARSHIP 'ON REBATE?'
##
      <dbl> <chr>
                     <chr>
                                <chr>
                                             <chr> <chr>
                                                           <chr>>
                                                                        <lgl>
##
    1
          1 ABAH
                    CHIAMAKA
                                <NA>
                                            NURS~ " CHIO~ NA
                                                                        NA
##
          2 ABAH
                    OGOCHUKWU
                                <NA>
                                            PRIM~ " 00"
                                                                        NA
##
          8 ADETUN~ DEMILADE
                                <NA>
                                            PRIM~ " SALA~ NA
                                                                        NA
##
    4
          9 ADETUN~ FUNMILADE
                                <NA>
                                            PRIM~ " OPAR~ NA
                                                                        NA
##
   5
         10 ADEWOLE DAVID
                                            PRIM~ " 00"
                                <NA>
                                                           NA
                                                                        NA
##
         11 ADEWOLE DORATHY
                                <NA>
                                            NURS~ " BETT~ NA
   7
         12 ADIEZE DAVID
                                            PRIM~ " OMOT~ <NA>
##
                                < NA >
                                                                        NΔ
##
    8
         13 ADIEZE FLOURISH
                                AMANDA
                                            NURS~ " BETT~ NA
                                                                        NA
   9
##
         15 AGIM
                    CHIMAMANDA <NA>
                                            PRIM~ " EMMA~ NA
                                                                        NA
## 10
         16 AGIM
                    PHILIP
                                <NA>
                                            PRIM~ " 00"
## # ... with 283 more rows, and 1 more variable: 'COMPUTER No' <chr>
```

```
#summing helps to know the total number of students in this category
sum(same_surname$n)
## [1] 293
#Join to assign the groups to the table that contains the names of children with siblings
same_surname_join_siblings <-inner_join(same_surname, siblings, by = "Surname")</pre>
same_surname_join_siblings
## # A tibble: 293 x 12
##
                 n groups groups_alpha s_no First_name Other_names class teacher
     Surname
      <chr> <int> <int> <chr>
                                   <dbl> <chr>
                                                       <chr>
##
                                                                   <chr> <chr>
## 1 OKAFOR
                        1 group b
                                       279 CHIBUNDO
                                                        <NA>
                                                                   PRIM~ " EKEO~
              12
## 2 OKAFOR
                                                                   PRIM~ " EKEO~
                12
                        1 group b
                                         280 CHUKWUAMA~ <NA>
## 3 OKAFOR
                12
                                         281 CHUKWUDIR~ <NA>
                                                                   PRIM~ " EMMA~
                        1 group b
             12
## 4 OKAFOR
                       1 group b
                                         282 DABELUCHU~ <NA>
                                                                   PRIM~ " BAMI~
## 5 OKAFOR 12
                                         283 EBUBE
                       1 group b
                                                       <NA>
                                                                   NURS~ " CHIO~
                                                       CHIMDUMEBI PRIM~ " OMOT~
## 6 OKAFOR 12
                       1 group b
                                         284 IGBO
## 7 OKAFOR
             12
                        1 group b
                                         285 KENECHUKWU <NA>
                                                                   PRIM~ " ODES~
              12
## 8 OKAFOR
                        1 group b
                                         286 NMASICHUK~ <NA>
                                                                   KG 2 " VIOL~
## 9 OKAFOR
                                                       <NA>
              12
                        1 group b
                                         287 SOMADINA
                                                                  PRIM~ " BAMI~
## 10 OKAFOR
                                         288 SOMTOCHUK~ <NA>
                                                                   PRIM~ " BAMI~
                12
                        1 group b
## # ... with 283 more rows, and 3 more variables: SCHOLARSHIP <chr>, 'ON
## # REBATE?' <lgl>, 'COMPUTER No' <chr>
#Gets the count of people who don't share surname
dif_surname <- alphaorderclassonly %>%
 count(Surname)%>%
 filter(n==1)
dif surname
## # A tibble: 124 x 2
##
     Surname
##
     <chr>
                <int>
## 1 ADEBAYO
## 2 ADEBOWALE
## 3 ADELEKE
## 4 ADESANYA
## 5 ADESOYE
## 6 AGBASI
## 7 AGU
## 8 AJADI
                    1
## 9 AJAYI
## 10 AKAKASIAKA
## # ... with 114 more rows
#Creates a new column to initialize grouping
dif_surname$groups <- NA</pre>
#Assigns numbers to the respective distinct surnames
dif_surname$groups <- 1:nrow(dif_surname)</pre>
```

dif surname

```
## # A tibble: 124 x 3
##
     Surname n groups
     <chr>
##
             <int> <int>
## 1 ADEBAYO
                 1
## 2 ADEBOWALE
                  1
## 3 ADELEKE
                  1
## 4 ADESANYA
                 1
## 5 ADESOYE
                  1
## 6 AGBASI
                  1
## 7 AGU
                  1
## 8 AJADI
                  1
## 9 AJAYI
                         9
                   1
## 10 AKAKASIAKA
                        10
                  1
## # ... with 114 more rows
#sort into group a or b
dif_surname$groups_alpha <- NA
i <- 1
for(i in dif surname$groups){
 if(dif_surname$groups[i] %% 2 == 0){
   dif_surname$groups_alpha[i] <- "group a"</pre>
 }else{
   dif_surname$groups_alpha[i] <- "group b"</pre>
 i <- i + 1
}
dif_surname
## # A tibble: 124 x 4
##
     Surname n groups groups_alpha
     <chr>
               <int> <int> <chr>
## 1 ADEBAYO
                1
                         1 group b
## 2 ADEBOWALE
                  1
                         2 group a
## 3 ADELEKE
                  1
                       3 group b
## 4 ADESANYA
                 1
                       4 group a
## 5 ADESOYE
                       5 group b
                  1
## 6 AGBASI
                  1
                       6 group a
## 7 AGU
                  1
                        7 group b
## 8 AJADT
                  1
                         8 group a
## 9 AJAYI
                  1
                         9 group b
                1
## 10 AKAKASIAKA
                        10 group a
## # ... with 114 more rows
#shows(filters) the students without siblings
no_siblings <- alphaorderclassonly %>%
 filter(Surname %in% dif_surname$Surname)
no_siblings
## # A tibble: 124 x 9
      s_no Surname First_name Other_names class teacher SCHOLARSHIP 'ON REBATE?'
##
     <dbl> <chr> <chr> <chr>
                                      <chr> <chr> <chr>
                                                               <1g1>
       3 ADEBAYO AMIRAT OLATOKUNBO PRIM~ " OO"
## 1
                                                   NA
                                                              NΑ
```

```
4 ADEBOW~ OLAOLUWA
                               <NA>
##
                                           PRIM~ " ENIO~ NA
                                                                     NA
##
  3
         5 ADELEKE ADEDAYO
                               ODTNAKA
                                           PRIM~ " BAMI~ NA
                                                                     NΑ
         6 ADESAN~ DAVID
##
                               <NA>
                                           PRIM~ " AYO" NA
                                                                     NA
         7 ADESOYE IBRAHEEM
                               <NA>
                                           PRIM~ " SHOG~ <NA>
## 5
                                                                     NΔ
##
   6
        14 AGBASI ZIKORAH
                               <NA>
                                           PRIM~ " OPAR~ NA
                                                                     NA
##
  7
        19 AGU
                    CHINEDU
                               <NA>
                                           PRIM~ " 00"
                                                                     NA
##
        20 AJADI
                   DEBORAH
                               <NA>
                                           PRIM~ " 00"
         21 AJAYI
                   ANJOLAOLU~ <NA>
                                           NURS~ " OGUN~ NA
                                                                     NΑ
## 9
## 10
         26 AKAKAS~ DOMINION
                               <NA>
                                           PRIM~ " OMOT~ <NA>
## # ... with 114 more rows, and 1 more variable: 'COMPUTER No' <chr>
```

#Join to assign the groups to the table that contains the names of children with no siblings
dif_surname_join_no_sibling <-inner_join(dif_surname, no_siblings, by = "Surname")
dif_surname_join_no_sibling</pre>

```
## # A tibble: 124 x 12
##
      Surname
                 n groups groups_alpha s_no First_name Other_names class teacher
      <chr>
                                      <dbl> <chr>
                                                        <chr>
##
            <int> <int> <chr>
                                                                    <chr> <chr>
## 1 ADEBAYO
                        1 group b
                                           3 AMIRAT
                                                        OLATOKUNBO PRIM~ " 00"
                 1
                                                                    PRIM~ " ENIO~
## 2 ADEBOW~
                                           4 OLAOLUWA
                                                        <NA>
                 1
                        2 group a
                        3 group b
## 3 ADELEKE
                 1
                                           5 ADEDAYO
                                                        ODINAKA
                                                                    PRIM~ " BAMI~
## 4 ADESAN~
                                                        <NA>
                                                                    PRIM~ " AYO"
                 1
                        4 group a
                                           6 DAVID
                                                                    PRIM~ " SHOG~
## 5 ADESOYE
                 1
                        5 group b
                                           7 IBRAHEEM
                                                        <NA>
## 6 AGBASI
                                                                    PRIM~ " OPAR~
                 1
                        6 group a
                                          14 ZIKORAH
                                                        <NA>
## 7 AGU
                                          19 CHINEDU
                                                        <NA>
                                                                    PRIM~ " 00"
                 1
                        7 group b
## 8 AJADI
                  1
                        8 group a
                                          20 DEBORAH
                                                         <NA>
                                                                    PRIM~ " 00"
                                                                    NURS~ " OGUN~
## 9 AJAYI
                  1
                        9 group b
                                          21 ANJOLAOLU~ <NA>
## 10 AKAKAS~
                 1
                       10 group a
                                          26 DOMINION
                                                         <NA>
                                                                    PRIM~ " OMOT~
## # ... with 114 more rows, and 3 more variables: SCHOLARSHIP <chr>, 'ON
## # REBATE?' <lgl>, 'COMPUTER No' <chr>
```

```
#Removing unwanted columns from the two tables
same_surname_join_siblings <- same_surname_join_siblings %>%
select(-n, -teacher, -SCHOLARSHIP, -'ON REBATE?', -'COMPUTER No')
same_surname_join_siblings
```

```
## # A tibble: 293 x 7
      Surname groups groups alpha s no First name
                                                     Other names class
               <int> <chr>
##
      <chr>
                                  <dbl> <chr>
                                                     <chr>
                                                                 <chr>
## 1 OKAFOR
                  1 group b
                                    279 CHIBUNDO
                                                     <NA>
                                                                 PRIMARY 2
## 2 OKAFOR
                                    280 CHUKWUAMANDA <NA>
                                                                 PRIMARY 2
                   1 group b
## 3 OKAFOR
                   1 group b
                                    281 CHUKWUDIRIM <NA>
                                                                 PRIMARY 4
## 4 OKAFOR
                                    282 DABELUCHUKWU <NA>
                                                                 PRIMARY 5
                  1 group b
## 5 OKAFOR
                                    283 EBUBE
                                                     <NA>
                                                                 NURSERY 2
                  1 group b
## 6 OKAFOR
                  1 group b
                                    284 IGBO
                                                     CHIMDUMEBI PRIMARY 1
## 7 OKAFOR
                   1 group b
                                    285 KENECHUKWU
                                                     <NA>
                                                                 PRIMARY 4
                                                                 KG 2
## 8 OKAFOR
                   1 group b
                                    286 NMASICHUKWU <NA>
## 9 OKAFOR
                                    287 SOMADINA
                                                     <NA>
                                                                 PRIMARY 5
                   1 group b
## 10 OKAFOR
                                    288 SOMTOCHUKWU <NA>
                                                                PRIMARY 5
                   1 group b
## # ... with 283 more rows
```

```
dif_surname_join_no_sibling <- dif_surname_join_no_sibling %>%
 select(-n, -teacher, -SCHOLARSHIP, -'ON REBATE?', -'COMPUTER No')
dif_surname_join_no_sibling
## # A tibble: 124 x 7
##
     Surname
                groups groups_alpha s_no First_name
                                                     Other_names class
##
      <chr>
                 <int> <chr>
                                    <dbl> <chr>
                                                      <chr>
                                                                  <chr>
## 1 ADEBAYO
                                      3 AMIRAT
                                                      OLATOKUNBO PRIMARY 5
                     1 group b
## 2 ADEBOWALE
                     2 group a
                                       4 OLAOLUWA
                                                      <NA>
                                                                  PRIMARY 5
## 3 ADELEKE
                                       5 ADEDAYO
                                                      ODINAKA
                                                                  PRIMARY 5
                     3 group b
## 4 ADESANYA
                     4 group a
                                       6 DAVID
                                                      <NA>
                                                                  PRIMARY 6
## 5 ADESOYE
                                       7 IBRAHEEM
                                                      <NA>
                                                                 PRIMARY 1
                     5 group b
                                                                 PRIMARY 3
## 6 AGBASI
                     6 group a
                                      14 ZIKORAH
                                                      <NA>
## 7 AGU
                     7 group b
                                       19 CHINEDU
                                                      <NA>
                                                                 PRIMARY 6
## 8 AJADI
                     8 group a
                                       20 DEBORAH
                                                      <NA>
                                                                 PRIMARY 3
                                       21 ANJOLAOLUWA <NA>
## 9 AJAYI
                                                                 NURSERY 1
                     9 group b
                                       26 DOMINION
                                                                 PRIMARY 1
## 10 AKAKASIAKA
                    10 group a
                                                      <NA>
## # ... with 114 more rows
#Joining the two tables
full_grouped_table <- full_join(same_surname_join_siblings, dif_surname_join_no_sibling)%>%
 select(-groups) %>%
   arrange(Surname)
## Joining, by = c("Surname", "groups", "groups alpha", "s no", "First name", "Other names", "class")
full_grouped_table
## # A tibble: 417 x 6
##
     Surname groups_alpha s_no First_name Other_names class
##
     <chr>
                            <dbl> <chr>
               <chr>
                                             <chr>
                                                         <chr>>
## 1 ABAH
                               1 CHIAMAKA
                                             <NA>
                                                        NURSERY 2
               group b
## 2 ABAH
                                2 OGOCHUKWU <NA>
              group b
                                                        PRIMARY 3
## 3 ADEBAYO group b
                                3 AMIRAT
                                             OLATOKUNBO PRIMARY 5
## 4 ADEBOWALE group a
                                             <NA>
                                4 OLAOLUWA
                                                        PRIMARY 5
## 5 ADELEKE
               group b
                                5 ADEDAYO
                                             ODINAKA
                                                        PRIMARY 5
## 6 ADESANYA group a
                                6 DAVID
                                             <NA>
                                                        PRIMARY 6
## 7 ADESOYE
               group b
                               7 IBRAHEEM
                                             <NA>
                                                        PRIMARY 1
                               8 DEMILADE
                                             <NA>
## 8 ADETUNMBI group a
                                                        PRIMARY 5
## 9 ADETUNMBI group a
                               9 FUNMILADE <NA>
                                                        PRIMARY 3
## 10 ADEWOLE
               group b
                              10 DAVID
                                             <NA>
                                                        PRIMARY 6
## # ... with 407 more rows
#Separating groups
group_a_pupils <- full_grouped_table %>%
 filter(groups_alpha == "group a")
group_a_pupils
## # A tibble: 204 x 6
##
     Surname groups_alpha s_no First_name
                                                 Other_names class
##
                            <dbl> <chr>
      <chr>
               <chr>
                                                 <chr>
                                                             <chr>>
```

```
PRIMARY 5
## 1 ADEBOWALE group a
                               4 OLAOLUWA
                                                <NA>
## 2 ADESANYA group a
                               6 DAVID
                                                <NA>
                                                           PRIMARY 6
                                                <NA>
## 3 ADETUNMBI group a
                              8 DEMILADE
                                                           PRIMARY 5
                              9 FUNMILADE
                                                           PRIMARY 3
## 4 ADETUNMBI group a
                                                <NA>
## 5 ADIEZE
             group a
                              12 DAVID
                                                <NA>
                                                           PRIMARY 1
## 6 ADIEZE
                             13 FLOURISH
                                                AMANDA
                                                          NURSERY 1
             group a
## 7 AGBASI
                             14 ZIKORAH
                                                <NA>
                                                          PRIMARY 3
              group a
## 8 AGODI
                             17 CHIMAMAKA
                                                <NA>
                                                          PRIMARY 2
               group a
             group a
## 9 AGODI
                             18 OLUEBUBECHUKWU <NA>
                                                          NURSERY 2
## 10 AJADI
                              20 DEBORAH
                                                <NA>
                                                           PRIMARY 3
              group a
## # ... with 194 more rows
group_b_pupils <- full_grouped_table %>%
 filter(groups_alpha == "group b")
group_b_pupils
## # A tibble: 213 x 6
##
     Surname groups_alpha s_no First_name Other_names class
##
      <chr> <chr> <dbl> <chr>
                                          <chr> <chr>
## 1 ABAH
                            1 CHIAMAKA
                                          <NA>
                                                     NURSERY 2
             group b
## 2 ABAH
                             2 OGOCHUKWU <NA>
                                                     PRIMARY 3
             group b
## 3 ADEBAYO group b
                            3 AMIRAT
                                          OLATOKUNBO PRIMARY 5
## 4 ADELEKE group b
                            5 ADEDAYO
                                          ODINAKA
                                                    PRIMARY 5
## 5 ADESOYE group b
                            7 IBRAHEEM <NA>
                                                    PRIMARY 1
## 6 ADEWOLE group b
                            10 DAVID
                                          <NA>
                                                    PRIMARY 6
                            11 DORATHY
                                          <NA>
                                                    NURSERY 1
## 7 ADEWOLE group b
## 8 AGIM
                            15 CHIMAMANDA <NA>
                                                    PRIMARY 4
             group b
## 9 AGIM
                            16 PHILIP
                                          <NA>
                                                     PRIMARY 5
             group b
## 10 AGU
             group b
                            19 CHINEDU
                                          <NA>
                                                     PRIMARY 6
## # ... with 203 more rows
#Filter for different class
kg_1_group_a <- group_a_pupils %>%
 filter(class == "KG 1")
kg_1_group_a
## # A tibble: 3 x 6
    Surname groups_alpha s_no First_name Other_names class
    <chr> <chr>
                      <dbl> <chr>
                                         <chr>
                                                    <chr>>
                                                    KG 1
## 1 ETONIRU group a
                         125 EMMANUELLA <NA>
                         333 FOLAKEMI
## 2 OLUFEMI group a
                                         GRACE
                                                    KG 1
## 3 OMOSULE group a
                         338 FEYISOLA
                                         <NA>
                                                    KG 1
kg_1_group_b <- group_b_pupils %>%
 filter(class == "KG 1")
kg_1_group_b
## # A tibble: 4 x 6
##
    Surname groups_alpha s_no First_name
                                             Other names
                                                           class
    <chr> <chr>
                        <dbl> <chr>
                                             <chr>
                                                           <chr>
## 1 ANYANWU group b
                          50 OLUEBUBECHUKWU MELODY
                                                           KG 1
## 2 MAHA group b
                                             AMSHAL
                                                           KG 1
                         182 -
```

```
## 3 OROKO group b
                             356 MALEEK
                                                  <NA>
                                                                  KG 1
## 4 SOKUNBI group b
                             380 SHARON
                                                  ATOHUNSELOLUWA KG 1
kg_2_group_a <- group_a_pupils %>%
  filter(class == "KG 2")
kg_2_group_a
## # A tibble: 9 x 6
     Surname groups_alpha s_no First_name Other_names
                                                              class
##
     <chr>
               <chr>
                                                              <chr>
                              35 CHINAZA
                                               <NA>
                                                              KG 2
## 1 AMAEFULE group a
## 2 EJIKEME group a
                              99 CHIZARAM
                                               <NA>
                                                              KG 2
                           141 OLAOLUWA <NA>
168 CHIMAMANDA MICHELLE
196 DANIELLE CHIBUSOMMA
252 EBUBE <NA>
303 JASON <NA>
358 ESTHER ONYINYECHUR
## 3 FAWEMO
               group a
                                                              KG 2
## 4 JOHNSON group a
                                                              KG 2
                                               CHIBUSOMMA
## 5 NGWU
               group a
                                                              KG 2
## 6 OCHIOGU group a
                                                              KG 2
## 7 OKONGWU group a
                                                              KG 2
## 8 OSADUME group a
                                               ONYINYECHUKWU KG 2
                             414 -
## 9 VINCENT group a
                                                              KG 2
                                               UKAIWE
#and so on
```

R Markdown