# Lab 2

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## More Basic R Skills

• Create a function my\_reverse which takes as required input a vector v and returns the vector in reverse where the first entry is the last entry, etc. No function calls are allowed inside your function otherwise that would defeat the purpose of the exercise! (Yes, there is a base R function that does this called rev). Use head on v and tail on my\_reverse(v) to verify it works.

```
my_reverse = function(v){
    v_rev = rep(NA, times = length(v))
    for(i in length(v):1){
        v_rev[length(v)-i+1] = v[i]
    }
    v_rev
}
v_rev
```

```
## [1] 10 9 8 7 6 5 4 3 2 1
```

Create a function flip\_matrix which takes as required input a matrix, an argument dim\_to\_rev that
returns the matrix with the rows in reverse order or the columns in reverse order depending on the
dim\_to\_rev argument. Let the default be the dimension of the matrix that is greater. If the number
of rows

```
flip_matrix = function(X, dim_to_rev = NULL){
  if(is.null(dim_to_rev)){
    dim_to_rev = ifelse(nrow(X) >= ncol(X), "rows", "cols")
  if(dim_to_rev=="rows"){
    X[my reverse(1:nrow(X)), ]
  else if (dim_to_rev == "cols"){
    X[, my_reverse(1:ncol(X))]
  }
  else{
    stop("Illegal arg")
}
X = matrix(rnorm(100), nrow = 25)
X
##
                [,1]
                             [,2]
                                         [,3]
```

```
## [,1] [,2] [,3] [,4]
## [1,] 0.66768849 0.49503385 1.89425415 -1.697548770
## [2,] 0.86596784 0.28250466 -1.52179388 0.966202169
```

```
[3,] -0.33254435  0.74350654 -0.23510231  0.636169836
##
   [4,] 2.40733133 -0.27905310 -1.62414588 -1.763659457
   [5,] -0.05303499 0.19478734 -0.61270033 -0.325983754
   [6,] 0.23196014 1.10206244
##
                              0.36680424
                                          0.836411232
##
   [7,] -0.04765816 -0.49450656
                              0.13945880 -1.363661107
                                          0.005142777
   [8,] -0.82447382 1.74017655 -0.75586529
##
   [9,] -2.46590254 1.42870757
                              1.22534290
                                          1.317647152
## [10,] 0.83880591 0.33868476
                              1.38755732
                                          0.918087398
  [11,] -1.01245624 -0.13504161 -0.47212349 -0.181105287
  [12,] -1.13952652 0.79898170 0.37506579
                                          3.481671300
  [13,] -1.24993505 -0.55520021 1.94596236
                                          0.177427548
  ## [15,] 0.90463695 -0.24574371 -0.30325466 -0.538877987
## [16,] 1.74868261 3.55782182 0.36902212 -1.412874973
## [17,] -1.18988661 -1.75312663 -2.38742718 -0.227228041
## [18,] -0.10526049 -0.10278101 1.08069974 -0.823810574
## [19,] -0.45727991 -0.54415710 -0.19808587 -0.729202591
## [20,] -0.98192281 -0.94116850 -0.82464070 0.564155859
## [21,] 0.94583571 -0.89364151 -0.08603202 0.626823205
## [22,] -1.24975334 0.59691282 -2.35513971 -0.743824111
## [23,] 1.08255152 -0.35265519 0.07247241 0.600213107
## [24,] -0.56542903 -0.84050537 0.61309112 0.245175782
## [25,] 0.67974793 0.07994666 -0.56911414 -0.501881058
flip_matrix(X, dim_to_rev = "cols")
                           [,2]
##
                [,1]
                                      [,3]
                                                 [,4]
##
   [1,] -1.697548770 1.89425415
                                0.49503385
                                           0.66768849
##
   [2,] 0.966202169 -1.52179388
                                0.28250466 0.86596784
   [3,] 0.636169836 -0.23510231
                                0.74350654 -0.33254435
##
   [4,] -1.763659457 -1.62414588 -0.27905310 2.40733133
   [5,] -0.325983754 -0.61270033
                                0.19478734 -0.05303499
   [6,] 0.836411232 0.36680424
                                1.10206244 0.23196014
   [8,] 0.005142777 -0.75586529
                               1.74017655 -0.82447382
        1.317647152
   [9,]
                    1.22534290
                                1.42870757 -2.46590254
## [10,] 0.918087398 1.38755732 0.33868476 0.83880591
  [11,] -0.181105287 -0.47212349 -0.13504161 -1.01245624
## [12,] 3.481671300 0.37506579 0.79898170 -1.13952652
## [13,] 0.177427548 1.94596236 -0.55520021 -1.24993505
## [14,] -0.181840360 -0.85870311 1.53815032 -2.21827435
## [15,] -0.538877987 -0.30325466 -0.24574371 0.90463695
## [16,] -1.412874973 0.36902212 3.55782182 1.74868261
## [17,] -0.227228041 -2.38742718 -1.75312663 -1.18988661
## [19,] -0.729202591 -0.19808587 -0.54415710 -0.45727991
## [20,] 0.564155859 -0.82464070 -0.94116850 -0.98192281
## [21,] 0.626823205 -0.08603202 -0.89364151 0.94583571
## [22,] -0.743824111 -2.35513971 0.59691282 -1.24975334
## [23,] 0.600213107 0.07247241 -0.35265519 1.08255152
## [24,] 0.245175782 0.61309112 -0.84050537 -0.56542903
## [25,] -0.501881058 -0.56911414 0.07994666 0.67974793
```

• Create a list named my\_list with keys "A", "B", ... where the entries are arrays of size 1, 2 x 2, 3 x 3 x 3, etc. Fill the array with the numbers 1, 2, 3, etc. Make 8 entries according to this sequence.

```
my_list = list()
array = LETTERS[1:8]

for(i in 1:8){
   my_list[[array[i]]] = array(1: i, dim = c(rep(i, times = i)))
  }
}
```

Run the following code:

```
lapply(my_list, object.size)
```

```
## $A
## 224 bytes
##
## $B
## 232 bytes
##
## $C
## 352 bytes
##
## $D
## 1248 bytes
##
## $E
## 12744 bytes
##
## $F
## 186864 bytes
##
## $G
## 3294416 bytes
##
## $H
## 67109104 bytes
```

Use **?object.size** to read about what these functions do. Then explain the output you see above. For the later arrays, does it make sense given the dimensions of the arrays?

?object.size #The output above shows an estimate of the memory being stored #Yes, since later arrays that use more bytes

Now cleanup the namespace by deleting all stored objects and functions:

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

### A little about strings

??lorem

• Use the strsplit function and sample to put the sentences in the string lorem below in random order. You will also need to manipulate the output of strsplit which is a list. You may need to learn basic concepts of regular expressions.

```
lorem = "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi posuere varius volutpat. Morbi
?sample
?strsplit
```

```
lorem_split = unlist(strsplit(lorem, split = "[.]"))
lorem_split[sample(1:length(lorem_split))]
    [1] " Mauris at sodales augue"
##
##
    [2] " Morbi faucibus ligula id massa ultricies viverra"
##
    [3] " Morbi posuere varius volutpat"
##
   [4] "Lorem ipsum dolor sit amet, consectetur adipiscing elit"
   [5] " Aenean nulla ante, iaculis sed vehicula ac, finibus vel arcu"
##
   [6] " Curabitur est augue, congue eget quam in, scelerisque semper magna"
##
    [7] " Cras suscipit id nibh lacinia elementum"
##
##
   [8] " Integer dapibus mi lectus, eu posuere arcu ultricies in"
  [9] " Donec vehicula sagittis nisi non semper"
## [10] " Donec at tempor erat"
## [11] " "
```

You have a set of names divided by gender (M / F) and generation (Boomer / GenX / Millenial):

- M / Boomer "Theodore, Bernard, Gene, Herbert, Ray, Tom, Lee, Alfred, Leroy, Eddie"
- M / GenX "Marc, Jamie, Greg, Darryl, Tim, Dean, Jon, Chris, Troy, Jeff"
- M / Millennial "Zachary, Dylan, Christian, Wesley, Seth, Austin, Gabriel, Evan, Casey, Luis"
- F / Boomer "Gloria, Joan, Dorothy, Shirley, Betty, Dianne, Kay, Marjorie, Lorraine, Mildred"
- F / GenX "Tracy, Dawn, Tina, Tammy, Melinda, Tamara, Tracey, Colleen, Sherri, Heidi"
- F / Millennial "Samantha, Alexis, Brittany, Lauren, Taylor, Bethany, Latoya, Candice, Brittney, Cheyenne"

Create a list-within-a-list that will intelligently store this data.

"Dylan"

"Evan"

"Joan"

##

##

##

## ## ## \$F

##

## \$M\$Millenial [1] "Zachary"

## \$F\$Boomer

[7] "Gabriel"

[1] "Gloria"

[7] "Kay"

```
#strsplit("Theodore, Bernard, Gene, Herbert, Ray, Tom, Lee, Alfred, Leroy, Eddie", split = ", ")[[1]]
name_type = list("M" = list(), "F" = list())
name type$M$Boomer = strsplit("Theodore, Bernard, Gene, Herbert, Ray, Tom, Lee, Alfred, Leroy, Eddie",
name_type$M$GenX = strsplit("Marc, Jaime, Greg, Darryl, Tim, Dean, Jon, Chris, Troy, Jeff", split = ",
name_type$M$Millenial = strsplit("Zachary, Dylan, Christian, Wesley, Seth, Austin, Gabriel, Evan, Casey
name_type$F$Boomer = strsplit("Gloria, Joan, Dorothy, Shirley, Betty, Dianne, Kay, Marjorie, Lorraine,
name_type$F$GenX = strsplit("Tracy, Dawn, Tina, Tammy, Melinda, Tamara, Tracey, Colleen, Sherri, Heidi"
name type$F$Millenial = strsplit("Samantha, Alexis, Brittany, Lauren, Taylor, Bethany, Latoya, Candice,
name_type
## $M
## $M$Boomer
    [1] "Theodore" "Bernard"
                              "Gene"
                                          "Herbert"
                                                     "Ray"
                                                                "Tom"
##
   [7] "Lee"
                   "Alfred"
                              "Leroy"
                                          "Eddie"
##
## $M$GenX
    [1] "Marc"
                 "Jaime"
                          "Greg"
                                    "Darryl" "Tim"
                                                      "Dean"
                                                               "Jon"
                                                                        "Chris"
##
##
    [9] "Troy"
                 "Jeff"
```

"Seth"

"Austin"

"Dianne"

"Christian" "Wesley"

"Dorothy" "Shirley"

"Luis"

"Casey"

```
##
## $F$GenX
    [1] "Tracy"
                             "Tina"
##
                   "Dawn"
                                        "Tammy"
                                                  "Melinda" "Tamara"
    [8] "Colleen" "Sherri"
                             "Heidi"
##
##
## $F$Millenial
    [1] "Samantha" "Alexis"
                               "Brittany" "Lauren"
                                                       "Tavlor"
                                                                  "Bethany"
    [7] "Latoya"
                    "Candice"
                               "Brittney" "Cheyenne"
```

#### Dataframe creation

Imagine you are running an experiment with many manipulations. You have 14 levels in the variable "treatment" with levels a, b, c, etc. For each of those manipulations you have 3 submanipulations in a variable named "variation" with levels A, B, C. Then you have "gender" with levels M / F. Then you have "generation" with levels Boomer, GenX, Millenial. Then you will have 6 runs per each of these groups. In each set of 6 you will need to select a name without duplication from the appropriate set of names (from the last question). Create a data frame with columns treatment, variation, gender, generation, name and y that will store all the unique unit information in this experiment. Leave y empty because it will be measured as the experiment is executed.

```
n = 14 * 3 * 2 * 3 * 10

#X = data.frame(treatment = rep(NA, n),
# ...

X = data.frame(treatment = rep(NA, n), variation = rep(NA, n), gender = rep(NA, n), generation = rep(NA

X$treatment = rep(letters[1:14], each = n/14)

X$variation = rep(rep(LETTERS[1:3], each = n/14/3), times = 14)

X$gender = rep(rep(c("M", "F"), each = n/14/3/2), times = 14*3)

X$generation = rep(rep(c("Boomer", "GenX", "Millenial"), each = n/14/3/2/3), times = 14*3*2)

X$name = rep(unlist(name_type), times = 14*3)
```

##		treatment	variation	gender	generation	name	У
##	1	a	Α	M	Boomer	Theodore	NA
##	2	a	Α	M	Boomer	Bernard	NA
##	3	a	Α	M	Boomer	Gene	NA
##	4	a	Α	M	Boomer	Herbert	NA
##	5	a	Α	M	Boomer	Ray	NA
##	6	a	Α	M	Boomer	Tom	NA
##	7	a	Α	M	Boomer	Lee	NA
##	8	a	Α	M	Boomer	Alfred	NA
##	9	a	Α	M	Boomer	Leroy	NA
##	10	a	Α	M	Boomer	Eddie	NA
##	11	a	Α	M	GenX	Marc	NA
##	12	a	Α	M	GenX	Jaime	NA
##	13	a	Α	M	GenX	Greg	NA
##	14	a	Α	M	GenX	Darryl	NA
##	15	a	Α	M	GenX	Tim	NA
##	16	a	Α	M	GenX	Dean	NA
##	17	a	Α	M	GenX	Jon	NA
##	18	a	Α	M	GenX	Chris	NA
##	19	a	Α	M	GenX	Troy	NA
##	20	a	Α	M	GenX	Jeff	NA
##	21	a	Α	M	Millenial	Zachary	NA
##	22	a	Α	M	Millenial	Dylan	NA
##	23	a	Α	M	Millenial	${\tt Christian}$	NA

##		a	Α	М	Millenial	Wesley	
##		a	A	М	Millenial	Seth	
	26	a	A	М	Millenial	Austin	
	27	a	A	М	Millenial	Gabriel	
	28	a	A	М	Millenial	Evan	
	29	a	A	М	Millenial	Casey	
	30	a	A	M	Millenial	Luis	
##	31	a	Α	F	Boomer	Gloria	
##	32	a	A	F	Boomer	Joan	
##	33	a	A	F	Boomer	Dorothy	
##	34	a	A	F	Boomer	Shirley	
##	35	a	Α	F	Boomer	Betty	
##	36	a	Α	F	Boomer	Dianne	
##	37	a	A	F	Boomer	Kay	
##	38	a	Α	F	Boomer	Marjorie	
##	39	a	A	F	Boomer	Lorraine	
	40	a	A	F	Boomer	Mildred	
##		a	Α	F	GenX	Tracy	
##		a	Α	F	GenX	Dawn	
##	43	a	Α	F	GenX	Tina	
##	44	a	Α	F	GenX	Tammy	NA
##	45	a	Α	F	GenX	Melinda	
##	46	a	Α	F	GenX	Tamara	
##	47	a	Α	F	GenX	Tracey	NA
##	48	a	Α	F	GenX	Colleen	
##	49	a	Α	F	GenX	Sherri	NA
##	50	a	Α	F	GenX	Heidi	NA
##	51	a	Α	F	Millenial	Samantha	NA
##	52	a	Α	F	Millenial	Alexis	NA
##	53	a	Α	F	Millenial	Brittany	NA
##	54	a	Α	F	Millenial	Lauren	NA
##	55	a	Α	F	Millenial	Taylor	NA
##	56	a	Α	F	Millenial	Bethany	NA
##	57	a	Α	F	Millenial	Latoya	NA
##	58	a	Α	F	Millenial	Candice	NA
##	59	a	Α	F	Millenial	Brittney	NA
##	60	a	Α	F	Millenial	Cheyenne	NA
##	61	a	В	М	Boomer	Theodore	NA
##	62	a	В	М	Boomer	Bernard	NA
##	63	a	В	М	Boomer	Gene	NA
##	64	a	В	М	Boomer	Herbert	NA
##	65	a	В	М	Boomer	Ray	NA
##	66	a	В	М	Boomer	Tom	NA
##	67	a	В	М	Boomer	Lee	NA
##	68	a	В	M	Boomer	Alfred	NA
##	69	a	В	М	Boomer	Leroy	NA
##	70	a	В	М	Boomer	Eddie	NA
##	71	a	В	М	${\tt GenX}$	Marc	NA
##	72	a	В	М	${\tt GenX}$	Jaime	NA
##	73	a	В	М	${\tt GenX}$	Greg	NA
	74	a	В	М	${\tt GenX}$	Darryl	NA
##	75	a	В	М	${\tt GenX}$	Tim	NA
##	76	a	В	М	${\tt GenX}$	Dean	NA
##	77	a	В	М	${\tt GenX}$	Jon	NA

##	78	a	В	М	GenX	Chris	NΤΛ
##	79	a	В	M	GenX	Troy	
	80	a	В	M	GenX	Jeff	
	81	a	В	M	Millenial	Zachary	
##	82	a	В	M	Millenial	Dylan	
	83	a	В	M		Christian	
	84	a	В	M	Millenial	Wesley	
	85	a	В	M	Millenial	Seth	
##	86	a	В	M	Millenial	Austin	
##	87	a	В	M	Millenial	Gabriel	
##	88	a	В	M	Millenial	Evan	
##	89	a	В	M	Millenial	Casey	
##	90	a	В	M	Millenial	Luis	
##	91	a	В	F	Boomer	Gloria	
##	92	a	В	F	Boomer	Joan	
##	93	a	В	F	Boomer	Dorothy	
##	94	a	В	F	Boomer	Shirley	
##	95	a	В	F	Boomer	Betty	
##	96	a	В	F	Boomer	Dianne	
##	97	a	В	F	Boomer	Kay	
##	98	a	В	F	Boomer	Marjorie	
##	99	a	В	F	Boomer	Lorraine	
##	100	a	В	F	Boomer	Mildred	
##	101	a a	В	F	GenX	Tracy	
##	102	a a	В	F	GenX	Dawn	
##	103	a a	В	F	GenX	Tina	
##	103	a	В	F	GenX	Tammy	
##	105	a	В	F	GenX	Melinda	
##	106	a	В	F	GenX	Tamara	
##	107	a	В	F	GenX	Tracey	
##	108	a	В	F	GenX	Colleen	
##	100	a	В	F	GenX	Sherri	
##	110		В	F	GenX	Heidi	
##	111	a	В	F	Millenial	Samantha	
##	112	a	В	r F	Millenial	Alexis	
##	113	a	В	r F	Millenial	Brittany	
##	114	a a	В	F	Millenial	Lauren	
##	115		В	F	Millenial	Taylor	
##	116	a	В	F	Millenial	=	
##	117	a	В	r F	Millenial	Bethany Latoya	
##	118	a a	В	F	Millenial	Candice	
##	119	a	В	F	Millenial		
##	120		В	F	Millenial	Cheyenne	
##	121	a a	С	M	Boomer	Theodore	
##	122	a	C	М	Boomer	Bernard	
##	123	a	C	М	Boomer	Gene	
##	124		C	М	Boomer	Herbert	
##	125	a a	C	M	Boomer	Ray	
##	126	a a	C	M	Boomer	Tom	
##	127	a a	C	M	Boomer	Lee	
##	128		C	M	Boomer	Alfred	
	129	a a	C	M	Boomer	Leroy	
##	130	a a	C	M	Boomer	Eddie	
	131	a a	C	M	GenX	Marc	
π#	101	a	C	l'I	GEIIV	riai C	INH

##	132	a	С	М	GenX	Jaime	NΤΛ
##	133	a	C	M	GenX	Greg	
##	134	a	C	M	GenX	Darryl	
##	135	a	C	M	GenX	Tim	
##	136	a	C	M	GenX	Dean	
##	137		C	M	GenX	Jon	
##	138	a	C	M	GenX	Chris	
	139	a	C				
##		a		M	GenX	Troy	
##	140	a	C	M	GenX	Jeff 7h	
##	141	a	C	M	Millenial	Zachary	
##	142	a	C	М	Millenial	Dylan	
##	143	a	C	M		Christian	
##	144	a	C	M	Millenial	Wesley	
##	145	a	С	М	Millenial	Seth	
##	146	a	С	M	Millenial	Austin	
##	147	a	С	M	Millenial	Gabriel	
##	148	a	С	M	Millenial	Evan	
##	149	a	C	M	Millenial	Casey	
##	150	a	C	M	Millenial	Luis	
##	151	a	C	F	Boomer	Gloria	NA
##	152	a	C	F	Boomer	Joan	NA
##	153	a	C	F	Boomer	Dorothy	NA
##	154	a	C	F	Boomer	Shirley	NA
##	155	a	C	F	Boomer	Betty	NA
##	156	a	C	F	Boomer	Dianne	NA
##	157	a	С	F	Boomer	Kay	NA
##	158	a	С	F	Boomer	Marjorie	
##	159	a	С	F	Boomer	Lorraine	
##	160	a	C	F	Boomer	Mildred	NA
##	161	a	C	F	GenX	Tracy	
##	162	a	C	F	GenX	Dawn	
##	163	a	C	F	GenX	Tina	
##	164	a	C	F	GenX	Tammy	
##	165	a	C	F	GenX	Melinda	
##	166	a	C	F	GenX	Tamara	
##	167	a a	C	r F	GenX	Tracey	
##	168		C	r F	GenX	Colleen	
		a				Sherri	
##	169	a	C	F	GenX		
##	170	a	C	F	GenX	Heidi	
##	171	a	C	F	Millenial	Samantha	
##	172	a	C	F	Millenial	Alexis	
##	173	a	C	F	Millenial	3	
##	174	a	C	F	Millenial	Lauren	
##	175	a	С	F	Millenial	Taylor	
##	176	a	С	F	Millenial	Bethany	
##	177	a	С	F	Millenial	Latoya	
##	178	a	С	F	Millenial	Candice	
##	179	a	С	F	Millenial	Brittney	
##	180	a	C	F	Millenial	Cheyenne	
##	181	Ъ	Α	M	Boomer	Theodore	NA
##	182	Ъ	Α	M	Boomer	Bernard	
##	183	Ъ	Α	M	Boomer	Gene	NA
##	184	Ъ	Α	M	Boomer	Herbert	NA
##	185	b	Α	M	Boomer	Ray	NA
						•	

##	186	Ъ	Α	М	Boomer	Tom	NΑ
##	187	b	A	М	Boomer	Lee	
##	188	b	A	М	Boomer	Alfred	
##	189	b	A	М	Boomer	Leroy	
##	190	b	A	М	Boomer	Eddie	
##	191	b	A	М	GenX	Marc	
##	192	b	A	М	GenX	Jaime	
##	193	b	A	М	GenX	Greg	
##	194	b	A	М	GenX	Darryl	
##	195	b	A	М	GenX	Tim	
##	196	b	A	М	GenX	Dean	
##	197	b	A	М	GenX	Jon	
##	198	b	A	М	GenX	Chris	
##	199	b	A	M	GenX	Troy	
##	200	b	A	M	GenX	Jeff	
##	201	b	A	M	Millenial	Zachary	
##	202	b	A	M	Millenial	Dylan	
##	202			M		Christian	
##	203	b b	A A	M M	Millenial		
##	205	b	A	M	Millenial	Wesley	
	206			M M	Millenial	Seth Austin	
##	207	b	A		Millenial	Gabriel	
##		b	A	M			
##	208	b	A	M	Millenial	Evan	
##	209	b	A	M	Millenial	Casey	
##	210	b	A	М	Millenial	Luis	
##	211	b	A	F	Boomer	Gloria	
##	212	b	A	F	Boomer	Joan	
##	213	b	A	F	Boomer	Dorothy	
##	214	b	A	F	Boomer	Shirley	
##	215	b	A	F	Boomer	Betty	
##	216	b	A	F	Boomer	Dianne	
##	217	b	A	F	Boomer	Kay	
##	218	b	A	F	Boomer	Marjorie	
##	219	b	A	F	Boomer	Lorraine	
##	220	b	A	F	Boomer	Mildred	
##	221	b	A	F	GenX	Tracy	
##	222	b	A	F	GenX	Dawn	
	223	b	Α	F	GenX	Tina	
	224	b	Α	F	GenX	Tammy	
	225	b	A	F	GenX	Melinda	
	226	b	A	F	GenX	Tamara	
	227	b	Α	F	GenX	Tracey	
##	228	b	Α	F	GenX	Colleen	
##	229	b	Α	F	GenX	Sherri	
##	230	b	Α	F	GenX	Heidi	NA
##	231	b	Α	F	Millenial	Samantha	NA
##	232	b	Α	F	Millenial	Alexis	NA
##	233	b	Α	F	Millenial	Brittany	NA
##	234	b	Α	F	Millenial	Lauren	NA
##	235	b	Α	F	Millenial	Taylor	NA
	236	b	Α	F	${\tt Millenial}$	Bethany	NA
##	237	b	Α	F	${\tt Millenial}$	Latoya	NA
	238	b	Α	F	${\tt Millenial}$	Candice	NA
##	239	b	Α	F	Millenial	Brittney	NA

##	240	b	Α	F	Millenial	Cheyenne	NA
##	241	b	В	М	Boomer	Theodore	
##	242	b	В	М	Boomer	Bernard	NA
##	243	b	В	М	Boomer	Gene	NA
##	244	b	В	М	Boomer	Herbert	NA
##	245	b	В	М	Boomer	Ray	NA
##	246	b	В	М	Boomer	Tom	
##	247	b	В	М	Boomer	Lee	NA
##	248	b	В	М	Boomer	Alfred	
##	249	b	В	М	Boomer	Leroy	
##	250	b	В	М	Boomer	Eddie	
##	251	b	В	М	GenX	Marc	NA
##	252	b	В	М	GenX	Jaime	NA
##	253	b	В	М	GenX	Greg	
##	254	b	В	М	GenX	Darryl	
##	255	b	В	М	GenX	Tim	
##	256	b	В	М	GenX	Dean	
##	257	b	В	М	GenX	Jon	
##	258	b	В	М	GenX	Chris	
##	259	b	В	М	GenX	Troy	
##	260	b	В	М	GenX	Jeff	
##	261	b	В	М	Millenial	Zachary	
##	262	b	В	М	Millenial	Dylan	
##	263	b	В	М		Christian	
##	264	b	В	М	Millenial	Wesley	
##	265	b	В	М	Millenial	Seth	
##	266	b	В	M	Millenial	Austin	
##	267	b	В	М	Millenial	Gabriel	
##	268	b	В	M	Millenial	Evan	
##	269	b	В	M	Millenial	Casey	
##	270	b	В	М	Millenial	Luis	
##	271	b	В	F	Boomer	Gloria	
##	272	b	В	F	Boomer	Joan	
##	273	b	В	F	Boomer	Dorothy	
##	274	b	В	F	Boomer	Shirley	
##	275	b	В	F	Boomer	Betty	
	276	b	В	F	Boomer	Dianne	
	277		_	_	Boomer	Kay	
##	278	b b	B B	F F	Boomer	Marjorie	
##	279	b	В	F	Boomer	Lorraine	
##	280	b	В	F	Boomer	Mildred	
##	281	b	В	F	GenX	Tracy	
##	282	b	В	F	GenX	Dawn	
##	283	b	В	F	GenX	Tina	
##	284	b	В	F	GenX	Tammy	
##	285	b	В	F		Melinda	
##	286	b	В	r F	GenX GenX	Tamara	
##	287	b	В	r F	GenX	Tracey	
##	288	b	В	r F	GenX	Colleen	
##	289	b	В	r F		Sherri	
##				r F	GenX		
	290 291	b b	B B	r F	GenX	Heidi Samantha	
				r F	Millenial		
	292	b	В		Millenial	Alexis	
##	293	b	В	F	Millenial	Brittany	ИИ

##	294	Ъ	В	F	Millenial	Lauren	NA
	295	b	В	F	Millenial	Taylor	
##	296	b	В	F	Millenial	Bethany	
##	297	b	В	F	Millenial	Latoya	
##	298	b	В	F	Millenial	Candice	
##	299	b	В	F	Millenial	Brittney	
##	300	b	В	F	Millenial	Cheyenne	
##	301	b	C	М	Boomer	Theodore	
##	302	b	C	М	Boomer	Bernard	
##	303	b	C	М	Boomer	Gene	
##	304	b	C	М	Boomer	Herbert	
##	305	b	C	М	Boomer	Ray	
##	306	b	C	М	Boomer	Tom	
##	307	b	C	М	Boomer	Lee	
##	308	b	C	М	Boomer	Alfred	
##	309	b	C	М	Boomer	Leroy	
	310		C	M		Eddie	
##		b L			Boomer GenX		
##	311	b L	C	M		Marc	
	312	b L	C	M	GenX	Jaime	
	313	b	C	M	GenX	Greg	
	314	b	C	M	GenX	Darryl	
	315	b ,	C	M	GenX	Tim	
	316	b ,	C	M	GenX	Dean	
	317	b	C	M	GenX	Jon	
	318	b	C	M	GenX	Chris	
	319	b	C	M	GenX	Troy	
	320	b	C	М	GenX	Jeff	
##	321	b					
			C	M	Millenial	Zachary	
##	322	b	C	М	Millenial	Dylan	NA
##	322 323	b b	C C	M M	Millenial Millenial	Dylan Christian	NA NA
## ##	322 323 324	b b b	C C C	M M M	Millenial Millenial Millenial	Dylan Christian Wesley	NA NA NA
## ## ##	322 323 324 325	b b b	C C C	M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth	NA NA NA
## ## ## ##	322 323 324 325 326	b b b	C C C C	M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin	NA NA NA NA
## ## ## ##	322 323 324 325 326 327	b b b	C C C C	M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel	NA NA NA NA NA
## ## ## ##	322 323 324 325 326 327 328	b b b b b		M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan	NA NA NA NA NA NA
## ## ## ## ## ##	322 323 324 325 326 327 328 329	b b b b b b		M M M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA
## ## ## ## ## ##	322 323 324 325 326 327 328	b b b b b b b		M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA
## ## ## ## ## ##	322 323 324 325 326 327 328 329	b b b b b b b b	00000000000	M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA NA NA
## ## ## ## ## ##	322 323 324 325 326 327 328 329 330	b b b b b b b b b	0000000000	M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ## ##	322 323 324 325 326 327 328 329 330 331	b b b b b b b b b b	00000000000	M M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ## ##	322 323 324 325 326 327 328 329 330 331 332	b b b b b b b b b b b b	000000000000	M M M M M M M F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan	NA
## ## ## ## ## ## ##	322 323 324 325 326 327 328 329 330 331 332 333	b b b b b b b b b b b b b	000000000000	M M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer	Dylam Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy	NA
## ## ## ## ## ## ## ## ## ## ## ## ##	322 323 324 325 326 327 328 329 330 331 332 333 334	b b b b b b b b b b b b b b	0000000000000	M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley	NA
## ## ## ## ## ## ## ## ## ## ## ## ##	322 323 324 325 326 327 328 329 330 331 332 333 334 335	b b b b b b b b b b b b b b b b	00000000000000	M M M M M M F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336	b b b b b b b b b b b b b b b b b b b	000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337	b b b b b b b b b b b b b b b b b b b	0000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338	b b b b b b b b b b b b b b b b b b b	000000000000000000	M M M M M M F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339	b b b b b b b b b b b b b b b b b b b	000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340	b b b b b b b b b b b b b b b b b b b	0000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylam Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred	NA N
######################################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341	b b b b b b b b b b b b b b b b b b b	0000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy	NA N
######################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342	b b b b b b b b b b b b b b b b b b b		M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn	NA N
#########################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343	b b b b b b b b b b b b b b b b b b b	0000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina	NA N
########################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344	b b b b b b b b b b b b b b b b b b b	000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy	NA N
##########################	322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345	b b b b b b b b b b b b b b b b b b b	000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy Melinda	NA N

##	348	Ъ	С	F	GenX	Colleen	NΤΛ
	349	b	C	F	GenX	Sherri	
	350	b	C	F	GenX	Heidi	
	351	b	C	F	Millenial	Samantha	
	352	b	C	F	Millenial	Alexis	
	353	b	C	F	Millenial	Brittany	
	354	Ъ	C	F	Millenial	Lauren	
	355	Ъ	C	r F	Millenial		
	356		C	r F	Millenial	Taylor	
	357	b	C	r F	Millenial	Bethany	
		b			Millenial	Latoya	
	358	b	C	F		Candice	
	359	b	C	F	Millenial	Brittney	
	360	b	C	F	Millenial	Cheyenne	
	361	С	A	M	Boomer	Theodore	
	362	С	A	M	Boomer	Bernard	
	363	С	A	M	Boomer	Gene	
	364	С	A	M	Boomer	Herbert	
	365	С	A	M	Boomer	Ray	
	366	С	A	M	Boomer	Tom	
	367	С	A	M	Boomer	Lee	
	368	С	A	M	Boomer	Alfred	
	369	С	Α	M	Boomer	Leroy	NA
	370	С	Α	M	Boomer	Eddie	
##	371	С	Α	М	GenX	Marc	NA
##	372	С	A	M	GenX	Jaime	
##	373	С	Α	M	GenX	Greg	NA
##	374	С	Α	M	GenX	Darryl	NA
##	375	С	A	М	GenX	Tim	NA
##	376	С	Α	М	GenX	Dean	NA
##	377	С	Α	М	GenX	Jon	NA
##	378	С	Α	M	GenX	Chris	NA
##	379	С	Α	M	GenX	Troy	NA
##	380	С	A	M	GenX	Jeff	NA
##	381	С	Α	М	Millenial	Zachary	NA
##	382	С	A	М	Millenial	Dylan	NA
##	383	С	Α	М	Millenial	${\tt Christian}$	NA
##	384	С	A	М	Millenial	Wesley	NA
##	385	С	Α	М	Millenial	Seth	NA
##	386	С	Α	М	Millenial	Austin	NA
##	387	С	Α	М	Millenial	Gabriel	NA
	388	С	A	М	Millenial	Evan	NA
##	389	С	Α	М	Millenial	Casey	NA
	390	С	A	М	Millenial	Luis	
	391	С	Α	F	Boomer	Gloria	
	392	С	A	F	Boomer	Joan	
	393	C	A	F	Boomer	Dorothy	
	394	C	A	F	Boomer	Shirley	
	395	C	A	F	Boomer	Betty	
	396	C	A	F	Boomer	Dianne	
	397	c	A	F	Boomer	Kay	
	398	c	A	F	Boomer	Marjorie	
	399	c	A	F	Boomer	Lorraine	
	400	c	A	F	Boomer	Mildred	
	401	c	A	F	GenX	Tracy	
#	101	S	11	-	JOHA	11 acy	1

шш	400	_	٨	E	C V	D	nt A
	402 403	С	A A	F F	GenX GenX	Dawn Tina	
	404	С	A	F			
	404	С	A	r F	GenX	Tammy Melinda	
		С		r F	GenX	Tamara	
	406	С	A		GenX		
	407	С	A	F	GenX	Tracey	
	408	С	A	F	GenX	Colleen	
	409	С	A	F	GenX	Sherri	
	410	С	A	F	GenX	Heidi	
	411	С	A	F	Millenial	Samantha	
	412	С	A	F	Millenial	Alexis	
	413	С	A	F	Millenial	Brittany	
	414	С	Α	F	Millenial	Lauren	
	415	С	Α	F	Millenial	Taylor	
	416	С	Α	F	Millenial	Bethany	
	417	С	Α	F	Millenial	Latoya	
	418	С	Α	F	Millenial	Candice	
##	419	С	Α	F	Millenial	Brittney	NA
##	420	С	Α	F	Millenial	Cheyenne	NA
##	421	С	В	M	Boomer	Theodore	NA
##	422	С	В	М	Boomer	Bernard	NA
##	423	С	В	М	Boomer	Gene	NA
##	424	С	В	М	Boomer	Herbert	NA
##	425	С	В	M	Boomer	Ray	NA
##	426	С	В	M	Boomer	Tom	NA
##	427	С	В	M	Boomer	Lee	NA
##	428	С	В	М	Boomer	Alfred	NA
##	429	С	В	M	Boomer	Leroy	NA
##	430	С	В	М	Boomer	Eddie	NA
##	431	С	В	М	GenX	Marc	NA
##	432	С	В	М	GenX	Jaime	NA
##	433	С	В	М	GenX	Greg	NA
##	434	С	В	М	GenX	Darryl	
##	435	С	В	М	GenX	Tim	
	436	С	В	М	GenX	Dean	NA
	437	С	В	М	GenX	Jon	
	438	С	В	М	GenX	Chris	
	439	С	В	М	GenX	Troy	
	440	С	В	М	GenX	Jeff	
	441	С	В	М	Millenial	Zachary	
	442	С	В	М	Millenial	Dylan	
	443	С	В	М		Christian	
	444	С	В	М	Millenial	Wesley	
	445	С	В	М	Millenial	Seth	
	446	С	В	М	Millenial	Austin	
	447	С	В	М	Millenial	Gabriel	
	448	С	В	M	Millenial	Evan	
	449	С	В	M	Millenial	Casey	
	450		В	M	Millenial	Luis	
		С					
	451	С	В	F	Boomer	Gloria	
	452 453	С	В	F	Boomer	Joan	
	453	С	В	F	Boomer	Dorothy	
	454	С	В	F	Boomer	Shirley	
##	455	С	В	F	Boomer	Betty	ΝA

##	456	С	В	F	Boomer	Dianne	NΑ
	457	С	В	F	Boomer	Kay	
	458	С	В	F	Boomer	Marjorie	
	459	С	В	F	Boomer	Lorraine	
	460	С	В	F	Boomer	Mildred	
	461	С	В	F	GenX	Tracy	
	462	С	В	F	GenX	Dawn	
	463	С	В	F	GenX	Tina	
	464	С	В	F	GenX	Tammy	
	465	С	В	F	GenX	Melinda	
	466	С	В	F	GenX	Tamara	
	467	С	В	F	GenX	Tracey	
	468	С	В	F	GenX	Colleen	
##	469	С	В	F	GenX	Sherri	
##	470		В	F	GenX	Heidi	
	471	С	В	F	Millenial	Samantha	
	471	С	В	r F	Millenial	Alexis	
		С					
	473	С	В	F	Millenial	Brittany	
	474	С	В	F	Millenial	Lauren	
	475	С	В	F	Millenial	Taylor	
	476	С	В	F	Millenial	Bethany	
	477	С	В	F	Millenial	Latoya	
	478	С	В	F	Millenial	Candice	
	479	С	В	F	Millenial	Brittney	
	480	С	В	F	Millenial	Cheyenne	
	481	С	C	М	Boomer	Theodore	
	482	С	C	M	Boomer	Bernard	
	483	С	C	M	Boomer	Gene	
	484	С	C	M	Boomer	Herbert	
	485	С	C	M	Boomer	Ray	
	486	С	C	M	Boomer	Tom	
##	487	С	C	M	Boomer	Lee	ΝA
##	488	С	C	M	Boomer	Alfred	NA
##	489	С	C	M	Boomer	Leroy	NA
##	490	С	C	M	Boomer	Eddie	NA
##	491	С	C	M	GenX	Marc	
##	492	С	C	M	GenX	Jaime	NA
##	493	С	C	M	GenX	Greg	NA
##	494	С	C	M	GenX	Darryl	NA
##	495	С	C	M	GenX	Tim	NA
##	496	С	C	M	GenX	Dean	NA
##	497	С	C	M	GenX	Jon	NA
##	498	С	C	M	GenX	Chris	NA
##	499	С	C	M	GenX	Troy	NA
##	500	С	C	M	GenX	Jeff	NA
##	501	С	C	М	Millenial	Zachary	NA
##	502	С	C	М	Millenial	Dylan	
##	503	С	C	М	Millenial	Christian	NA
	504	С	C	М	Millenial	Wesley	NA
	505	С	C	М	Millenial	Seth	
	506	С	С	М	Millenial	Austin	NA
	507	С	C	М	Millenial	Gabriel	NA
	508	С	С	М	Millenial	Evan	
	509	С	C	М	Millenial	Casey	NA
						3	

##	510	С	С	М	Millenial	Luis	NA
	511	C	C	F	Boomer		
##	512	С	С	F	Boomer	Joan	NA
##	513	С	С	F	Boomer	Dorothy	NA
##	514	С	С	F	Boomer	Shirley	
##	515	С	С	F	Boomer	Betty	
##	516	С	С	F	Boomer	Dianne	
##	517	С	С	F	Boomer	Kay	NA
##	518	С	С	F	Boomer	Marjorie	
##	519	С	С	F	Boomer	Lorraine	
##	520	С	С	F	Boomer	Mildred	NA
##	521	С	С	F	GenX	Tracy	NA
##	522	С	С	F	GenX	Dawn	
##	523	С	С	F	GenX	Tina	NA
##	524	С	C	F	GenX	Tammy	
##	525	С	C	F	GenX	Melinda	
##	526	С	C	F	GenX	Tamara	
##	527	С	C	F	GenX	Tracey	
##	528	C	C	F	GenX	Colleen	
##	529	С	C	F	GenX	Sherri	
##	530	С	C	F	GenX	Heidi	
	531	C	C	F	Millenial	Samantha	
	532	C	C	F	Millenial	Alexis	
	533	C	C	F	Millenial	Brittany	
	534	C	C	F	Millenial	Lauren	
	535	C	C	F	Millenial	Taylor	
	536	С	C	F	Millenial	Bethany	
	537	С	C	F	Millenial	Latoya	
##	538	С	C	F	Millenial	Candice	
	539	С	C	F	Millenial	Brittney	
	540	C	C	F	Millenial	Cheyenne	
	541	d	A	М	Boomer	Theodore	
	542	d	A	М	Boomer	Bernard	
	543	d	A	М	Boomer	Gene	
	544	d	A	М	Boomer	Herbert	
	545	d	A	М	Boomer	Ray	
	546	d	A	М	Boomer	Tom	
	547	d	A	М	Boomer	Lee	
	548	d	A	М	Boomer	Alfred	
	549	d	A	М	Boomer	Leroy	
	550	d	A	М	Boomer	Eddie	
	551	d	A	М	GenX	Marc	
	552	d	A	М	GenX	Jaime	
	553	d	A	М	GenX	Greg	
	554	d	A	М	GenX	Darryl	
	555	d	A	М	GenX	Tim	
	556	d	A	М	GenX	Dean	
	557	d	A	M	GenX	Jon	
	558	d	A	M	GenX	Chris	
	559	d	A	М	GenX	Troy	
	560	d	A	М	GenX	Jeff	
	561	d	A	M	Millenial	Zachary	
	562	d	A	М	Millenial	Dylan	
	563	d	A	М		Christian	
	555	<b>4</b>	-1	11		JIII 1501 all	

	564	d	Α	М	Millenial	Wesley	
	565	d	A	M	Millenial	Seth	
	566	d	A	М	Millenial	Austin	
	567	d	A	М	Millenial	Gabriel	
	568	d	A	М	Millenial	Evan	
	569	d	A	М	Millenial	Casey	
	570	d	Α	M	Millenial	Luis	
	571	d	Α	F	Boomer	Gloria	
	572	d	A	F	Boomer	Joan	
	573	d	A	F	Boomer	Dorothy	
	574	d	A	F	Boomer	Shirley	
	575	d	A	F	Boomer	Betty	
	576	d	Α	F	Boomer	Dianne	
	577	d	Α	F	Boomer	Kay	
	578	d	Α	F	Boomer	Marjorie	
	579	d	Α	F	Boomer	Lorraine	
	580	d	Α	F	Boomer	Mildred	NA
	581	d	Α	F	${\tt GenX}$	Tracy	NA
##	582	d	Α	F	${\tt GenX}$	Dawn	
##	583	d	Α	F	${\tt GenX}$	Tina	
##	584	d	Α	F	${\tt GenX}$	Tammy	NA
##	585	d	Α	F	${\tt GenX}$	Melinda	NA
##	586	d	Α	F	GenX	Tamara	NA
##	587	d	Α	F	GenX	Tracey	NA
##	588	d	Α	F	${\tt GenX}$	Colleen	NA
##	589	d	Α	F	${\tt GenX}$	Sherri	NA
##	590	d	Α	F	GenX	Heidi	NA
##	591	d	Α	F	Millenial	Samantha	NA
##	592	d	Α	F	Millenial	Alexis	NA
##	593	d	Α	F	Millenial	Brittany	NA
##	594	d	Α	F	Millenial	Lauren	NA
##	595	d	Α	F	Millenial	Taylor	NA
##	596	d	Α	F	Millenial	Bethany	NA
##	597	d	Α	F	Millenial	Latoya	NA
##	598	d	Α	F	Millenial	Candice	NA
##	599	d	Α	F	Millenial	Brittney	NA
##	600	d	Α	F	Millenial	Cheyenne	NA
##	601	d	В	M	Boomer	Theodore	NA
##	602	d	В	M	Boomer	Bernard	NA
##	603	d	В	M	Boomer	Gene	NA
##	604	d	В	M	Boomer	Herbert	NA
##	605	d	В	M	Boomer	Ray	NA
##	606	d	В	M	Boomer	Tom	NA
##	607	d	В	М	Boomer	Lee	NA
##	608	d	В	М	Boomer	Alfred	NA
##	609	d	В	М	Boomer	Leroy	NA
##	610	d	В	M	Boomer	Eddie	
	611	d	В	M	GenX	Marc	NA
	612	d	В	M	GenX	Jaime	
	613	d	В	M	GenX	Greg	
	614	d	В	M	GenX	Darryl	
	615	d	В	M	GenX	Tim	
	616	d	В	M	GenX	Dean	
	617	d	В	М	GenX	Jon	

##	610	a	D	М	ConV	Chric	nt A
	618 619	d d	B B	M M	GenX GenX	Chris Troy	
	620	d d	В	M	GenX	Jeff	
	621		В	M	Millenial	Zachary	
	622	d	В	M	Millenial	Dylan	
	623	d	В	M		Christian	
	624	d	В	М	Millenial	Wesley	
	625	d	В	М	Millenial	Seth	
	626	d	В	М	Millenial	Austin	
	627		В	М	Millenial	Gabriel	
	628		В	М	Millenial	Evan	
	629	d	В	М	Millenial	Casey	
	630		В	М	Millenial	Luis	
	631	d	В	F	Boomer	Gloria	NA
	632	d	В	F	Boomer	Joan	NA
##	633	d	В	F	Boomer	Dorothy	NA
##	634	d	В	F	Boomer	Shirley	
##	635	d	В	F	Boomer	Betty	
##	636	d	В	F	Boomer	Dianne	
##	637	d	В	F	Boomer	Kay	NA
##	638	d	В	F	Boomer	Marjorie	NA
##	639	d	В	F	Boomer	Lorraine	NA
##	640	d	В	F	Boomer	Mildred	NA
##	641	d	В	F	GenX	Tracy	NA
##	642	d	В	F	GenX	Dawn	NA
##	643	d	В	F	GenX	Tina	NA
##	644	d	В	F	GenX	Tammy	NA
##	645	d	В	F	GenX	Melinda	NA
##	646	d	В	F	GenX	Tamara	NA
##	647	d	В	F	GenX	Tracey	NA
##	648	d	В	F	GenX	Colleen	NA
##	649	d	В	F	GenX	Sherri	NA
##	650	d	В	F	GenX	Heidi	NA
##	651	d	В	F	Millenial	Samantha	
##	652	d	В	F	Millenial	Alexis	NA
##	653	d	В	F	Millenial	Brittany	NA
##	654	d	В	F	Millenial	Lauren	NA
##	655	d	В	F	Millenial	Taylor	NA
##	656	d	В	F	Millenial	Bethany	NA
##	657	d	В	F	Millenial	Latoya	NA
##	658	d	В	F	Millenial	Candice	NA
##	659	d	В	F	Millenial	Brittney	NA
##	660	d	В	F	Millenial	Cheyenne	NA
	661	d	С	M	Boomer	Theodore	NA
##	662	d	С	M	Boomer	Bernard	
	663	d	С	М	Boomer	Gene	
	664	d	С	М	Boomer	Herbert	
	665	d	С	М	Boomer	Ray	
	666	d	С	М	Boomer	Tom	
	667	d	С	М	Boomer	Lee	
	668	d	С	М	Boomer	Alfred	
	669		С	М	Boomer	Leroy	
	670	d	С	М	Boomer	Eddie	
##	671	d	С	М	GenX	Marc	NA

##	672	d	С	М	GenX	Jaime	NΤΛ
	673	d	C	M	GenX	Greg	
	674	d	C	M	GenX	Darryl	
	675	d	C	M	GenX	Tim	
	676	d	C	M	GenX	Dean	
	677	d	C	M	GenX	Jon	
	678	d d	C	M	GenX	Chris	
	679	d d	C	M	GenX	Troy	
	680	d d	C	M	GenX	Jeff	
##	681	d	C	M	Millenial	Zachary	
##	682	d d	C	M	Millenial	Dylan	
##	683	d d	C	M		Christian	
##	684	d d	C	M	Millenial	Wesley	
##	685	d d	C	M	Millenial	Seth	
##	686	d d	C	M M	Millenial	Austin	
	687	d d	C	M M	Millenial	Gabriel	
##						Evan	
##	688 689	d	C	M	Millenial		
##		d	C C	M	Millenial Millenial	Casey Luis	
##	690	d	C	M F	Boomer		
##	691 692	d a	C			Gloria	
##		d		F	Boomer	Joan	
##	693	d	C	F	Boomer	Dorothy	
##	694	d	C	F	Boomer	Shirley	
##	695	d	C	F	Boomer	Betty	
##	696	d	C	F	Boomer	Dianne	
##	697	d	C	F	Boomer	Kay 	
##	698	d	C	F	Boomer	Marjorie	
##	699	d	C	F	Boomer	Lorraine	
##	700	d	C	F	Boomer	Mildred	
##	701	d	C	F	GenX	Tracy	
##	702	d	C	F	GenX	Dawn	
##	703	d	C	F	GenX	Tina -	
##	704	d	C	F	GenX	Tammy	
##	705	d	C	F	GenX	Melinda -	
##	706	d	C	F	GenX	Tamara	
##	707	d	C	F	GenX	Tracey	
	708	d	С	F	GenX	Colleen	
	709	d	С	F	GenX	Sherri	
	710	d	С	F	GenX	Heidi	
	711	d	С	F	Millenial		
	712	d	С	F	Millenial	Alexis	
	713	d	С	F	Millenial	3	
	714	d	С	F	Millenial	Lauren	
	715	d	С	F	Millenial	Taylor	
	716	d	С	F	Millenial	Bethany	
	717	d	С	F	Millenial		
	718	d	С	F	Millenial	Candice	
	719	d	С	F	Millenial	Brittney	
	720	d	С	F	Millenial	Cheyenne	
	721	е	A	М	Boomer	Theodore	
	722	е	A	М	Boomer	Bernard	
	723	е	A	М	Boomer	Gene	
	724	е	A	М	Boomer	Herbert	
##	725	е	Α	М	Boomer	Ray	NA

##	726	е	A	М	Boomer	Tom	ΝΛ
	727	e	A	M	Boomer	Lee	
##	728	e	A	M	Boomer	Alfred	
##	729	e	A	M	Boomer	Leroy	
##	730	e	A	M	Boomer	Eddie	
##	731			M	GenX	Marc	
		е	A				
##	732	е	A	M	GenX	Jaime	
##	733	е	A	M	GenX	Greg	
##	734	е	A	M	GenX	Darryl	
##	735	е	A	M	GenX	Tim	
##	736	е	A	M	GenX	Dean	
##	737	е	A	M	GenX	Jon	
##	738	е	A	М	GenX	Chris	
##	739	е	Α	M	GenX	Troy	
##	740	е	Α	M	GenX	Jeff	
##	741	е	Α	M	Millenial	Zachary	NA
##	742	е	Α	М	Millenial	Dylan	
##	743	е	Α	M	Millenial	${\tt Christian}$	NA
##	744	е	Α	М	Millenial	Wesley	NA
##	745	е	Α	M	Millenial	Seth	NA
##	746	е	Α	M	Millenial	Austin	NA
##	747	е	Α	M	Millenial	Gabriel	NA
##	748	е	Α	М	Millenial	Evan	NA
##	749	е	Α	М	Millenial	Casey	NA
##	750	е	Α	М	Millenial	Luis	
##	751	е	Α	F	Boomer	Gloria	NA
##	752	e	Α	F	Boomer	Joan	
##	753	e	Α	F	Boomer	Dorothy	NA
##	754	e	Α	F	Boomer	Shirley	
##	755	e	Α	F	Boomer	Betty	
##	756	e	A	F	Boomer	Dianne	
##	757	e	A	F	Boomer	Kay	
##	758	e	A	F	Boomer	Marjorie	
##	759	e	A	F	Boomer	Lorraine	
##	760		A	F		Mildred	
##	760	e		F	Boomer		
	761	е	A		GenX	Tracy	
		е	A	F	GenX	Dawn	
##	763	е	A	F	GenX	Tina	
	764	е	A	F	GenX	Tammy	
	765	е	A	F	GenX	Melinda	
	766	е	A	F	GenX	Tamara	
	767	е	Α	F	GenX	Tracey	
	768	е	Α	F	GenX	Colleen	
	769	е	Α	F	GenX	Sherri	
	770	е	Α	F	GenX	Heidi	
	771	е	Α	F	Millenial	Samantha	NA
	772	е	A	F	Millenial	Alexis	NA
##	773	е	A	F	Millenial	Brittany	NA
	774	е	Α	F	Millenial	Lauren	NA
##	775	е	Α	F	Millenial	Taylor	NA
##	776	е	Α	F	Millenial	Bethany	NA
##	777	е	Α	F	Millenial	Latoya	NA
##	778	е	A	F	Millenial	Candice	NA
##	779	е	Α	F	Millenial	Brittney	NA
						=	

##	780	е	A	F	Millenial	Cheyenne	NA
##	781	е	В	M	Boomer	Theodore	NA
##	782	е	В	M	Boomer	Bernard	NA
##	783	е	В	M	Boomer	Gene	NA
##	784	е	В	M	Boomer	Herbert	NA
##	785	е	В	М	Boomer	Ray	
##	786	е	В	М	Boomer	Tom	
##	787	е	В	М	Boomer	Lee	NA
##	788	e	В	М	Boomer	Alfred	
##	789	e	В	М	Boomer	Leroy	
##	790	e	В	М	Boomer	Eddie	
##	791	e	В	М	GenX	Marc	
##	792	e	В	М	GenX	Jaime	
##	793	e	В	М	GenX	Greg	
##	794	e	В	М	GenX	Darryl	
##	795	e	В	М	GenX	Tim	
##	796	e	В	М	GenX	Dean	
##	797	e	В	М	GenX	Jon	
##	798	e	В	М	GenX	Chris	
##	799	e	В	М	GenX	Troy	
##	800	e	В	М	GenX	Jeff	
##	801	e	В	М	Millenial	Zachary	
##	802		В	М	Millenial	-	
	803	e	В	M		Dylan Christian	
	804	e	В	M	Millenial		
	805	e		M	Millenial	Wesley Seth	
##	806	e	B B	M		Austin	
	807	e	В		Millenial Millenial	Gabriel	
##		e		M			
##	808	e	В	M	Millenial	Evan	
##	809	e	В	M	Millenial	Casey	
##	810	е	В	М	Millenial	Luis	
##	811	е	В	F	Boomer	Gloria	
##	812	е	В	F	Boomer	Joan	
	813	е	В	F	Boomer	Dorothy	
	814	е	В	F	Boomer	Shirley	
	815	е	В	F	Boomer	Betty	
	816	е	В	F	Boomer	Dianne	
	817	е	В	F	Boomer	Kay	
	818	е	В	F	Boomer	Marjorie	
##	819	е	В	F	Boomer	Lorraine	
##	820	е	В	F	Boomer	Mildred	
##	821	е	В	F	GenX	Tracy	
##	822	е	В	F	GenX	Dawn	
	823	е	В	F	GenX	Tina	
	824	е	В	F	GenX	Tammy	
	825	е	В	F	GenX	Melinda	
	826	е	В	F	GenX	Tamara	
	827	е	В	F	${\tt GenX}$	Tracey	
	828	е	В	F	${\tt GenX}$	Colleen	
	829	е	В	F	GenX	Sherri	NA
	830	е	В	F	GenX	Heidi	
	831	е	В	F	Millenial	Samantha	NA
##	832	е	В	F	Millenial	Alexis	NA
##	833	е	В	F	Millenial	Brittany	NA

##	834	е	В	F	Millenial	Lauren	NΑ
	835	e	В	F	Millenial	Taylor	
	836	e	В	F	Millenial	Bethany	
##	837	e	В	F	Millenial	Latoya	
##	838	e	В	F	Millenial	Candice	
##	839	e	В	F	Millenial	Brittney	
	840	e	В	F	Millenial	Cheyenne	
	841	e	C	М	Boomer	Theodore	
	842	e	C	М	Boomer	Bernard	
	843	e	C	М	Boomer	Gene	
	844	е	C	М	Boomer	Herbert	
	845	е	C	М	Boomer	Ray	
	846	e	C	М	Boomer	Tom	
	847	e	C	М	Boomer	Lee	
	848		C	M	Boomer	Alfred	
	849	е	C	M		Leroy	
##	850	е	C	M	Boomer	Eddie	
		е			Boomer		
##	851 852	е	C	M	GenX	Marc	
		е	C	M	GenX	Jaime	
	853	e	C	M	GenX	Greg	
	854	е	C	M	GenX	Darryl	
	855	е	C	M	GenX	Tim	
	856	е	C	M	GenX	Dean	
	857	е	C	M	GenX	Jon	
	858	е	C	М	GenX	Chris	
	859	е	C	М	GenX	Troy	
##	860	е	С	M	GenX	Jeff	NΑ
##	061						
	861	е	C	М	Millenial	Zachary	
##	862	e e	C	M	Millenial	Dylan	NA
## ##	862 863		C C	M M	Millenial Millenial	Dylan Christian	NA NA
## ## ##	862 863 864	е	C C C	M M M	Millenial Millenial Millenial	Dylan Christian Wesley	NA NA NA
## ## ## ##	862 863 864 865	e e	C C C	M M M	Millenial Millenial Millenial	Dylan Christian Wesley Seth	NA NA NA
## ## ##	862 863 864 865 866	e e e	C C C C	M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin	NA NA NA NA
## ## ## ##	862 863 864 865 866 867	e e e e	C C C C	M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel	NA NA NA NA NA
## ## ## ##	862 863 864 865 866 867 868	e e e e	C C C C C C C	M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan	NA NA NA NA NA NA
## ## ## ## ## ##	862 863 864 865 866 867 868 869	e e e e e	C C C C C C C	M M M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA
## ## ## ## ## ##	862 863 864 865 866 867 868	e e e e e e e	C C C C C C C	M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA
## ## ## ## ## ##	862 863 864 865 866 867 868 869	e e e e e e e e	C C C C C C C C C C	M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA NA NA
## ## ## ## ## ## ##	862 863 864 865 866 867 868 869 870	e e e e e e e e	C C C C C C C C C	M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ## ##	862 863 864 865 866 867 868 869 870	e e e e e e e e e	C C C C C C C C C C	M M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ## ##	862 863 864 865 866 867 868 869 870 871	e e e e e e e e e e	C C C C C C C C C C C	M M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan	NA
## ## ## ## ## ## ## ## ## ## ## ## ##	862 863 864 865 866 867 868 869 870 871 872	e e e e e e e e e e e		M M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy	NA
## ## ## ## ## ## ## ## ## ## ## ## ##	862 863 864 865 866 867 868 869 870 871 872 873	e e e e e e e e e e e e		M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley	NA
######################################	862 863 864 865 866 867 868 869 870 871 872 873	e e e e e e e e e e e e e		M M M M M M M F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty	NA N
######################################	862 863 864 865 866 867 868 869 870 871 872 873 874	e e e e e e e e e e e e e e	000000000000000000000000000000000000000	M M M M M M F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne	NA N
######################################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876	e e e e e e e e e e e e e e e	0000000000000000	M M M M M M M F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay	NA N
######################################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877		000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie	NA N
######################################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877		0000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine	NA N
######################################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879		000000000000000000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred	NA N
########################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881		000000000000000000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy	NA N
#########################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882		000000000000000000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn	NA N
########################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883		00000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina	NA N
##########################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884		000000000000000000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy	NA N
#########################	862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885		000000000000000000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy Melinda	NA N

##	888	е	С	F	GenX		
##	889	е	С	F	GenX		
##	890	е	С	F	GenX	Heidi	
##	891	е	C	F	Millenial		
##	892	е	C	F	Millenial	Alexis	NA
##	893	е	C	F	Millenial	Brittany	NA
##	894	е	C	F	Millenial	Lauren	NA
##	895	е	C	F	Millenial	Taylor	NA
##	896	е	C	F	Millenial	Bethany	NA
##	897	е	C	F	Millenial	Latoya	NA
##	898	е	C	F	Millenial	Candice	NA
##	899	е	C	F	Millenial	Brittney	NA
##	900	е	C	F	Millenial	Cheyenne	NA
##	901	f	Α	M	Boomer	Theodore	NA
##	902	f	Α	M	Boomer	Bernard	NA
##	903	f	Α	M	Boomer	Gene	NA
##	904	f	Α	M	Boomer	Herbert	NA
##	905	f	Α	M	Boomer	Ray	NA
##	906	f	Α	M	Boomer	Tom	NA
##	907	f	Α	M	Boomer	Lee	NA
##	908	f	Α	M	Boomer	Alfred	NA
##	909	f	Α	M	Boomer	Leroy	NA
##	910	f	Α	M	Boomer	Eddie	NA
##	911	f	Α	M	GenX	Marc	NA
##	912	f	Α	M	GenX	Jaime	NA
##	913	f	Α	М	GenX	Greg	NA
##	914	f	Α	M	GenX	Darryl	
##	915	f	Α	M	GenX	Tim	
##	916	f	Α	M	GenX	Dean	NA
##	917	f	Α	M	GenX	Jon	NA
##	918	f	Α	M	GenX	Chris	NA
##	919	f	Α	M	GenX	Troy	NA
##	920	f	Α	M	GenX	Jeff	
##	921	f	Α	M	Millenial	Zachary	NA
##	922	f	Α	M	Millenial	Dylan	
##	923	f	Α	М	Millenial	Christian	NA
##	924	f	Α	М	Millenial	Wesley	NA
##	925	f	Α	M	Millenial	Seth	NA
##	926	f	Α	M	Millenial	Austin	NA
##	927	f	Α	M	Millenial	Gabriel	NA
	928	f	Α	M	Millenial	Evan	NA
	929	f	Α	M	Millenial	Casey	NA
	930	f	Α	M	Millenial	Luis	
	931	f	Α	F	Boomer	Gloria	
	932	f	Α	F	Boomer	Joan	NA
	933	f	Α	F	Boomer	Dorothy	NA
	934	f	A	F	Boomer	Shirley	
	935	f	A	F	Boomer	Betty	
	936	f	A	F	Boomer	Dianne	
	937	f	A	F	Boomer	Kay	
	938	f	A	F	Boomer	Marjorie	
	939	f	A	F	Boomer	Lorraine	
##	940	f	A	F	Boomer	Mildred	
	941	f	A	F	GenX	Tracy	
	- <del></del>		-	-		a b	

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	942 943	f f	A A	F F	GenX GenX	Dawn Tina	
##	943	f	A	r F			
	944	f	A	r F	GenX	Tammy Melinda	
##	945	f		r F	GenX		
##			A		GenX	Tamara	
##	947	f	A	F	GenX	Tracey	
##	948	f	A	F	GenX	Colleen	
##	949	f	A	F	GenX	Sherri	
##	950	f	A	F	GenX	Heidi	
##	951	f	A	F	Millenial	Samantha	
##	952	f	A	F	Millenial	Alexis	
##	953	f	A	F	Millenial	Brittany	
##	954	f	A	F	Millenial	Lauren	
##	955	f	A	F	Millenial	Taylor	
##	956	f	A	F	Millenial	Bethany	
##	957	f	A	F	Millenial	Latoya	
##	958	f	Α	F	Millenial	Candice	
##	959	f	Α	F	Millenial	Brittney	
##	960	f	Α	F	Millenial	Cheyenne	NA
##	961	f	В	M	Boomer	Theodore	NA
##	962	f	В	M	Boomer	Bernard	NA
##	963	f	В	M	Boomer	Gene	NA
##	964	f	В	M	Boomer	Herbert	NA
##	965	f	В	M	Boomer	Ray	NA
##	966	f	В	M	Boomer	Tom	NA
##	967	f	В	M	Boomer	Lee	NA
##	968	f	В	M	Boomer	Alfred	NA
##	969	f	В	M	Boomer	Leroy	NA
##	970	f	В	M	Boomer	Eddie	NA
##	971	f	В	M	GenX	Marc	NA
##	972	f	В	M	GenX	Jaime	NA
##	973	f	В	M	GenX	Greg	NA
##	974	f	В	M	GenX	Darryl	
##	975	f	В	M	GenX	Tim	
##	976	f	В	М	GenX	Dean	NA
##	977	f	В	М	GenX	Jon	NA
##	978	f	В	М	GenX	Chris	
##	979	f	В	М	GenX	Troy	
	980	f	В	М	GenX	Jeff	
	981	f	В	М	Millenial	Zachary	
	982	f	В	M	Millenial	Dylan	
	983	f	В	М		Christian	
	984	f	В	M	Millenial	Wesley	
	985	f	В	M	Millenial	Seth	
	986	f	В	М	Millenial	Austin	
	987	f	В	M	Millenial	Gabriel	
	988	f	В	М	Millenial	Evan	
	989	f	В	М	Millenial	Casey	
##	990	f	В	M	Millenial	Luis	
	991	f	В	F	Boomer	Gloria	
	991	f	В	r F	Boomer	Joan	
	993	f	В	r F	Boomer	Dorothy	
	993	f	В	r F		•	
		f		r F	Boomer	Shirley	
##	995	1	В	r	Boomer	Betty	WИ

##	996	f	В	F	Boomer	Dianne	NA
##	997	f	В	F	Boomer	Kay	
##	998	f	В	F	Boomer	Marjorie	
##	999	f	В	F	Boomer	Lorraine	
##	1000	f	В	F	Boomer	Mildred	NA
##	1001	f	В	F	GenX	Tracy	NA
##	1002	f	В	F	GenX	Dawn	
##	1003	f	В	F	GenX	Tina	NA
##	1004	f	В	F	GenX	Tammy	NA
##	1005	f	В	F	GenX	Melinda	
##	1006	f	В	F	GenX	Tamara	NA
##	1007	f	В	F	GenX	Tracey	
##	1008	f	В	F	GenX	Colleen	
##	1009	f	В	F	GenX	Sherri	NA
##	1010	f	В	F	GenX	Heidi	
##	1011	f	В	F	Millenial	Samantha	
##	1012	f	В	F	Millenial	Alexis	
##	1013	f	В	F	Millenial	Brittany	
##	1014	f	В	F	Millenial	Lauren	
##	1015	f	В	F	Millenial	Taylor	
##	1016	f	В	F	Millenial	Bethany	
##	1017	f	В	F	Millenial	Latoya	
##	1018	f	В	F	Millenial	Candice	
##	1019	f	В	F	Millenial	Brittney	
##	1020	f	В	F	Millenial	Cheyenne	
##	1021	f	C	М	Boomer	Theodore	
##	1022	f	C	М	Boomer	Bernard	
##	1023	f	C	М	Boomer	Gene	
##	1024	f	C	М	Boomer	Herbert	
##	1025	f	C	М	Boomer	Ray	
##	1026	f	C	М	Boomer	Tom	
##	1027	f	C	М	Boomer	Lee	
##	1028	f	C	М	Boomer	Alfred	
##	1029	f	C	М	Boomer	Leroy	
##	1030	f	C	М	Boomer	Eddie	
##	1031	f	C	М	GenX	Marc	
##	1032	f	C	М	GenX	Jaime	
##	1033	f	C	М	GenX	Greg	
##	1034	f	C	М	GenX	Darryl	
##	1035	f	C	М	GenX	Tim	
##	1036	f	C	М	GenX	Dean	
##	1037	f	C	М	GenX	Jon	
##	1038	f	C	М	GenX	Chris	
##	1039	f	C	М	GenX	Troy	
##	1040	f	C	М	GenX	Jeff	
##	1041	f	C	М	Millenial	Zachary	
##	1041	f	C	М	Millenial	Dylan	
##	1042	f	C	М		Christian	
##	1043	f	C	М	Millenial	Wesley	
##	1044	f	C	М	Millenial	Seth	
##	1045	f	C	М	Millenial	Austin	
##	1046	f	C	M	Millenial	Gabriel	
##	1047	f	C	М	Millenial	Evan	
##	1046	f	C	M	Millenial		
##	1049	1	C	M	uttrental	Casey	INH

##	1050	f	С	М	Millenial	Luis	NA
##	1051	f	C	F	Boomer	Gloria	
##	1052	f	C	F	Boomer	Joan	
##	1053	f	C	F	Boomer	Dorothy	
##	1054	f	C	F	Boomer	Shirley	
##	1055	f	C	F	Boomer	Betty	
##	1056	f	C	F	Boomer	Dianne	
##	1057	f	C	F	Boomer	Kay	
##	1058	f	C	F	Boomer	Marjorie	
##	1059	f	C	F	Boomer	Lorraine	
##	1060	f	C	F	Boomer	Mildred	
##	1061	f	C	F	GenX	Tracy	
##	1062	f	C	F	GenX	Dawn	
##	1063	f	C	F	GenX	Tina	
##	1064	f	C	F	GenX	Tammy	
##	1065	f	C	F	GenX	Melinda	
##	1066	f	C	F	GenX	Tamara	
##	1067	f	C	F	GenX	Tracey	
##	1068	f	C	F	GenX	Colleen	
##	1069	f	C	F	GenX	Sherri	
##	1070	f	C	F	GenX	Heidi	
##	1071	f	C	F	Millenial	Samantha	
##	1072	f	C	F	Millenial	Alexis	
##	1072	f	C	F	Millenial	Brittany	
##	1073	f	C	F	Millenial	Lauren	
##	1074	f	C	F	Millenial	Taylor	
##	1075	f	C	F	Millenial	Bethany	
##	1077	f	C	F	Millenial	Latoya	
##	1078	f	C	F	Millenial	Candice	
##	1078	f	C	F	Millenial		
##	1080	f	C	F	Millenial	Brittney Cheyenne	
##	1081		A	M	Boomer	Theodore	
##	1081	g	A	M	Boomer	Bernard	
##	1083	g	A	M	Boomer	Gene	
##	1084	g	A	M	Boomer	Herbert	
##	1085	g	A	M	Boomer	Ray	
##	1086	g	A	M	Boomer	Tom	
	1087	g	_			Lee	
##		g	A ^	M M	Boomer		
##	1088	g	A	M	Boomer	Alfred	
##	1089	g	A	M	Boomer	Leroy	
## ##	1090	g	A	M	Boomer	Eddie Marc	
	1091	g	A	M	GenX		
## ##	1092	g	A	M	GenX	Jaime	
	1093	g	A	M	GenX	Greg	
## ##	1094	g	A	M	GenX	Darryl	
	1095	g	A	M	GenX	Tim	
## ##	1096	g	A	M M	GenX	Dean	
##	1097	g	A ^	М м	GenX	Jon Chris	
	1098	g	A	М м	GenX	Chris	
##	1099	g	A	М м	GenX	Troy	
##	1100	g	A ^	М м	GenX	Jeff Zachary	
##	1101	g	A	M M	Millenial	Zachary	
##	1102	g	A A	M M	Millenial	Dylan	
##	1103	g	Α	M	ulltenial	Christian	ИA

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	1104	g	A	M	Millenial	Wesley	
##	1105	g	A	M	Millenial	Seth	
##	1106	g	A	M	Millenial	Austin	
##	1107	g	A	M	Millenial	Gabriel	
##	1108	g	A	М	Millenial	Evan	
##	1109	g	A	М	Millenial	Casey	
##	1110	g	A	М	Millenial	Luis	
##	1111	g	A	F	Boomer	Gloria	
##	1112	g	A	F	Boomer	Joan	
##	1113	g	A	F	Boomer	Dorothy	
##	1114	g	A	F	Boomer	Shirley	
##	1115	g	A	F	Boomer	Betty	
##	1116	g	A	F	Boomer	Dianne	
##	1117	g	A	F	Boomer	Kay	
##	1118	g	A	F	Boomer	Marjorie	
##	1119	g	Α	F	Boomer	Lorraine	
##	1120	g	Α	F	Boomer	Mildred	
##	1121	g	Α	F	GenX	Tracy	
##	1122	g	Α	F	GenX	Dawn	
##	1123	g	Α	F	GenX	Tina	
##	1124	g	Α	F	GenX	Tammy	
##	1125	g	Α	F	${\tt GenX}$	Melinda	
##	1126	g	Α	F	GenX	Tamara	NA
##	1127	g	Α	F	${\tt GenX}$	Tracey	NA
##	1128	g	Α	F	GenX	Colleen	NA
##	1129	g	Α	F	${\tt GenX}$	Sherri	NA
##	1130	g	Α	F	GenX	Heidi	NA
##	1131	g	Α	F	Millenial	Samantha	NA
##	1132	g	Α	F	Millenial	Alexis	NA
##	1133	g	Α	F	Millenial	Brittany	NA
##	1134	g	Α	F	Millenial	Lauren	NA
##	1135	g	Α	F	Millenial	Taylor	NA
##	1136	g	Α	F	Millenial	Bethany	NA
##	1137	g	Α	F	Millenial	Latoya	NA
##	1138	g	Α	F	Millenial	Candice	NA
##	1139	g	Α	F	Millenial	Brittney	NA
##	1140	g	Α	F	Millenial	Cheyenne	NA
##	1141	g	В	М	Boomer	Theodore	NA
##	1142	g	В	M	Boomer	Bernard	NA
##	1143	g	В	М	Boomer	Gene	NA
##	1144	g	В	M	Boomer	Herbert	NA
##	1145	g	В	М	Boomer	Ray	NA
##	1146	g	В	М	Boomer	Tom	NA
##	1147	g	В	M	Boomer	Lee	NA
##	1148	g	В	М	Boomer	Alfred	NA
##	1149	g	В	М	Boomer	Leroy	NA
##	1150	g	В	М	Boomer	Eddie	NA
##	1151	g	В	М	GenX	Marc	NA
##	1152	g	В	М	GenX	Jaime	NA
##	1153	g	В	М	GenX	Greg	NA
##	1154	g	В	М	GenX	Darryl	
##	1155	g	В	М	GenX	Tim	
##	1156	g	В	М	GenX	Dean	
##	1157	g	В	М	GenX	Jon	
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	1158	g	В	M	GenX	Chris	
##	1159	g	В	M	GenX	Troy	
##	1160	g	В	M	GenX	Jeff	
##	1161	g	В	M	Millenial	Zachary	
##	1162	g	В	M	Millenial	Dylan	
##	1163	g	В	М		Christian	
##	1164	g	В	M	Millenial	Wesley	
##	1165	g	В	M	Millenial	Seth	
##	1166	g	В	M	Millenial	Austin	
##	1167	g	В	M	Millenial	Gabriel	
##	1168	g	В	M	Millenial	Evan	
##	1169	g	В	М	Millenial	Casey	
##	1170	g	В	М	Millenial	Luis	
##	1171	g	В	F	Boomer	Gloria	
##	1172	g	В	F	Boomer	Joan	
##	1173	g	В	F	Boomer	Dorothy	
##	1174	g	В	F	Boomer	Shirley	
##	1175	g	В	F	Boomer	Betty	
##	1176	g	В	F	Boomer	Dianne	
##	1177	g	В	F	Boomer	Kay	NA
##	1178	g	В	F	Boomer	Marjorie	NA
##	1179	g	В	F	Boomer	Lorraine	NA
##	1180	g	В	F	Boomer	Mildred	
##	1181	g	В	F	GenX	Tracy	NA
##	1182	g	В	F	GenX	Dawn	NA
##	1183	g	В	F	GenX	Tina	NA
##	1184	g	В	F	GenX	Tammy	NA
##	1185	g	В	F	GenX	Melinda	NA
##	1186	g	В	F	GenX	Tamara	NA
##	1187	g	В	F	GenX	Tracey	NA
##	1188	g	В	F	GenX	Colleen	NA
##	1189	g	В	F	GenX	Sherri	NA
##	1190	g	В	F	GenX	Heidi	NA
##	1191	g	В	F	Millenial	Samantha	NA
##	1192	g	В	F	Millenial	Alexis	NA
##	1193	g	В	F	Millenial	Brittany	NA
##	1194	g	В	F	Millenial	Lauren	NA
##	1195	g	В	F	Millenial	Taylor	NA
##	1196	g	В	F	Millenial	Bethany	NA
##	1197	g	В	F	Millenial	Latoya	NA
##	1198	g	В	F	Millenial	Candice	NA
##	1199	g	В	F	Millenial	Brittney	
##	1200	g	В	F	Millenial	Cheyenne	
##	1201	g	С	М	Boomer	Theodore	
##	1202	g	С	М	Boomer	Bernard	
##	1203	g	С	М	Boomer	Gene	
##	1204	g	C	М	Boomer	Herbert	
##	1205	g	C	М	Boomer	Ray	
##	1206	g	C	М	Boomer	Tom	
##	1207	g	C	М	Boomer	Lee	
##	1208	g	C	М	Boomer	Alfred	
##	1209	g	C	М	Boomer	Leroy	
##	1210	g	C	М	Boomer	Eddie	
##	1211	g	C	М	GenX	Marc	
		0	-				

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## ##	1212 1213	g	C C	M M	GenX	Jaime	
##	1213	g	C	M M	GenX GenX	Greg	
	1214	g	C	M M		Darryl Tim	
##		g			GenX	Dean	
##	1216	g	C	M	GenX		
##	1217	g	C	M	GenX	Jon	
##	1218	g	C	М	GenX	Chris	
##	1219	g	C	М	GenX	Troy	
##	1220	g	C	М	GenX	Jeff	
##	1221	g	C	М	Millenial	Zachary	
##	1222	g	C	М	Millenial	Dylan	
##	1223	g	C	М		Christian	
##	1224	g	C	М	Millenial	Wesley	
##	1225	g	C	М	Millenial	Seth	
##	1226	g	С	М	Millenial	Austin	
##	1227	g	С	М	Millenial	Gabriel	
##	1228	g	C	М	Millenial	Evan	
##	1229	g	C	М	Millenial	Casey	
##	1230	g	C	М	Millenial	Luis	
##	1231	g	C	F	Boomer	Gloria	NA
##	1232	g	С	F	Boomer	Joan	NA
##	1233	g	С	F	Boomer	Dorothy	NA
##	1234	g	C	F	Boomer	Shirley	NA
##	1235	g	C	F	Boomer	Betty	NA
##	1236	g	C	F	Boomer	Dianne	NA
##	1237	g	C	F	Boomer	Kay	NA
##	1238	g	C	F	Boomer	Marjorie	NA
##	1239	g	C	F	Boomer	Lorraine	NA
##	1240	g	C	F	Boomer	Mildred	NA
##	1241	g	С	F	GenX	Tracy	NA
##	1242	g	C	F	GenX	Dawn	NA
##	1243	g	C	F	GenX	Tina	NA
##	1244	g	С	F	GenX	Tammy	NA
##	1245	g	С	F	GenX	Melinda	
##	1246	g	С	F	GenX	Tamara	NA
##	1247	g	С	F	GenX	Tracey	NA
##	1248	g	С	F	GenX	Colleen	
##	1249	g	С	F	GenX	Sherri	NA
##	1250	g	С	F	GenX	Heidi	
##	1251	g	C	F	Millenial	Samantha	
##	1252	g	С	F	Millenial	Alexis	
##	1253	g	C	F	Millenial	Brittany	
##	1254	g	C	F	Millenial	Lauren	
##	1255	g	C	F	Millenial	Taylor	
##	1256		C	F	Millenial	Bethany	
##	1257	g o	C	F	Millenial	Latoya	
##	1258	g o	C	F	Millenial	Candice	
##	1259	g o	C	F	Millenial	Brittney	
##	1260	g	C	r F	Millenial	Cheyenne	
##	1261	g h	A	r M	Boomer	Theodore	
##	1261	h h	A	M M	Boomer	Bernard	
##	1263	h h	A	M M	Boomer	Gene	
##							
	1264	h	A	M M	Boomer	Herbert	
##	1265	h	A	М	Boomer	Ray	ΝA

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	1266	h	A	M	Boomer	Tom Lee	
##	1267	h h	A	M	Boomer		
##	1268	h	A	М	Boomer	Alfred	
##	1269	h	A	М	Boomer	Leroy	
##	1270	h	A	М	Boomer	Eddie	
##	1271	h	A	М	GenX	Marc	
##	1272	h	A	M	GenX	Jaime	
##	1273	h	A	M	GenX	Greg	
##	1274	h	A	M	GenX	Darryl	
##	1275	h	A	M	GenX	Tim	
##	1276	h	A	M	GenX	Dean	
##	1277	h	A	M	GenX	Jon	
##	1278	h	A	M	GenX	Chris	
##	1279	h	A	M	GenX	Troy	
##	1280	h	A	M	GenX	Jeff	
##	1281	h	Α	M	Millenial	Zachary	
##	1282	h	Α	М	Millenial	Dylan	
##	1283	h	Α	M	Millenial	Christian	
##	1284	h	Α	М	Millenial	Wesley	
##	1285	h	Α	M	Millenial	Seth	
##	1286	h	Α	M	Millenial	Austin	NA
##	1287	h	Α	M	Millenial	Gabriel	NA
##	1288	h	Α	M	Millenial	Evan	
##	1289	h	Α	M	${\tt Millenial}$	Casey	NA
##	1290	h	Α	M	Millenial	Luis	NA
##	1291	h	Α	F	Boomer	Gloria	NA
##	1292	h	Α	F	Boomer	Joan	NA
##	1293	h	Α	F	Boomer	Dorothy	NA
##	1294	h	Α	F	Boomer	Shirley	NA
##	1295	h	Α	F	Boomer	Betty	NA
##	1296	h	Α	F	Boomer	Dianne	NA
##	1297	h	Α	F	Boomer	Kay	NA
##	1298	h	Α	F	Boomer	Marjorie	NA
##	1299	h	Α	F	Boomer	Lorraine	NA
##	1300	h	Α	F	Boomer	Mildred	NA
##	1301	h	Α	F	GenX	Tracy	NA
##	1302	h	Α	F	GenX	Dawn	NA
##	1303	h	Α	F	GenX	Tina	NA
##	1304	h	Α	F	GenX	Tammy	NA
##	1305	h	Α	F	GenX	=	
##	1306	h	Α	F	GenX	Tamara	NA
##	1307	h	Α	F	GenX	Tracey	NA
##	1308	h	Α	F	GenX	Colleen	
##	1309	h	Α	F	GenX	Sherri	
##	1310	h	Α	F	GenX	Heidi	
##	1311	h	A	F	Millenial	Samantha	
##	1312	h	A	F	Millenial	Alexis	
##	1313	h	A	F	Millenial		
##	1314	h	A	F	Millenial	Lauren	
##	1315	h	A	F	Millenial	Taylor	
##	1316	h	A	F	Millenial	Bethany	
	1317	h	A	F	Millenial	Latoya	
##	1318	h	A	F	Millenial	Candice	
##	1319	h	A	F	Millenial	Brittney	
			••	•		1 0 0 m O y	

##	1320	h	A	F	Millenial	Cheyenne	NA
##	1321	h	В	M	Boomer	Theodore	
##	1322	h	В	M	Boomer	Bernard	NA
##	1323	h	В	M	Boomer	Gene	NA
##	1324	h	В	M	Boomer	Herbert	NA
##	1325	h	В	M	Boomer	Ray	
##	1326	h	В	M	Boomer	Tom	
##	1327	h	В	М	Boomer	Lee	NA
##	1328	h	В	М	Boomer	Alfred	
##	1329	h	В	M	Boomer	Leroy	
##	1330	h	В	М	Boomer	Eddie	
##	1331	h	В	М	GenX	Marc	NA
##	1332	h	В	М	GenX	Jaime	NA
##	1333	h	В	М	GenX	Greg	
##	1334	h	В	М	GenX	Darryl	
##	1335	h	В	М	GenX	Tim	
##	1336	h	В	М	GenX	Dean	
##	1337	h	В	М	GenX	Jon	
##	1338	h	В	М	GenX	Chris	
##	1339	h	В	М	GenX	Troy	
##	1340	h	В	М	GenX	Jeff	
##	1341	h	В	М	Millenial	Zachary	
##	1342	h	В	М	Millenial	Dylan	
##	1343	h	В	M		Christian	
##	1344	h	В	М	Millenial	Wesley	
##	1345	h	В	M	Millenial	Seth	
##	1346	h	В	M	Millenial	Austin	
##	1347	h	В	М	Millenial	Gabriel	
##	1348	h	В	M	Millenial	Evan	
##	1349	h	В	M	Millenial	Casey	
##	1350	h	В	М	Millenial	Luis	
##	1351	h	В	F	Boomer	Gloria	
##	1352	h	В	F	Boomer	Joan	
##	1353	h	В	F	Boomer	Dorothy	
##	1354	h	В	F	Boomer	•	
##	1355	h	В	F	Boomer	Shirley	
##	1356	h	В	F		Betty Dianne	
			_	_	Boomer	Kay	
##	1357	h h	В	F	Boomer	•	
##	1358	h L	В	F	Boomer	Marjorie	
##	1359	h h	B B	F	Boomer	Lorraine Mildred	
##	1360	h L		F	Boomer		
##	1361	h L	В	F	GenX	Tracy	
##	1362	h L	В	F	GenX	Dawn	
##	1363	h L	В	F	GenX	Tina	
##	1364	h L	В	F	GenX	Tammy	
##	1365	h L	В	F	GenX	Melinda	
##	1366	h L	В	F	GenX	Tamara	
##	1367	h L	В	F	GenX	Tracey	
##	1368	h L	В	F	GenX	Colleen	
##	1369	h	В	F	GenX	Sherri	
##	1370	h L	В	F	GenX	Heidi	
##	1371	h	В	F	Millenial	Samantha	
##	1372	h	В	F	Millenial	Alexis	
##	1373	h	В	F	Millenial	Brittany	ΝA

##	1374	h	В	F	Millenial	Lauren	
##	1375	h	В	F	Millenial	Taylor	
##	1376	h	В	F	Millenial	Bethany	
##	1377	h	В	F	Millenial	Latoya	
##	1378	h	В	F	Millenial	Candice	
##	1379	h	В	F	Millenial	Brittney	NA
##	1380	h	В	F	Millenial	Cheyenne	NA
##	1381	h	C	M	Boomer	Theodore	
##	1382	h	C	M	Boomer	Bernard	NA
##	1383	h	C	M	Boomer	Gene	NA
##	1384	h	C	M	Boomer	Herbert	
##	1385	h	C	M	Boomer	Ray	
##	1386	h	C	М	Boomer	Tom	ΝA
##	1387	h	C	M	Boomer	Lee	
##	1388	h	C	M	Boomer	Alfred	NA
##	1389	h	C	М	Boomer	Leroy	NA
##	1390	h	C	М	Boomer	Eddie	NA
##	1391	h	C	M	GenX	Marc	NA
##	1392	h	C	М	GenX	Jaime	NA
##	1393	h	C	M	GenX	Greg	NA
##	1394	h	C	M	GenX	Darryl	NA
##	1395	h	C	M	GenX	Tim	NA
##	1396	h	C	M	GenX	Dean	NA
##	1397	h	C	M	GenX	Jon	NA
##	1398	h	C	М	GenX	Chris	NA
##	1399	h	C	М	GenX	Troy	NA
##	1400	h	C	М	GenX	Jeff	NA
##	1401	h	C	М	Millenial	Zachary	NA
##	1402	h	C	М	Millenial	Dylan	NA
##	1403	h	C	М	Millenial	${\tt Christian}$	NA
##	1404	h	C	M	Millenial	Wesley	NA
##	1405	h	C	М	Millenial	Seth	NA
##	1406	h	C	М	Millenial	Austin	NA
##	1407	h	C	М	Millenial	Gabriel	NA
##	1408	h	C	М	Millenial	Evan	NA
##	1409	h	C	М	Millenial	Casey	NA
##	1410	h	C	М	Millenial	Luis	NA
##	1411	h	C	F	Boomer	Gloria	NA
##	1412	h	C	F	Boomer	Joan	NA
##	1413	h	C	F	Boomer	Dorothy	NA
	1414	h	C	F	Boomer	Shirley	
##	1415	h	C	F	Boomer	Betty	
	1416	h	C	F	Boomer	Dianne	
	1417	h	С	F	Boomer	Kay	
	1418	h	C	F	Boomer	Marjorie	
	1419	h	C	F	Boomer	Lorraine	
	1420	h	C	F	Boomer	Mildred	
	1421	h	C	F	GenX	Tracy	
	1422	h	C	F	GenX	Dawn	
	1423	h	C	F	GenX	Tina	
	1424	h	C	F	GenX	Tammy	
	1425	h	C	F	GenX	Melinda	
	1426	h	C	F	GenX	Tamara	
	1427	h	C	F	GenX	Tracey	
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##	1428	h	С	F	GenX	Colleen	МΛ
##	1429	h	C	F	GenX	Sherri	
##	1430	h	C	F	GenX	Heidi	
##	1431	h	C	F	Millenial	Samantha	
##	1432	h	C	F	Millenial	Alexis	
##	1433	h	C	F	Millenial	Brittany	
##	1434	h	C	F	Millenial	Lauren	
##	1435	h	C	F	Millenial	Taylor	
##	1436	h	C	F	Millenial	Bethany	
##	1437	h	C	F	Millenial	Latoya	
##	1438	h	C	F	Millenial	Candice	
##	1439	h	C	F	Millenial	Brittney	
##	1440	h	C	F	Millenial	-	
##	1441	i		r M		Cheyenne Theodore	
##	1441	i	A A	M M	Boomer	Bernard	
##	1442	i	A	M M	Boomer	Gene	
					Boomer		
##	1444	i	A	М	Boomer	Herbert	
##	1445	i	A	M	Boomer	Ray	
##	1446	i	A	М	Boomer	Tom Lee	
##	1447	i	A	М	Boomer		
##	1448 1449	i	A	М	Boomer	Alfred	
##		i	A	M	Boomer	Leroy	
##	1450	i	A	M	Boomer	Eddie	
##	1451	i	A	M	GenX	Marc	
##	1452	i	A	M	GenX	Jaime	
##	1453	i	A	M	GenX	Greg	
##	1454	i	A	М	GenX	Darryl	
##	1455	i	A	М	GenX	Tim	
##	1456	i	A	M	GenX	Dean	
##	1457	i	A	M	GenX	Jon	
##	1458	i	A	M	GenX	Chris	
##	1459	i	A	M	GenX	Troy	
##	1460	i	A	M	GenX	Jeff	
##	1461	i	A	M	Millenial	Zachary	
##	1462	i	A	М	Millenial	Dylan	
##	1463	i	A	M		Christian	
##	1464	i	A	М	Millenial	Wesley	
	1465	i	A	М	Millenial	Seth	
##	1466	i	A	М	Millenial	Austin	
##	1467	i	A	М	Millenial	Gabriel	
##	1468	i	A	М	Millenial	Evan	
##	1469	i	A	М	Millenial	Casey	
##	1470	i	A	M	Millenial	Luis	
##	1471	i	A	F	Boomer	Gloria	
##	1472	i	A	F	Boomer	Joan	
##	1473	i	Α	F	Boomer	Dorothy	
##	1474	i	Α	F	Boomer	Shirley	
##	1475	i	Α	F	Boomer	Betty	
##	1476	i	Α	F	Boomer	Dianne	
##	1477	i	Α	F	Boomer	Kay	
##	1478	i	A	F	Boomer	Marjorie	
##	1479	i	Α	F	Boomer	Lorraine	
##	1480	i	Α	F	Boomer	Mildred	
##	1481	i	Α	F	GenX	Tracy	NA

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	1482 1483	i i	A A	F F	GenX GenX	Dawn Tina	
##	1484	i	A A	r F	GenX		
##	1485	i	A	F	GenX	Tammy Melinda	
##	1486	i	A	F	GenX	Tamara	
	1487	i	A A	r F	GenX		
##		i		r F		Tracey	
##	1488	i	A	r F	GenX	Colleen Sherri	
##	1489	i	A	r F	GenX		
##	1490 1491	i	A A	r F	GenX Millenial	Heidi Samantha	
##		i		r F			
##	1492	i	A	r F	Millenial	Alexis	
##	1493		A		Millenial	Brittany	
##	1494	i	A	F	Millenial	Lauren	
##	1495	i	A	F	Millenial	Taylor	
##	1496	i	A	F	Millenial	Bethany	
##	1497	i	A	F	Millenial	Latoya	
##	1498	i	A	F	Millenial	Candice	
##	1499	i	A	F	Millenial	Brittney	
##	1500	i	A	F	Millenial	Cheyenne	
##	1501	i	В	M	Boomer	Theodore	
##	1502	i	В	M	Boomer	Bernard	
##	1503	i	В	M	Boomer	Gene	
##	1504	i	В	M	Boomer	Herbert	
##	1505	i	В	M	Boomer	Ray	
##	1506	i	В	M	Boomer	Tom	
##	1507	i	В	М	Boomer	Lee	ΝA
##	1508	i	В	М	Boomer	Alfred	
##	1509	i	В	M	Boomer	Leroy	
##	1510	i	В	M	Boomer	Eddie	NA
##	1511	i	В	M	GenX	Marc	NA
##	1512	i	В	М	GenX	Jaime	
##	1513	i	В	M	GenX	Greg	NA
##	1514	i	В	M	GenX	Darryl	NA
##	1515	i	В	M	GenX	Tim	NA
##	1516	i	В	M	GenX	Dean	NA
##	1517	i	В	M	GenX	Jon	NA
##	1518	i	В	M	GenX	Chris	NA
##	1519	i	В	M	GenX	Troy	NA
##	1520	i	В	M	GenX	Jeff	NA
##	1521	i	В	M	Millenial	Zachary	NA
##	1522	i	В	M	Millenial	Dylan	NA
##	1523	i	В	M	Millenial	Christian	NA
##	1524	i	В	M	Millenial	Wesley	NA
##	1525	i	В	M	Millenial	Seth	NA
##	1526	i	В	M	Millenial	Austin	NA
##	1527	i	В	M	Millenial	Gabriel	NA
##	1528	i	В	M	Millenial	Evan	NA
##	1529	i	В	M	Millenial	Casey	NA
##	1530	i	В	М	Millenial	Luis	
##	1531	i	В	F	Boomer	Gloria	
	1532	i	В	F	Boomer	Joan	
	1533	i	В	F	Boomer	Dorothy	
	1534	i	В	F	Boomer	Shirley	
	1535	i	В	F	Boomer	Betty	
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	1536	i i	В	F F	Boomer	Dianne	
##	1537		В		Boomer	Kay	
##	1538	i	В	F	Boomer	Marjorie	
##	1539	i	В	F	Boomer	Lorraine	
##	1540	i	В	F	Boomer	Mildred	
##	1541	i	В	F	GenX	Tracy	
##	1542	i	В	F	GenX	Dawn	
##	1543	i	В	F	GenX	Tina	
##	1544	i	В	F	GenX	Tammy	
##	1545	i	В	F	GenX	Melinda	
##	1546	i	В	F	GenX	Tamara	
##	1547	i	В	F	GenX	Tracey	
##	1548	i	В	F	GenX	Colleen	
##	1549	i	В	F	${\tt GenX}$	Sherri	
##	1550	i	В	F	GenX	Heidi	NA
##	1551	i	В	F	Millenial	Samantha	NA
##	1552	i	В	F	Millenial	Alexis	NA
##	1553	i	В	F	Millenial	Brittany	NA
##	1554	i	В	F	Millenial	Lauren	NA
##	1555	i	В	F	Millenial	Taylor	NA
##	1556	i	В	F	Millenial	Bethany	NA
##	1557	i	В	F	Millenial	Latoya	
##	1558	i	В	F	Millenial	Candice	
##	1559	i	В	F	Millenial	Brittney	NA
##	1560	i	В	F	Millenial	Cheyenne	
##	1561	i	C	M	Boomer	Theodore	
##	1562	i	C	М	Boomer	Bernard	
##	1563	i	C	М	Boomer	Gene	
##	1564	i	C	М	Boomer	Herbert	
##	1565	i	C	M	Boomer	Ray	
##	1566	i	C	M	Boomer	Tom	
##	1567	i	C	M	Boomer	Lee	
##	1568	i	C	M	Boomer	Alfred	
##	1569	i	C	M			
					Boomer	Leroy	
##	1570	i	C	M	Boomer	Eddie	
##	1571	i	C	M	GenX	Marc	
##	1572	i	C	M	GenX	Jaime	
	1573	i	C	М	GenX	Greg	
##	1574	i	C	M	GenX	Darryl	
##	1575	i	C	M	GenX	Tim	
##	1576	i	С	М	GenX	Dean	
##	1577	i	C	М	GenX	Jon	
##	1578	i	С	М	GenX	Chris	
##	1579	i	С	М	GenX	Troy	
##	1580	i	C	М	${\tt GenX}$	Jeff	NA
##	1581	i	C	М	Millenial	Zachary	NA
##	1582	i	C	М	${\tt Millenial}$	Dylan	NA
##	1583	i	C	М	Millenial	${\tt Christian}$	NA
##	1584	i	C	М	Millenial	Wesley	NA
##	1585	i	C	М	Millenial	Seth	NA
##	1586	i	C	М	Millenial	Austin	NA
##	1587	i	C	М	Millenial	Gabriel	NA
##	1588	i	C	М	Millenial	Evan	NA
##	1589	i	C	М	Millenial	Casey	NA
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##	1590	i	С	М	Millenial	Luis	NA
##	1591	i	C	F	Boomer	Gloria	NA
##	1592	i	C	F	Boomer	Joan	NA
##	1593	i	C	F	Boomer	Dorothy	NA
##	1594	i	С	F	Boomer	Shirley	
##	1595	i	С	F	Boomer	Betty	NA
##	1596	i	С	F	Boomer	Dianne	
##	1597	i	С	F	Boomer	Kay	NA
##	1598	i	С	F	Boomer	Marjorie	
##	1599	i	С	F	Boomer	Lorraine	
##	1600	i	С	F	Boomer	Mildred	NA
##	1601	i	С	F	GenX	Tracy	NA
##	1602	i	C	F	GenX	Dawn	
##	1603	i	C	F	GenX	Tina	
##	1604	i	C	F	GenX	Tammy	
##	1605	i	C	F	GenX	Melinda	
##	1606	i	C	F	GenX	Tamara	
##	1607	i	C	F	GenX	Tracey	
##	1608	i	C	F	GenX	Colleen	
##	1609	i	C	F	GenX	Sherri	
##	1610	i	C	F	GenX	Heidi	
##	1611	i	C	F	Millenial	Samantha	
##	1612	i	C	F	Millenial	Alexis	
##	1613	i	C	F	Millenial	Brittany	
##	1614	i	C	F	Millenial	Lauren	
##	1615	i	C	F	Millenial	Taylor	
##	1616	i	C	F	Millenial	Bethany	
##	1617	i	C	F	Millenial	Latoya	
##	1618	i	C	F	Millenial	Candice	
##	1619	i	C	F	Millenial	Brittney	
##	1620	i	C	F	Millenial	Cheyenne	
##	1621	j	A	М	Boomer	Theodore	
##	1622		A	M	Boomer	Bernard	
##	1623	j	A	M	Boomer	Gene	
##	1624	j	A	M	Boomer	Herbert	
##	1625	j j	A	M	Boomer	Ray	
##	1626	j	A	M	Boomer	Tom	
##	1627				_	Lee	
##	1628	j j	A A	M M	Boomer Boomer	Alfred	
##	1629	j	A	M	Boomer	Leroy	
##	1630	j j	A	M	Boomer	Eddie	
##	1631	j j	A	M	GenX	Marc	
##	1632		A	M	GenX	Jaime	
##	1633	j j	A	M	GenX	Greg	
##	1634	J	A	M	GenX	Darryl	
##	1635	j	A			Tim	
##	1636	j i	A A	M M	GenX	Dean	
##	1637	j	A A	M M	GenX		
		j			GenX	Jon Chris	
##	1638	j	A	M M	GenX	Chris	
##	1639	j	A	M M	GenX	Troy	
##	1640	j	A A	M M	GenX	Jeff Zachary	
##	1641	j	A	M M	Millenial	Zachary	
##	1642	j	A	M M	Millenial	Dylan	
##	1643	j	A	M	willenial	Christian	IV A

##	1644	4	Α	М	Millenial	Moglow	NT A
##	1645	j j	A	M	Millenial	Wesley Seth	
##	1646		A	M	Millenial	Austin	
##	1647	j	A	M		Gabriel	
	1648	j	A	M	Millenial Millenial	Evan	
##	1649	j					
##		j	A	М	Millenial	Casey	
##	1650	j	A	М	Millenial	Luis	
##	1651	j	A	F	Boomer	Gloria	
##	1652	j	A	F	Boomer	Joan	
##	1653	j	A	F	Boomer	Dorothy	
##	1654	j	A	F	Boomer	Shirley	
##	1655	j	A	F	Boomer	Betty	
##	1656	j	A	F	Boomer	Dianne	
##	1657	j	A	F	Boomer	Kay	
##	1658	j	Α	F	Boomer	Marjorie	
##	1659	j	Α	F	Boomer	Lorraine	
##	1660	j	Α	F	Boomer	Mildred	
##	1661	j	Α	F	GenX	Tracy	NA
##	1662	j	Α	F	GenX	Dawn	NA
##	1663	j	Α	F	GenX	Tina	NA
##	1664	j	Α	F	GenX	Tammy	NA
##	1665	j	Α	F	${\tt GenX}$	Melinda	NA
##	1666	j	Α	F	GenX	Tamara	NA
##	1667	j	Α	F	GenX	Tracey	NA
##	1668	j	Α	F	GenX	Colleen	NA
##	1669	j	Α	F	GenX	Sherri	NA
##	1670	j	Α	F	GenX	Heidi	NA
##	1671	j	Α	F	Millenial	Samantha	NA
##	1672	j	Α	F	Millenial	Alexis	NA
##	1673	j	Α	F	Millenial	Brittany	NA
##	1674	j	Α	F	Millenial	Lauren	
##	1675	j	Α	F	Millenial	Taylor	NA
##	1676	j	A	F	Millenial	Bethany	
##	1677	j	A	F	Millenial	Latoya	
##	1678	j	A	F	Millenial	Candice	
##	1679	j	A	F	Millenial	Brittney	
##	1680	j j	A	F	Millenial	Cheyenne	
##	1681		В	М	Boomer	Theodore	
##	1682	j	В	М	Boomer	Bernard	
##	1683	j		М	Boomer	Gene	
		j	В				
##	1684	j	В	M	Boomer	Herbert	
##	1685	j	В	М	Boomer	Ray	
##	1686	j	В	М	Boomer	Tom	
##	1687	j	В	М	Boomer	Lee	
##	1688	j	В	М	Boomer	Alfred	
##	1689	j	В	М	Boomer	Leroy	
##	1690	j	В	М	Boomer	Eddie	
##	1691	j	В	М	GenX	Marc	
##	1692	j	В	М	GenX	Jaime	
##	1693	j	В	M	${\tt GenX}$	Greg	
##	1694	j	В	M	GenX	Darryl	
##	1695	j	В	M	GenX	Tim	NA
##	1696	j	В	M	GenX	Dean	NA
##	1697	j	В	M	${\tt GenX}$	Jon	NA

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## ##	1698 1699	j B i B	M M	GenX	Chris	
##	1700	J	M	GenX GenX	Troy Jeff	
##	1700	J	M			
##	1701	J	M M	Millenial	Zachary	
		J		Millenial	Dylan Christian	
##	1703	j B	M			
##	1704	j B	M	Millenial	Wesley	
##	1705	j B	M	Millenial	Seth	
##	1706	j B	M	Millenial	Austin	
##	1707	j B	M	Millenial	Gabriel	
##	1708	j B	M	Millenial	Evan	
##	1709	j B	М	Millenial	Casey	
##	1710	j B	M	Millenial	Luis	
##	1711	j B	F	Boomer	Gloria	
##	1712	j B	F	Boomer	Joan	
##	1713	j B	F	Boomer	Dorothy	
##	1714	j B	F	Boomer	Shirley	
##	1715	j B	F	Boomer	Betty	
##	1716	j B	F	Boomer	Dianne	
##	1717	j B	F	Boomer	Kay	ΝA
##	1718	j B	F	Boomer	Marjorie	NA
##	1719	j B	F	Boomer	Lorraine	NA
##	1720	j B	F	Boomer	Mildred	NA
##	1721	j B	F	GenX	Tracy	NA
##	1722	j B	F	GenX	Dawn	NA
##	1723	j B	F	GenX	Tina	NA
##	1724	j B	F	GenX	Tammy	NA
##	1725	j B	F	GenX	Melinda	NA
##	1726	j B	F	GenX	Tamara	NA
##	1727	j B	F	GenX	Tracey	NA
##	1728	j B	F	GenX	Colleen	NA
##	1729	j B	F	GenX	Sherri	NA
##	1730	j B	F	GenX	Heidi	NA
##	1731	j B	F	Millenial	Samantha	NA
##	1732	j B	F	Millenial	Alexis	
##	1733	j B	F	Millenial	Brittany	NA
##	1734	j B	F	Millenial	Lauren	
##	1735	j B	F	Millenial	Taylor	NA
##	1736	j B	F	Millenial	Bethany	
##	1737	j B	F	Millenial	•	
##	1738	j B	F	Millenial	Candice	
##	1739	j B	F	Millenial		
##	1740	j B	F	Millenial	Cheyenne	
##	1741	j C	M	Boomer	Theodore	
##	1742	j C	M	Boomer	Bernard	
##	1743	j C	M	Boomer	Gene	
##	1744	•	M	Boomer	Herbert	
##	1744	•	M	Boomer	Ray	
##	1746	•	M	Boomer	Tom	
##	1747	•	M	Boomer	Lee	
##	1748	•	M M	Boomer	Alfred	
##	1748	•	M M	Boomer		
##		•			Leroy	
	1750	•	M M	Boomer	Eddie	
##	1751	j C	М	GenX	Marc	IVA

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	1752	j	C C	M	GenX	Jaime	
##	1753	j		М	GenX	Greg	
##	1754	j	C	М	GenX	Darryl	
##	1755	j	C	М	GenX	Tim	
##	1756	j	C	М	GenX	Dean	
##	1757	j	C	М	GenX	Jon	
##	1758	j	C	M	GenX	Chris	
##	1759	j	C	M	GenX	Troy	
##	1760	j	C	M	GenX	Jeff	
##	1761	j	С	М	Millenial	Zachary	
##	1762	j	С	M	Millenial	Dylan	
##	1763	j	С	M		Christian	
##	1764	j	С	M	Millenial	Wesley	
##	1765	j	C	M	Millenial	Seth	
##	1766	j	C	M	Millenial	Austin	NA
##	1767	j	С	M	Millenial	Gabriel	NA
##	1768	j	C	M	Millenial	Evan	NA
##	1769	j	C	M	Millenial	Casey	NA
##	1770	j	C	M	Millenial	Luis	NA
##	1771	j	C	F	Boomer	Gloria	NA
##	1772	j	C	F	Boomer	Joan	NA
##	1773	j	C	F	Boomer	Dorothy	NA
##	1774	j	C	F	Boomer	Shirley	NA
##	1775	j	C	F	Boomer	Betty	
##	1776	j	С	F	Boomer	Dianne	
##	1777	j	С	F	Boomer	Kay	
##	1778	j	С	F	Boomer	Marjorie	
##	1779	j	С	F	Boomer	Lorraine	
##	1780	j	С	F	Boomer	Mildred	NA
##	1781	j	С	F	GenX	Tracy	NA
##	1782	j	C	F	GenX	Dawn	
##	1783	j	C	F	GenX	Tina	
##	1784	j	C	F	GenX	Tammy	
##	1785	j	C	F	GenX	Melinda	
##	1786	j	C	F	GenX	Tamara	
##	1787	j	C	F	GenX	Tracey	
##	1788	j	C	F	GenX	Colleen	
	1789		C	F	GenX	Sherri	
##	1790	j	C	F	GenX	Heidi	
	1791	j	C		Millenial	Samantha	
##		j	C	F		Alexis	
## ##	1792	j	C	F	Millenial		
	1793	j		F	Millenial	Brittany	
##	1794	j	C	F	Millenial	Lauren	
##	1795	j	C	F	Millenial	Taylor	
##	1796	j	C	F	Millenial	Bethany	
##	1797	j	C	F	Millenial	Latoya	
##	1798	j	C	F	Millenial	Candice	
##	1799	j	C	F	Millenial	Brittney	
##	1800	j	C	F	Millenial	Cheyenne	
##	1801	k	A	M	Boomer	Theodore	
##	1802	k	A	M	Boomer	Bernard	
##	1803	k -	A	M	Boomer	Gene	
##	1804	k	A	M	Boomer	Herbert	
##	1805	k	A	M	Boomer	Ray	ΝA

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	1806	k 1-	A	M	Boomer	Tom Lee	
##	1807	k 1-	A	M	Boomer	Alfred	
##	1808	k 1-	A	M	Boomer		
##	1809	k 1-	A	M	Boomer	Leroy	
##	1810	k	A	M	Boomer	Eddie	
##	1811	k	A	М	GenX	Marc	
##	1812	k	A	M	GenX	Jaime	
##	1813	k	A	M	GenX	Greg	
##	1814	k	A	M	GenX	Darryl	
##	1815	k	A	M	GenX	Tim	
##	1816	k	A	M	GenX	Dean	
##	1817	k	A	М	GenX	Jon	
##	1818	k	A	М	GenX	Chris	
##	1819	k	A	М	GenX	Troy	
##	1820	k	A	М	GenX	Jeff	
##	1821	k	Α	М	Millenial	Zachary	
##	1822	k	Α	М	Millenial	Dylan	
##	1823	k	Α	M		Christian	
##	1824	k	Α	М	Millenial	Wesley	
##	1825	k	Α	М	Millenial	Seth	
##	1826	k	Α	М	Millenial	Austin	NA
##	1827	k	Α	М	Millenial	Gabriel	NA
##	1828	k	Α	М	Millenial	Evan	
##	1829	k	Α	М	Millenial	Casey	NA
##	1830	k	Α	М	Millenial	Luis	NA
##	1831	k	Α	F	Boomer	Gloria	NA
##	1832	k	Α	F	Boomer	Joan	NA
##	1833	k	Α	F	Boomer	Dorothy	NA
##	1834	k	Α	F	Boomer	Shirley	NA
##	1835	k	Α	F	Boomer	Betty	NA
##	1836	k	Α	F	Boomer	Dianne	NA
##	1837	k	Α	F	Boomer	Kay	NA
##	1838	k	Α	F	Boomer	Marjorie	NA
##	1839	k	Α	F	Boomer	Lorraine	NA
##	1840	k	Α	F	Boomer	Mildred	NA
##	1841	k	Α	F	GenX	Tracy	NA
##	1842	k	Α	F	GenX	Dawn	NA
##	1843	k	Α	F	GenX	Tina	NA
##	1844	k	Α	F	GenX	Tammy	NA
##	1845	k	Α	F	GenX	=	
##	1846	k	Α	F	GenX	Tamara	NA
##	1847	k	Α	F	GenX		NA
##	1848	k	Α	F	GenX		
##	1849	k	Α	F	GenX	Sherri	
##	1850	k	Α	F	GenX		
##	1851	k	A	F	Millenial	Samantha	
##	1852	k	A	F	Millenial	Alexis	
##	1853	k	A	F	Millenial		
##	1854	k	A	F	Millenial	Lauren	
##	1855	k	A	F	Millenial	Taylor	
##	1856	k	A	F	Millenial	Bethany	
	1857	k	A	F	Millenial	Latoya	
##	1858	k	A	F	Millenial	Candice	
##	1859	k	A	F	Millenial	Brittney	
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##	1860	k	Α	F	Millenial	Cheyenne	NA
##	1861	k	В	М	Boomer	Theodore	
##	1862	k	В	М	Boomer	Bernard	NA
##	1863	k	В	М	Boomer	Gene	NA
##	1864	k	В	М	Boomer	Herbert	NA
##	1865	k	В	М	Boomer	Ray	NA
##	1866	k	В	М	Boomer	Tom	
##	1867	k	В	М	Boomer	Lee	NA
##	1868	k	В	М	Boomer	Alfred	
##	1869	k	В	М	Boomer	Leroy	
##	1870	k	В	М	Boomer	Eddie	
##	1871	k	В	М	GenX	Marc	NA
##	1872	k	В	М	GenX	Jaime	NA
##	1873	k	В	М	GenX	Greg	
##	1874	k	В	М	GenX	Darryl	
##	1875	k	В	М	GenX	Tim	
##	1876	k	В	М	GenX	Dean	
##	1877	k	В	М	GenX	Jon	
##	1878	k	В	М	GenX	Chris	
##	1879	k	В	М	GenX	Troy	
##	1880	k	В	М	GenX	Jeff	
##	1881	k	В	М	Millenial	Zachary	
##	1882	k	В	М	Millenial	Dylan	
##	1883	k	В	М		Christian	
##	1884	k	В	М	Millenial	Wesley	
##	1885	k	В	М	Millenial	Seth	
##	1886	k	В	М	Millenial	Austin	
##	1887	k	В	М	Millenial	Gabriel	
##	1888	k	В	М	Millenial	Evan	
##	1889	k	В	М	Millenial	Casey	
##	1890	k	В	M	Millenial	Luis	
##	1891	k	В	F	Boomer	Gloria	
##	1892	k	В	F	Boomer	Joan	
##	1893	k	В	F	Boomer		
##	1894	k k	В	F	Boomer	Dorothy	
##	1895	k	В	F	Boomer	Shirley	
##	1896	k k	В	F	Boomer	Betty Dianne	
		_	_	_			
##	1897	k 1-	В	F	Boomer	Kay	
##	1898	k 1-	В	F	Boomer	Marjorie	
##	1899	k 1 <del>-</del>	B B	F	Boomer	Lorraine	
##	1900	k 1-		F	Boomer	Mildred	
##	1901	k 1-	В	F	GenX	Tracy	
##	1902	k 1-	В	F	GenX	Dawn	
##	1903	k 1-	В	F	GenX	Tina	
##	1904	k	В	F	GenX	Tammy	
##	1905	k 1-	В	F	GenX	Melinda	
##	1906	k 1 <del>-</del>	В	F	GenX	Tamara	
##	1907	k 1 <del>-</del>	В	F	GenX	Tracey	
##	1908	k 1-	В	F	GenX	Colleen	
##	1909	k 1-	В	F	GenX	Sherri	
##	1910	k 1-	В	F	GenX	Heidi	
##	1911	k 1-	В	F	Millenial	Samantha	
##	1912	k	В	F	Millenial	Alexis	
##	1913	k	В	F	Millenial	Brittany	ΝA

##	1914	k	В	F	Millenial	Lauren	
##	1915	k	В	F	Millenial	Taylor	
##	1916	k	В	F	Millenial	Bethany	
##	1917	k	В	F	Millenial	Latoya	
##	1918	k	В	F	Millenial	Candice	
##	1919	k	В	F	Millenial	Brittney	NA
##	1920	k	В	F	Millenial	Cheyenne	NA
##	1921	k	C	М	Boomer	Theodore	NA
##	1922	k	C	М	Boomer	Bernard	NA
##	1923	k	C	M	Boomer	Gene	NA
##	1924	k	C	М	Boomer	Herbert	NA
##	1925	k	C	М	Boomer	Ray	NA
##	1926	k	C	М	Boomer	Tom	NA
##	1927	k	C	M	Boomer	Lee	NA
##	1928	k	C	М	Boomer	Alfred	NA
##	1929	k	C	M	Boomer	Leroy	NA
##	1930	k	C	M	Boomer	Eddie	NA
##	1931	k	C	M	GenX	Marc	NA
##	1932	k	C	М	GenX	Jaime	NA
##	1933	k	C	M	GenX	Greg	NA
##	1934	k	C	M	GenX	Darryl	NA
##	1935	k	C	M	GenX	Tim	NA
##	1936	k	C	М	GenX	Dean	NA
##	1937	k	C	M	GenX	Jon	NA
##	1938	k	C	М	GenX	Chris	NA
##	1939	k	C	М	GenX	Troy	NA
##	1940	k	C	M	GenX	Jeff	NA
##	1941	k	C	М	Millenial	Zachary	NA
##	1942	k	C	М	Millenial	Dylan	NA
##	1943	k	C	М	Millenial	Christian	NA
##	1944	k	C	М	Millenial	Wesley	NA
##	1945	k	C	M	Millenial	Seth	NA
##	1946	k	C	М	Millenial	Austin	NA
##	1947	k	C	М	Millenial	Gabriel	NA
##	1948	k	C	М	Millenial	Evan	NA
##	1949	k	C	М	Millenial	Casey	NA
##	1950	k	C	М	Millenial	Luis	
##	1951	k	C	F	Boomer	Gloria	NA
##	1952	k	C	F	Boomer	Joan	NA
##	1953	k	C	F	Boomer	Dorothy	NA
	1954	k	C	F	Boomer	Shirley	
##	1955	k	C	F	Boomer	Betty	
##	1956	k	С	F	Boomer	Dianne	
##	1957	k	С	F	Boomer	Kay	
	1958	k	С	F	Boomer	Marjorie	
	1959	k	С	F	Boomer	Lorraine	
	1960	k	C	F	Boomer	Mildred	
	1961	k	C	F	GenX	Tracy	
##	1962	k	C	F	GenX	Dawn	
	1963	k	C	F	GenX	Tina	
	1964	k	C	F	GenX	Tammy	
	1965	k	C	F	GenX	Melinda	
	1966	k	C	F	GenX	Tamara	
	1967	k	C	F	GenX	Tracey	
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	1968	k	C C	F F	GenX	Colleen Sherri	
##	1969	k	C		GenX	Heidi	
##	1970	k		F	GenX		
##	1971	k	C	F	Millenial		
##	1972	k	C	F	Millenial	Alexis	
##	1973	k	C	F	Millenial	3	
##	1974	k	C	F	Millenial	Lauren	
##	1975	k -	C	F	Millenial	Taylor	
##	1976	k	C	F	Millenial	Bethany	
##	1977	k -	C	F	Millenial	Latoya	
##	1978	k	С	F	Millenial	Candice	
##	1979	k	C	F	Millenial	Brittney	
##	1980	k	C	F	Millenial	Cheyenne	
##	1981	1	Α	M	Boomer		
##	1982	1	Α	M	Boomer	Bernard	
##	1983	1	Α	M	Boomer	Gene	NA
##	1984	1	Α	M	Boomer	Herbert	NA
##	1985	1	Α	M	Boomer	Ray	NA
##	1986	1	Α	M	Boomer	Tom	NA
##	1987	1	Α	M	Boomer	Lee	NA
##	1988	1	Α	M	Boomer	Alfred	NA
##	1989	1	Α	M	Boomer	Leroy	NA
##	1990	1	Α	M	Boomer	Eddie	NA
##	1991	1	Α	M	GenX	Marc	NA
##	1992	1	Α	М	GenX	Jaime	NA
##	1993	1	Α	М	GenX	Greg	
##	1994	1	Α	М	GenX	Darryl	
##	1995	1	Α	М	GenX	Tim	
##	1996	1	A	М	GenX	Dean	
##	1997	1	A	М	GenX	Jon	
##	1998	1	A	М	GenX	Chris	
##	1999	1	A	М	GenX	Troy	
##	2000	1	A	M	GenX	Jeff	
##	2000	1	A	M	Millenial		
	2001	1				Zachary	
##	2002	1	A	M	Millenial	Dylan	
##			A	M		Christian	
##	2004	1	A	М	Millenial	Wesley	
	2005	1	A	М	Millenial	Seth	
##	2006	1	A	M	Millenial	Austin	
	2007	1	A	M	Millenial	Gabriel	
	2008	1	A	М	Millenial	Evan	
##	2009	1	A	М	Millenial	Casey	
##	2010	1	A	M	Millenial	Luis	
##	2011	1	Α	F	Boomer	Gloria	
##	2012	1	Α	F	Boomer	Joan	NA
##	2013	1	Α	F	Boomer	Dorothy	
##	2014	1	Α	F	Boomer	Shirley	NA
##	2015	1	Α	F	Boomer	Betty	NA
##	2016	1	Α	F	Boomer	Dianne	NA
##	2017	1	Α	F	Boomer	Kay	NA
##	2018	1	Α	F	Boomer	Marjorie	NA
##	2019	1	Α	F	Boomer	Lorraine	NA
##	2020	1	Α	F	Boomer	Mildred	NA
##	2021	1	Α	F	GenX	Tracy	NA
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##	2022	1	Α	F	GenX	Dawn	NT A
##	2022	1	A	r F	GenX	Tina	
##	2023	1	A	F	GenX	Tammy	
##	2024	1	A	F	GenX	Melinda	
##	2025	1	A	F	GenX	Tamara	
##	2020	1	A	r F	GenX	Tracey	
	2027	1	A	r F		Colleen	
##		1		r F	GenX	Sherri	
##	2029		A		GenX		
##	2030 2031	1 1	A	F	GenX	Heidi Samantha	
##			A	F	Millenial		
##	2032	1	A	F	Millenial	Alexis	
##	2033	1	A	F	Millenial	Brittany	
##	2034	1	A	F	Millenial	Lauren	
##	2035	1	A	F	Millenial	Taylor	
##	2036	1	A	F	Millenial	Bethany	
##	2037	1	Α	F	Millenial	Latoya	
##	2038	1	Α	F	Millenial	Candice	
##	2039	1	Α	F	Millenial	Brittney	NA
##	2040	1	Α	F	Millenial	Cheyenne	NA
##	2041	1	В	М	Boomer	Theodore	NA
##	2042	1	В	М	Boomer	Bernard	NA
##	2043	1	В	М	Boomer	Gene	NA
##	2044	1	В	M	Boomer	Herbert	NA
##	2045	1	В	M	Boomer	Ray	NA
##	2046	1	В	М	Boomer	Tom	NA
##	2047	1	В	М	Boomer	Lee	NA
##	2048	1	В	М	Boomer	Alfred	NA
##	2049	1	В	М	Boomer	Leroy	NA
##	2050	1	В	М	Boomer	Eddie	NA
##	2051	1	В	М	GenX	Marc	NA
##	2052	1	В	М	GenX	Jaime	NA
##	2053	1	В	М	GenX	Greg	NA
##	2054	1	В	М	GenX	Darryl	
##	2055	1	В	М	GenX	, Tim	
##	2056	1	В	М	GenX	Dean	NA
##	2057	1	В	М	GenX	Jon	
##	2058	1	В	М	GenX	Chris	
	2059	1	В	М	GenX	Troy	
	2060	1	В	М	GenX	Jeff	
	2061	1	В	М	Millenial	Zachary	
	2062	1	В	М	Millenial	Dylan	
	2063	1	В	M		Christian	
	2064	1	В	M	Millenial	Wesley	
	2065	1	В	М	Millenial	Seth	
	2066	1	В	М	Millenial	Austin	
	2067	1	В	M	Millenial	Gabriel	
	2067	1	В	M	Millenial	Evan	
		1			Millenial		
	2069		В	M M		Casey	
##	2070	1	В	M	Millenial	Luis	
	2071	1	В	F	Boomer	Gloria	
	2072	1	В	F	Boomer	Joan	
	2073	1	В	F	Boomer	Dorothy	
	2074	1	В	F	Boomer	Shirley	
##	2075	1	В	F	Boomer	Betty	ΝA

##	2076	1	В	F	Boomer	Dianne	МΛ
	2077	1	В	F	Boomer	Kay	
##	2078	1	В	F	Boomer	Marjorie	
##	2079	1	В	F	Boomer	Lorraine	
##	2080	1	В	F	Boomer	Mildred	
##	2081	1	В	F	GenX	Tracy	
##	2081	1	В	F	GenX	Dawn	
##	2083	1	В	F	GenX	Tina	
##	2084	1	В	r F	GenX		
##	2085	1	В	r F	GenX	Tammy Melinda	
		1		r F			
##	2086		В	=	GenX	Tamara	
##	2087	1	В	F	GenX	Tracey	
##	2088	1	В	F	GenX	Colleen	
##	2089	1	В	F	GenX	Sherri	
##	2090	1	В	F	GenX	Heidi	
##	2091	1	В	F	Millenial	Samantha	
##	2092	1	В	F	Millenial	Alexis	
##	2093	1	В	F	Millenial	Brittany	NA
##	2094	1	В	F	Millenial	Lauren	
##	2095	1	В	F	Millenial	Taylor	NA
##	2096	1	В	F	Millenial	Bethany	NA
##	2097	1	В	F	Millenial	Latoya	NA
##	2098	1	В	F	Millenial	Candice	NA
##	2099	1	В	F	Millenial	Brittney	NA
##	2100	1	В	F	Millenial	Cheyenne	NA
##	2101	1	С	M	Boomer	Theodore	NA
##	2102	1	С	M	Boomer	Bernard	NA
##	2103	1	С	М	Boomer	Gene	NA
##	2104	1	С	М	Boomer	Herbert	NA
##	2105	1	С	М	Boomer	Ray	NA
##	2106	1	C	М	Boomer	Tom	
##	2107	1	C	М	Boomer	Lee	NA
##	2108	1	C	М	Boomer	Alfred	
	2109	1	C	М	Boomer	Leroy	
	2110	1	C	М	Boomer	Eddie	
##	2111	1	C	М	GenX	Marc	
	2112	1	C	М	GenX	Jaime	
	2113	1	C	М	GenX	Greg	
	2114	1	C	М	GenX	_	
	2114	1	C	М	GenX	•	
		1	C				
	2116			M	GenX		
	2117	1	C	M	GenX		
	2118	1	C	M	GenX		
	2119	1	C	М	GenX	-	
	2120	1	C	М	GenX	Jeff	
	2121	1	C	М	Millenial	Zachary	
	2122	1	C	М	Millenial	Dylan	
	2123	1	С	М		Christian	
	2124	1	С	М	Millenial	Wesley	
	2125	1	C	М	Millenial	Seth	
	2126	1	С	М	Millenial	Austin	
##	2127	1	С	М	Millenial	Gabriel	NA
##	2128	1	С	М	Millenial	Evan	NA
##	2129	1	C	М	Millenial	Casey	NA

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	2130	1	C	М	Millenial	Luis	
	2131	1	C	F	Boomer		
	2132	1	C	F	Boomer	Joan	
	2133	1	C	F	Boomer	Dorothy	
	2134	1	C	F	Boomer	Shirley	
	2135	1	C	F	Boomer	Betty	
##	2136	1	C	F	Boomer	Dianne	
##	2137	1	C	F	Boomer	Kay	
##	2138	1	C	F	Boomer	Marjorie	
##	2139	1	С	F	Boomer		
##	2140	1	С	F	Boomer		
##	2141	1	С	F	GenX	Tracy	
##	2142	1	С	F	GenX	Dawn	
##	2143	1	С	F	GenX	Tina	
##	2144	1	C	F	GenX	Tammy	NA
##	2145	1	С	F	GenX	Melinda	NA
##	2146	1	C	F	GenX	Tamara	NA
##	2147	1	C	F	GenX	Tracey	NA
##	2148	1	C	F	GenX	Colleen	NA
##	2149	1	C	F	GenX	Sherri	NA
##	2150	1	C	F	GenX	Heidi	NA
##	2151	1	C	F	Millenial	Samantha	NA
##	2152	1	C	F	Millenial	Alexis	NA
##	2153	1	C	F	Millenial	Brittany	NA
##	2154	1	С	F	Millenial	Lauren	NA
##	2155	1	С	F	Millenial	Taylor	NA
##	2156	1	С	F	Millenial	Bethany	
##	2157	1	С	F	Millenial	Latoya	
##	2158	1	С	F	Millenial	Candice	
##	2159	1	С	F	Millenial	Brittney	NA
##	2160	1	С	F	Millenial	Cheyenne	
##	2161	m	Α	М	Boomer	Theodore	
##	2162	m	Α	М	Boomer	Bernard	NA
##	2163	m	Α	М	Boomer	Gene	
	2164	m	Α	М	Boomer	Herbert	
##	2165	m	A	М	Boomer	Ray	
	2166	m	A	М	Boomer	Tom	
	2167	m	A	М	Boomer	Lee	
	2168	m	A	М	Boomer	Alfred	
	2169	m	A	М	Boomer	Leroy	
	2170	m	A	М	Boomer	Eddie	
	2171	m	A	M	GenX	Marc	
	2172	m	A	M	GenX	Jaime	
	2173	m	A	M	GenX		
	2174	m	A	M	GenX	•	
##	2175		A	M	GenX	•	
##	2176	m m	A	M	GenX		
		m m		M M			
##	2177	m m	A A	M M	GenX		
##	2178	m m	A ^		GenX		
	2179	m m	A	M M	GenX	-	
	2180	m m	A ^	M M	GenX	Jeff Zachary	
	2181	m m	A	M M	Millenial	•	
	2182	m —	A	M	Millenial	Dylan	
##	2183	m	A	М	millenial	Christian	ИИ

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	2184	m	A	M	Millenial	Wesley	
	2185 2186	m 	A	M	Millenial	Seth	
		m	A	M	Millenial	Austin	
	2187	m	A	M	Millenial	Gabriel	
##	2188	m	A	M	Millenial	Evan	
##	2189	m	A	M	Millenial	Casey	
##	2190	m	A	M	Millenial	Luis	
##	2191	m	A	F	Boomer	Gloria	
##	2192	m	A	F	Boomer	Joan	
##	2193	m	A	F	Boomer	Dorothy	
##	2194	m	A	F	Boomer	Shirley	
##	2195	m	A	F	Boomer	Betty	
##	2196	m	A	F	Boomer	Dianne	
##	2197	m	A	F	Boomer	Kay	
##	2198	m	A	F	Boomer	Marjorie	
##	2199	m	A	F	Boomer	Lorraine	
##	2200	m	Α	F	Boomer	Mildred	
##	2201	m	Α	F	GenX	Tracy	
##	2202	m	Α	F	GenX	Dawn	
	2203	m	Α	F	GenX	Tina	
	2204	m	Α	F	GenX	Tammy	
	2205	m	Α	F	GenX	Melinda	
##	2206	m	Α	F	${\tt GenX}$	Tamara	
##	2207	m	Α	F	GenX	Tracey	NA
##	2208	m	Α	F	${\tt GenX}$	Colleen	
##	2209	m	Α	F	GenX	Sherri	NA
##	2210	m	Α	F	GenX	Heidi	NA
##	2211	m	Α	F	Millenial	Samantha	NA
##	2212	m	Α	F	Millenial	Alexis	NA
##	2213	m	Α	F	Millenial	Brittany	NA
##	2214	m	Α	F	Millenial	Lauren	NA
##	2215	m	Α	F	Millenial	Taylor	NA
##	2216	m	Α	F	Millenial	Bethany	NA
##	2217	m	Α	F	Millenial	Latoya	NA
##	2218	m	Α	F	Millenial	Candice	NA
##	2219	m	Α	F	Millenial	Brittney	NA
	2220	m	Α	F	Millenial	Cheyenne	NA
##	2221	m	В	M	Boomer	Theodore	NA
##	2222	m	В	M	Boomer	Bernard	NA
##	2223	m	В	M	Boomer	Gene	NA
##	2224	m	В	M	Boomer	Herbert	NA
##	2225	m	В	M	Boomer	Ray	NA
##	2226	m	В	M	Boomer	Tom	NA
##	2227	m	В	M	Boomer	Lee	NA
##	2228	m	В	M	Boomer	Alfred	NA
##	2229	m	В	M	Boomer	Leroy	NA
##	2230	m	В	M	Boomer	Eddie	NA
##	2231	m	В	М	GenX	Marc	NA
##	2232	m	В	М	GenX	Jaime	NA
	2233	m	В	М	GenX	Greg	NA
	2234	m	В	М	GenX	Darryl	
	2235	m	В	М	GenX	Tim	
	2236	m	В	M	GenX	Dean	NA
	2237	m	В	М	GenX	Jon	

##	2238	m	В	М	GenX	Chris	NT A
	2239	m m	В	M	GenX	Troy	
	2240		В	M	GenX	Jeff	
	2240	m —	В	M	Millenial		
		m —				Zachary	
	2242	m 	В	M	Millenial	Dylan	
	2243	m	В	М		Christian	
	2244	m	В	М	Millenial	Wesley	
	2245	m	В	М	Millenial	Seth	
	2246	m	В	М	Millenial	Austin	
##	2247	m	В	М	Millenial	Gabriel	
##	2248	m	В	М	Millenial	Evan	
##	2249	m	В	М	Millenial	Casey	
##	2250	m	В	M	Millenial	Luis	
##	2251	m	В	F	Boomer	Gloria	
##	2252	m	В	F	Boomer	Joan	
##	2253	m	В	F	Boomer	Dorothy	
##	2254	m	В	F	Boomer	Shirley	
##	2255	m	В	F	Boomer	Betty	
	2256	m	В	F	Boomer	Dianne	
	2257	m	В	F	Boomer	Kay	
	2258	m	В	F	Boomer	Marjorie	
##	2259	m	В	F	Boomer	Lorraine	
##	2260	m	В	F	Boomer	Mildred	
##	2261	m	В	F	GenX	Tracy	NA
##	2262	m	В	F	GenX	Dawn	NA
##	2263	m	В	F	GenX	Tina	NA
##	2264	m	В	F	GenX	Tammy	NA
##	2265	m	В	F	GenX	Melinda	NA
##	2266	m	В	F	GenX	Tamara	NA
##	2267	m	В	F	GenX	Tracey	NA
##	2268	m	В	F	GenX	Colleen	NA
##	2269	m	В	F	GenX	Sherri	NA
##	2270	m	В	F	GenX	Heidi	NA
##	2271	m	В	F	Millenial	Samantha	NA
##	2272	m	В	F	Millenial	Alexis	NA
##	2273	m	В	F	Millenial	Brittany	NA
##	2274	m	В	F	Millenial	Lauren	NA
##	2275	m	В	F	Millenial	Taylor	NA
##	2276	m	В	F	Millenial	Bethany	NA
##	2277	m	В	F	Millenial	Latoya	NA
##	2278	m	В	F	Millenial	Candice	NA
##	2279	m	В	F	Millenial	Brittney	NA
##	2280	m	В	F	Millenial	Cheyenne	NA
##	2281	m	С	M	Boomer	Theodore	NA
##	2282	m	С	M	Boomer	Bernard	NA
##	2283	m	С	M	Boomer	Gene	NA
##	2284	m	С	M	Boomer	Herbert	
##	2285	m	С	М	Boomer	Ray	
##	2286	m	С	М	Boomer	Tom	
##	2287	m	С	М	Boomer	Lee	
##	2288	m	С	М	Boomer	Alfred	
	2289	m	С	М	Boomer	Leroy	
##	2290	m	С	М	Boomer	Eddie	
	2291	m	С	М	GenX	Marc	

##	2292	m	С	М	GenX	Jaime	NT A
	2292	m m	C	M	GenX	Greg	
	2294	m m	C	M	GenX	Darryl	
##	2295	m m	C	M	GenX	Tim	
##	2296		C	M	GenX	Dean	
	2290	m ~	C	M M	GenX	Jon	
##		m 	C			Chris	
##	2298	m		M	GenX		
##	2299	m	C	M	GenX	Troy	
##	2300	m	C	M	GenX	Jeff	
##	2301	m	C	M	Millenial	Zachary	
##	2302	m	C	M	Millenial	Dylan	
##	2303	m	C	M		Christian	
##	2304	m	C	M	Millenial	Wesley	
##	2305	m	C	M	Millenial	Seth	
##	2306	m	С	M	Millenial	Austin	
##	2307	m	С	M	Millenial	Gabriel	
##	2308	m	С	M	Millenial	Evan	
##	2309	m	С	М	Millenial	Casey	
##	2310	m	С	M	Millenial	Luis	
##	2311	m	C	F	Boomer	Gloria	NA
##	2312	m	C	F	Boomer	Joan	NA
##	2313	m	C	F	Boomer	Dorothy	NA
##	2314	m	C	F	Boomer	Shirley	NA
##	2315	m	C	F	Boomer	Betty	NA
##	2316	m	C	F	Boomer	Dianne	NA
##	2317	m	C	F	Boomer	Kay	NA
##	2318	m	C	F	Boomer	Marjorie	NA
##	2319	m	C	F	Boomer	Lorraine	NA
##	2320	m	C	F	Boomer	Mildred	NA
##	2321	m	C	F	GenX	Tracy	NA
##	2322	m	C	F	GenX	Dawn	NA
##	2323	m	C	F	GenX	Tina	NA
##	2324	m	C	F	GenX	Tammy	NA
##	2325	m	C	F	GenX	Melinda	
##	2326	m	С	F	GenX	Tamara	NA
##	2327	m	С	F	GenX	Tracey	NA
##	2328	m	С	F	GenX	Colleen	
##	2329	m	С	F	GenX	Sherri	NA
	2330	m	C	F	GenX	Heidi	
	2331	m	C	F	Millenial	Samantha	
	2332	m	C	F	Millenial	Alexis	
	2333	m	C	F	Millenial	Brittany	
	2334	m	C	F	Millenial	Lauren	
	2335	m	C	F	Millenial	Taylor	
	2336	m	C	F	Millenial	Bethany	
	2337	m	C	F	Millenial	Latoya	
	2338	m	C	F	Millenial	Candice	
	2339	m m	C	F	Millenial	Brittney	
	2340	m m	C	F	Millenial	Cheyenne	
	2340		A	r M	Boomer	Theodore	
	2341	n	A	M	Boomer	Bernard	
	2342	n n	A	M M	Boomer	Gene	
		n					
	2344	n	A	M M	Boomer	Herbert	
##	2345	n	Α	М	Boomer	Ray	IN A

##	2346	n	Α	М	Boomer	Tom	NΑ
	2347	n	A	М	Boomer	Lee	
##	2348	n	A	М	Boomer	Alfred	
##	2349	n	A	М	Boomer	Leroy	
##	2350	n	A	М	Boomer	Eddie	
##	2351	n	A	M	GenX	Marc	
##	2352		A	M	GenX	Jaime	
	2353	n			GenX		
##		n	A	M	GenX	Greg	
##	2354	n	A	M M		Darryl	
##	2355	n	A	M	GenX	Tim	
##	2356	n	A	M	GenX	Dean	
##	2357	n	A	M	GenX	Jon	
##	2358	n	A	M	GenX	Chris	
##	2359	n	A	М	GenX	Troy	
##	2360	n	A	М	GenX	Jeff	
##	2361	n	A	М	Millenial	Zachary	
##	2362	n	Α	М	Millenial	Dylan	
##	2363	n	Α	М	Millenial	Christian	NA
##	2364	n	Α	М	Millenial	Wesley	NA
##	2365	n	Α	M	Millenial	Seth	NA
##	2366	n	Α	М	Millenial	Austin	NA
##	2367	n	Α	M	Millenial	Gabriel	NA
##	2368	n	Α	М	Millenial	Evan	NA
##	2369	n	Α	М	Millenial	Casey	NA
##	2370	n	Α	М	Millenial	Luis	
##	2371	n	Α	F	Boomer	Gloria	NA
##	2372	n	Α	F	Boomer	Joan	NA
##	2373	n	Α	F	Boomer	Dorothy	NA
##	2374	n	Α	F	Boomer	Shirley	
##	2375	n	Α	F	Boomer	Betty	
##	2376	n	A	F	Boomer	Dianne	
##	2377	n	A	F	Boomer	Kay	
##	2378	n	A	F	Boomer	Marjorie	
##	2379	n	A	F	Boomer	Lorraine	
##	2380		A	F	Boomer	Mildred	
##		n		r F			
	2381 2382	n	A		GenX	Tracy	
##		n	A	F	GenX	Dawn	
##	2383	n	A	F	GenX	Tina	
##	2384	n	A	F	GenX	Tammy	
##	2385	n	A	F	GenX	Melinda	
##	2386	n	Α	F	GenX	Tamara	
##	2387	n	Α	F	GenX	Tracey	ΝA
##	2388	n	Α	F	GenX	Colleen	NA
##	2389	n	Α	F	GenX	Sherri	NA
##	2390	n	Α	F	GenX	Heidi	NA
##	2391	n	Α	F	Millenial	Samantha	NA
##	2392	n	Α	F	Millenial	Alexis	NA
##	2393	n	Α	F	Millenial	Brittany	NA
##	2394	n	Α	F	Millenial	Lauren	NA
##	2395	n	Α	F	Millenial	Taylor	NA
##	2396	n	Α	F	Millenial	Bethany	
	2397	n	Α	F	Millenial	Latoya	
##	2398	n	Α	F	Millenial	Candice	
##	2399	n	A	F	Millenial	Brittney	
		-		-		J	

##	2400	n	Α	F	Millenial	Cheyenne	NA
##	2401	n	В	М	Boomer	Theodore	
##	2402	n	В	М	Boomer	Bernard	NA
##	2403	n	В	М	Boomer	Gene	NA
##	2404	n	В	М	Boomer	Herbert	NA
##	2405	n	В	М	Boomer	Ray	
##	2406	n	В	М	Boomer	Tom	
##	2407	n	В	М	Boomer	Lee	NA
##	2408	n	В	М	Boomer	Alfred	
##	2409	n	В	М	Boomer	Leroy	
##	2410	n	В	М	Boomer	Eddie	
##	2411	n	В	М	GenX	Marc	NA
##	2412	n	В	М	GenX	Jaime	NA
##	2413	n	В	М	GenX	Greg	
##	2414	n	В	М	GenX	Darryl	
##	2415	n	В	М	GenX	Tim	
##	2416	n	В	М	GenX	Dean	
##	2417	n	В	М	GenX	Jon	
##	2418	n	В	М	GenX	Chris	
##	2419	n	В	М	GenX	Troy	
##	2420	n	В	М	GenX	Jeff	
##	2421	n	В	М	Millenial	Zachary	
##	2422	n	В	М	Millenial	Dylan	
##	2423	n	В	М		Christian	
##	2424	n	В	М	Millenial	Wesley	
##	2425	n	В	М	Millenial	Seth	
##	2426	n	В	М	Millenial	Austin	
##	2427	n	В	М	Millenial	Gabriel	
##	2428	n	В	М	Millenial	Evan	
##	2429	n	В	М	Millenial	Casey	
##	2430	n	В	М	Millenial	Luis	
##	2431	n	В	F	Boomer	Gloria	
##	2432	n	В	F	Boomer	Joan	
##	2433	n	В	F	Boomer	Dorothy	
##	2434	n	В	F	Boomer	Shirley	
##	2435	n	В	F	Boomer	Betty	
	2436	n	В	F	Boomer	Dianne	
	2437	n	В	F	Boomer	Kay	
##	2438	n	В	F	Boomer	Marjorie	
	2439	n	В	F	Boomer	Lorraine	
	2440	n	В	F	Boomer	Mildred	
	2441	n	В	F	GenX	Tracy	
	2442	n	В	F	GenX	Dawn	
	2443	n	В	F	GenX	Tina	
	2444	n	В	F	GenX	Tammy	
	2445	n	В	F	GenX	Melinda	
	2446	n	В	F	GenX	Tamara	
	2447	n	В	F	GenX	Tracey	
	2448	n	В	F	GenX	Colleen	
	2449	n	В	F	GenX	Sherri	
	2450	n	В	F	GenX	Heidi	
	2451	n	В	F	Millenial	Samantha	
	2452	n	В	F	Millenial	Alexis	
	2453	n	В	F	Millenial	Brittany	
<b></b>			-	-			

##	2454	n	В	F	Millenial	Lauren	NΑ
	2455	n	В	F	Millenial	Taylor	
##	2456	n	В	F	Millenial	Bethany	
##	2457	n	В	F	Millenial	Latoya	
##	2458	n	В	F	Millenial	Candice	
##	2459	n	В	F	Millenial	Brittney	
##	2460	n	В	F	Millenial	Cheyenne	
##	2461	n	C	М	Boomer	Theodore	
##	2462	n	C	М	Boomer	Bernard	
##	2463	n	C	М	Boomer	Gene	
##	2464	n	C	М	Boomer	Herbert	
##	2465	n	C	М	Boomer	Ray	
##	2466	n	C	М	Boomer	Tom	
##	2467	n	C	М	Boomer	Lee	
##	2468		C	M	Boomer	Alfred	
##	2469	n	C	M	Boomer	Leroy	
##	2470	n	C	M		Eddie	
		n 			Boomer		
##	2471	n 	C	M	GenX	Marc	
##	2472	n	C	M	GenX	Jaime	
##	2473	n	C	M	GenX	Greg	
##	2474	n	C	M	GenX	Darryl	
##	2475	n	C	M	GenX	Tim	
##	2476	n	C	M	GenX	Dean	
##	2477	n	C	M	GenX	Jon	
##	2478	n	C	М	GenX	Chris	
##	2479	n	C	М	GenX	Troy	
##	2480	n	C	М	GenX	Jeff	
##	2481	n					
		11	C	М	Millenial	Zachary	
##	2482	n	C	M	Millenial	Dylan	NA
##	2482 2483		C C	M M	Millenial Millenial	Dylan Christian	NA NA
## ##	2482 2483 2484	n	C C C	M M M	Millenial Millenial Millenial	Dylan Christian Wesley	NA NA NA
## ## ##	2482 2483 2484 2485	n n	C C C	M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth	NA NA NA
## ##	2482 2483 2484 2485 2486	n n n	C C C C	M M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin	NA NA NA NA
## ## ##	2482 2483 2484 2485 2486 2487	n n n	C C C C	M M M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel	NA NA NA NA NA
## ## ## ##	2482 2483 2484 2485 2486 2487 2488	n n n n	C C C C C C	M M M M M M	Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan	NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489	n n n n n	C C C C C C C	M M M M M	Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490	n n n n n	C C C C C C	M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489	n n n n n n n	C C C C C C C	M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey	NA NA NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490	n n n n n n n n n	C C C C C C C C C	M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491	n n n n n n n n n n n n	C C C C C C C C C C	M M M M M M M M	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria	NA NA NA NA NA NA NA NA NA
## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492	n n n n n n n n n n n n n	C C C C C C C C C C C	M M M M M M M F F	Millenial Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan	NA
## ## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493	n n n n n n n n n n n n n n n		M M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy	NA
## ## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494	n n n n n n n n n n n n n n n n n		M M M M M M F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley	NA
## ## ## ## ## ## ## ## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495	n n n n n n n n n n n n n n n n n n		M M M M M M M F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty	NA N
## ## ## ## ## ## ## ## ## ## ## ## ##	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496	n n n n n n n n n n n n n n n n n n n	000000000000000000000000000000000000000	M M M M M M F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne	NA N
######################################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497	n n n n n n n n n n n n n n n n n n n	0000000000000000	M M M M M M M F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay	NA N
######################################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498		000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie	NA N
######################################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499	n n n n n n n n n n n n n n n n n n n	000000000000000000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine	NA N
######################################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500		000000000000000000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred	NA N
######################################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501		000000000000000000000000000000000000000	M M M M M M F F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy	NA N
####################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502		000000000000000000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn	NA N
########################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503		00000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina	NA N
######################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504		00000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer Boomer GenX GenX GenX	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy	NA N
######################	2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505		00000000000000000000000000	M M M M M M M F F F F F F F F F F F F F	Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Millenial Boomer	Dylan Christian Wesley Seth Austin Gabriel Evan Casey Luis Gloria Joan Dorothy Shirley Betty Dianne Kay Marjorie Lorraine Mildred Tracy Dawn Tina Tammy Melinda	NA N

```
## 2508
                            C
                                   F
                                            GenX
                                                    Colleen NA
                 n
## 2509
                            C
                                   F
                                            GenX
                                                     Sherri NA
                 n
                            С
                                                      Heidi NA
## 2510
                 n
                                   F
                                            GenX
                            С
## 2511
                                   F
                 n
                                      Millenial
                                                  Samantha NA
## 2512
                 n
                            С
                                   F
                                      Millenial
                                                     Alexis NA
## 2513
                            С
                                   F
                                      Millenial Brittany NA
                 n
## 2514
                            С
                                   F
                                      Millenial
                                                    Lauren NA
                 n
                            С
## 2515
                 n
                                   F
                                      Millenial
                                                     Taylor NA
## 2516
                            С
                                   F
                                      Millenial
                                                    Bethany NA
                 n
                            С
## 2517
                 n
                                   F
                                      Millenial
                                                    Latoya NA
## 2518
                            С
                                   F
                                      Millenial
                                                    Candice NA
                 n
                            С
## 2519
                                   F
                 n
                                      Millenial
                                                  Brittney NA
## 2520
                            C
                                      Millenial
                                                  Cheyenne NA
                 n
```

## **Packages**

Install the package pacman using regular base R.

```
#install.packages("pacman")
```

First, install the package testthat (a widely accepted testing suite for R) from https://github.com/r-lib/testthat using pacman. If you are using Windows, this will be a long install, but you have to go through it for some of the stuff we are doing in class. LINUX (or MAC) is preferred for coding. If you can't get it to work, install this package from CRAN (still using pacman), but this is not recommended long term.

```
pacman::p_load(testthat)
```

• Create vector v consisting of all numbers from -100 to 100 and test using the second line of code su

```
v= seq(-100, 100)
expect_equal(v, -100 : 100) #changed the second variable in () from 101 to 100 b/c not working
```

If there are any errors, the expect\_equal function will tell you about them. If there are no errors, then it will be silent.

Test the my\_reverse function from lab2 using the following code:

```
v = 1:100
my_reverse = function(v){
    v_rev = rep(NA, times = length(v))
    for(i in length(v):1){
        v_rev[length(v)-i+1] = v[i]
    }
    v_rev
}
my_reverse(v)
expect_equal(my_reverse(v), rev(v))
expect_equal(my_reverse(c("A", "B", "C")), c("C", "B", "A"))
```

# Multinomial Classification using KNN

Write a k=1 nearest neighbor algorithm using the Euclidean distance function. The following comments are standard "Roxygen" format for documentation. Hopefully, we will get to packages at some point and we will go over this again. It is your job also to fill in this documentation.

```
#' One nearest neighbor Classifier
#'
#' Classify an observation based on the label of the closest observation in the set of training observa
```

Write a few tests to ensure it actually works:

```
#T0-D0
```

We now add an argument d representing any legal distance function to the nn\_algorithm\_predict function. Update the implementation so it performs NN using that distance function. Set the default function to be the Euclidean distance in the original function. Also, alter the documentation in the appropriate places.

```
#' One nearest neighbor Classifier
#'
#' Classify an observation based on the label of the closest observation in the set of training observa
#'
#' @param Xinput
                      A matrix of features for training data observations
#' @param y binary
                      The vector of training data labels
#' @param Xtest
                      A test observation as a row vector
#' @param d
                      The function of distance which uses two row vectors as its inputs
                      The predicted label for the test observation
#' @return
nn_algorithm_predict = function(Xinput, y_binary, Xtest, d = function(v1, v2)
  sum((v1-v2)^2)){
  n = nrow(Xinput)
  distances = array(NA, n)
  for(i in 1:n){
    distances[i] = d(Xinput[i, ]-Xtest)
  y_binary[which.min(distances)]
}
```

For extra credit (unless you're a masters student), add an argument k to the nn\_algorithm\_predict function and update the implementation so it performs KNN. In the case of a tie, choose  $\hat{y}$  randomly. Set the default k to be the square root of the size of  $\mathcal{D}$  which is an empirical rule-of-thumb popularized by the "Pattern Classification" book by Duda, Hart and Stork (2007). Also, alter the documentation in the appropriate places.

```
#TO-DO for the 650 students but extra credit for undergrads
```

# **Basic Binary Classification Modeling**

 Load the famous iris data frame into the namespace. Provide a summary of the columns using the skim function in package skimr and write a few descriptive sentences about the distributions using the code below in English.

```
data(iris)
pacman::p_load(skimr)
skim(iris)
```

Table 1: Data summary

Name	iris
Number of rows	150
Number of columns	5
Column type frequency:	
factor	1
numeric	4
Group variables	None

#### Variable type: factor

skim_variable	n_missing	complete_rate	ordered	n_unique	top_counts
Species	0	1	FALSE	3	set: 50, ver: 50, vir: 50

## Variable type: numeric

skim_variable	n_missing	$complete\_rate$	mean	$\operatorname{sd}$	p0	p25	p50	p75	p100	hist
Sepal.Length	0	1	5.84	0.83	4.3	5.1	5.80	6.4	7.9	
Sepal.Width	0	1	3.06	0.44	2.0	2.8	3.00	3.3	4.4	
Petal.Length	0	1	3.76	1.77	1.0	1.6	4.35	5.1	6.9	
Petal.Width	0	1	1.20	0.76	0.1	0.3	1.30	1.8	2.5	

#From the data you can tell the each one of its S.D is not far from each other.

The outcome / label / response is Species. This is what we will be trying to predict. However, we only care about binary classification between "setosa" and "versicolor" for the purposes of this exercise. Thus the first order of business is to drop one class. Let's drop the data for the level "virginica" from the data frame.

```
iris = iris[iris$Species != "virginica", ]
```

Now create a vector **y** that is length the number of remaining rows in the data frame whose entries are 0 if "setosa" and 1 if "versicolor".

```
y = as.integer(iris$Species == "setosa")
```

• Write a function mode returning the sample mode.

```
mode = function(v){
  names(sort(table(v), decreasing = TRUE)[1])
}
```

• Fit a threshold model to y using the feature Sepal.Length. Write your own code to do this. What is the estimated value of the threshold parameter? Save the threshold value as threshold.

```
n = nrow(iris)
num_errors = rep(NA, n)
for(i in 1:n){
    y_hat = as.numeric(iris$Sepal.Length > iris$Sepal.Length[i])
    num_errors[i] = sum(y_hat != y)
}
threshold = iris$Sepal.Length[which.min(num_errors)]
g = function(x){
    as.numeric(x > threshold)
}
```

What is the total number of errors this model makes?

```
for(i in 1:n){
threshold = iris$Sepal.Length[i]
num_errors[i] = sum((iris$Sepal.Length > threshold) != y)
}
sum(num_errors)
```

```
## [1] 7204
```

Does the threshold model's performance make sense given the following summaries:

threshold

```
## [1] 5.7
summary(iris[iris$Species == "setosa", "Sepal.Length"])
##
      Min. 1st Qu. Median
                              Mean 3rd Qu.
                                               Max.
             4.800
                    5.000
##
     4.300
                             5.006
                                     5.200
                                              5.800
summary(iris[iris$Species == "versicolor", "Sepal.Length"])
##
      Min. 1st Qu.
                    Median
                              Mean 3rd Qu.
                                               Max.
                             5.936
                                             7.000
             5.600
                     5.900
                                     6.300
```

#It does because we can see that as the threshold parameter increases the theshold model performance decreases.

Create the function g explicitly that can predict y from x being a new Sepal.Length.

```
g = function(x){
  as.numeric(x > threshold)
}
```

#### Perceptron

You will code the "perceptron learning algorithm" for arbitrary number of features p. Take a look at the comments above the function. Respect the spec below:

```
#' @return
                      The computed final parameter (weight) as a vector of length p + 1
perceptron_learning_algorithm = function(Xinput, y_binary, MAX_ITER = 1000, w = NULL){
  X = cbind(1, Xinput)
 n = nrow(X)
  p = ncol(X)
  w = rep(0, p)
  for (iter in 1: MAX_ITER){
    is error = FALSE
   for (a in 1:n){
      x a = X[a, ]
      yhat_i = ifelse (sum(X[a, ]*w)> 0, 1, 0)
      if (yhat_i == 0)
        is error = TRUE
      for(i in 1:p){
       y_i = y_binary[a]
      w[i] = w[i] + (y_i - yhat_i * x_a[i])
   }
    if(is_error == FALSE)
      return(w)
  }
}
```

To understand what the algorithm is doing - linear "discrimination" between two response categories, we can draw a picture. First let's make up some very simple training data  $\mathbb{D}$ .

```
Xy_simple = data.frame(
  response = factor(c(0, 0, 0, 1, 1, 1)), #nominal
  first_feature = c(1, 1, 2, 3, 3, 4), #continuous
  second_feature = c(1, 2, 1, 3, 4, 3) #continuous
)
```

We haven't spoken about visualization yet, but it is important we do some of it now. Thus, I will write this code for you and you will just run it. First we load the visualization library we're going to use:

```
pacman::p_load(ggplot2)
```

We are going to just get some plots and not talk about the code to generate them as we will have a whole unit on visualization using ggplot2 in the future.

Let's first plot y by the two features so the coordinate plane will be the two features and we use different colors to represent the third dimension, y.

```
simple_viz_obj = ggplot(Xy_simple, aes(x = first_feature, y = second_feature, color = response)) +
    geom_point(size = 5)
simple_viz_obj
```

TO-DO: #The graph represents the first\_feature in the x-axis and the #second\_feature in the y-axis. It sem]ems that the 0 response tended #to be closer to zero or the center where as the 1 responses were #placed farther away the center. Now, let us run the algorithm and see what happens:

```
w_vec_simple_per = perceptron_learning_algorithm(
  cbind(Xy_simple$first_feature, Xy_simple$second_feature),
  as.numeric(Xy_simple$response == 1))
w_vec_simple_per
```

```
## [1] 553 -180 -184
```

Explain this output. What do the numbers mean? What is the intercept of this line and the slope? You will have to do some algebra.

#This numbers represent the weight which was mentioned to be the #computed final parameter. #The intercept of the line would be w 0 and the slope would be the #w 1.

```
simple_perceptron_line = geom_abline(
   intercept = -w_vec_simple_per[1] / w_vec_simple_per[3],
   slope = -w_vec_simple_per[2] / w_vec_simple_per[3],
   color = "orange")
simple_viz_obj + simple_perceptron_line
```

Explain this picture. Why is this line of separation not "satisfying" to you?

#The line of seperation is not satisfying because it only really takes #into account the 0 response, leaving the 1 responses as outliers.

For extra credit, program the maximum-margin hyperplane perceptron that provides the best linear discrimination model for linearly separable data. Make sure you provide ROxygen documentation for this function.

#T0-D0