assignment 3

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```
library(reshape2)
library(gmodels)
library(caret)
```

```
## Loading required package: ggplot2
```

```
## Warning in register(): Can't find generic `scale_type` in package ggplot2 to
## register S3 method.
```

```
## Loading required package: lattice
```

```
library(ISLR)
```

```
library(e1071)
ubank <- read.csv("./UniversalBank.csv")
ubank$Personal.Loan <-factor(ubank$Personal.Loan)
ubank$Online<-factor(ubank$Online)
ubank$CreditCard<-factor(ubank$CreditCard)
df=ubank

#A. pivot table for the training data with Online as a column variable,
#CC as a row variable, and Loan as a secondary row variable
Train_index <- createDataPartition(df$Personal.Loan , p=0.6, list = FALSE)
train.df = df[Train_index,]
validation.df= df[-Train_index,]
train.df
```

```
##       ID Age Experience Income ZIP.Code Family CCAvg Education Mortgage
## 1      1  25          1     49    91107      4  1.60         1        0
## 4      4  35          9    100    94112      1  2.70         2        0
## 5      5  35          8     45    91330      4  1.00         2        0
## 6      6  37         13     29    92121      4  0.40         2      155
## 7      7  53         27     72    91711      2  1.50         2        0
## 9      9  35         10     81    90089      3  0.60         2      104
## 12    12  29          5     45    90277      3  0.10         2        0
## 13    13  48         23    114    93106      2  3.80         3        0
## 14    14  59         32     40    94920      4  2.50         2        0
## 15    15  67         41    112    91741      1  2.00         1        0
## 18    18  42         18     81    94305      4  2.40         1        0
## 19    19  46         21    193    91604      2  8.10         3        0
## 20    20  55         28     21    94720      1  0.50         2        0
## 21    21  56         31     25    94015      4  0.90         2      111
## 22    22  57         27     63    90095      3  2.00         3        0
## 24    24  44         18     43    91320      2  0.70         1      163
## 25    25  36         11    152    95521      2  3.90         1      159
```

```
## 27    27  40      16      83    95064    4  0.20      3         0
## 29    29  56      30      48    94539    1  2.20      3         0
## 30    30  38      13     119    94104    1  3.30      2         0
## 31    31  59      35      35    93106    1  1.20      3       122
## 32    32  40      16      29    94117    1  2.00      2         0
## 35    35  31       5      50    94035    4  1.80      3         0
## 36    36  48      24      81    92647    3  0.70      1         0
## 37    37  59      35     121    94720    1  2.90      1         0
## 38    38  51      25      71    95814    1  1.40      3       198
## 39    39  42      18     141    94114    3  5.00      3         0
## 42    42  34       9      60    94122    3  2.30      1         0
## 43    43  32       7     132    90019    4  1.10      2       412
## 47    47  39      14      43    95014    3  0.70      2       153
## 48    48  37      12     194    91380    4  0.20      3       211
## 49    49  56      26      81    95747    2  4.50      3         0
## 50    50  40      16      49    92373    1  1.80      1         0
## 51    51  32       8       8    92093    4  0.70      2         0
## 54    54  50      26     190    90245    3  2.10      3       240
## 56    56  41      17     139    94022    2  8.00      1         0
## 57    57  55      30      29    94005    3  0.10      2         0
## 58    58  56      31     131    95616    2  1.20      3         0
## 59    59  28       2      93    94065    2  0.20      1         0
## 62    62  47      21     125    93407    1  5.70      1       112
## 64    64  42      17      32    94523    4  0.00      2         0
## 65    65  47      23     105    90024    2  3.30      1         0
## 66    66  59      35     131    91360    1  3.80      1         0
## 67    67  62      36     105    95670    2  2.80      1       336
## 69    69  47      21      60    93407    3  2.10      1         0
## 70    70  53      29      20    90045    4  0.20      1         0
## 71    71  42      18     115    91335    1  3.50      1         0
## 72    72  53      29      69    93907    4  1.00      2         0
## 75    75  28       3     135    94611    2  3.30      1         0
## 76    76  31       7     135    94901    4  3.80      2         0
## 79    79  54      30     133    93305    2  2.60      3         0
## 80    80  50      26      19    94720    2  0.40      1       118
## 82    82  47      22      40    94612    3  2.70      2         0
## 83    83  41      16      82    92507    1  4.00      3         0
## 85    85  46      22      18    91730    1  0.90      3         0
## 86    86  27       2     109    94005    4  1.80      3         0
## 87    87  40      16      42    94501    4  2.20      2       126
## 88    88  48      22      78    94305    3  1.10      1         0
## 89    89  65      41      51    94117    2  1.10      1         0
## 90    90  25      -1     113    94303    4  2.30      3         0
## 91    91  55      30     118    90277    4  5.60      2         0
## 92    92  35      10      29    94105    4  1.10      3         0
## 96    96  38      12      48    95617    4  0.20      3         0
## 97    97  41      15      80    95014    1  5.20      1         0
## 98    98  54      28     161    92121    1  2.90      1         0
## 102  102  61      36      30    94608    3  1.30      2         0
## 103  103  53      23      44    93555    3  1.00      3       198
## 105  105  56      32      38    93311    4  1.30      1       166
## 106  106  24       0      35    94704    3  0.10      2         0
## 108  108  42      18      43    92037    1  0.70      1       136
## 109  109  33       7      32    95136    1  0.60      3       166
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## 110  110  43     17     49   94542     1  2.80     1        0
## 111  111  41     14      9   91330     3  1.00     2        0
## 113  113  40     15     82   91775     3  1.00     1      309
## 117  117  54     29     35   92831     1  1.50     2        0
## 119  119  41     16     73   92647     3  3.00     1        0
## 121  121  54     29     12   90057     2  0.20     3        0
## 122  122  52     26     38   91711     3  0.90     3        0
## 124  124  37     13     84   92130     1  3.60     2        0
## 125  125  39     15     78   92121     4  2.40     1      118
## 127  127  31      5    115   92096     2  1.30     1      101
## 128  128  34      8     82   92646     1  2.70     2      251
## 129  129  38     14     74   92182     2  0.00     1        0
## 131  131  28      4     81   94801     3  1.50     1      276
## 136  136  58     33     45   93010     4  2.10     1        0
## 137  137  59     32     49   95035     4  2.50     2        0
## 138  138  49     25    128   95054     2  0.40     1        0
## 142  142  35     11     58   95831     3  2.00     1      149
## 144  144  25      1     54   94117     4  1.60     1        0
## 145  145  49     23     70   92093     2  1.50     2        0
## 146  146  59     35    124   90007     1  7.40     1        0
## 147  147  46     19     84   94102     1  2.67     2        0
## 149  149  52     28    163   91423     2  0.40     1      116
## 152  152  26      0    132   92834     3  6.50     3        0
## 153  153  57     32     24   93117     1  1.30     1        0
## 154  154  60     36     22   94551     2  1.00     1        0
## 155  155  54     29     58   92612     4  1.30     3        0
## 156  156  24      0     60   94596     4  1.60     1        0
## 157  157  26      0     15   92131     4  0.40     1        0
## 159  159  32      6     79   94720     2  1.50     3        0
## 163  163  38     12     52   90036     1  2.00     1        0
## 165  165  53     27     92   95120     2  1.10     1        0
## 166  166  27      1     43   94706     1  1.50     1        0
## 168  168  33      9     23   94305     3  0.90     3        0
## 170  170  27      1    112   90503     4  2.10     3        0
## 171  171  27      1    138   90250     2  2.00     1        0
## 172  172  52     28     11   95817     3  0.40     1        0
## 173  173  38     13    171   92717     2  7.80     1        0
## 175  175  42     17    168   95503     2  7.90     2        0
## 176  176  45     20     85   91711     4  1.10     2        0
## 177  177  52     25     44   93111     3  1.00     2      135
## 178  178  29      3     65   94132     4  1.80     2      244
## 179  179  53     29     24   95818     4  0.20     1        0
## 184  184  29      3    148   92173     3  4.10     1        0
## 185  185  52     26     63   92717     2  1.50     2        0
## 186  186  39     14    115   91320     1  1.00     3        0
## 189  189  64     40    169   91320     2  2.10     1      122
## 192  192  51     25     29   90404     1  0.30     3      140
## 194  194  48     24     21   93118     4  0.60     1        0
## 196  196  34     10     13   94577     4  1.00     1       95
## 197  197  48     24    165   93407     1  5.00     1        0
## 199  199  27      3     59   94123     4  0.00     1       90
## 203  203  30      3     68   94306     4  2.00     2        0
## 204  204  58     34     65   95747     4  2.20     1        0
## 205  205  56     31     61   96150     2  1.90     2      105
```

```
## 208   208   34      10      71      94115      4   0.10      2        0
## 209   209   40      16      73      94110      4   2.67      1        0
## 210   210   64      39     172      94707      4   3.10      1      282
## 211   211   51      26      20      92131      2   0.00      1        0
## 212   212   44      18      55      94720      1   0.20      1        0
## 213   213   46      22      69      91604      2   1.70      1      209
## 214   214   57      33     155      91326      1   7.40      1        0
## 216   216   38      14      92      95818      2   0.00      1      249
## 217   217   27       3     125      95521      2   0.60      1        0
## 220   220   56      30      61      94707      1   2.20      3        0
## 221   221   32       6      25      92130      2   0.30      1        0
## 222   222   45      19      83      95051      2   1.70      2        0
## 223   223   26       2     104      94306      3   2.50      1        0
## 224   224   55      25      41      95014      3   1.00      3        0
## 226   226   39      13      93      94720      1   1.50      3        0
## 227   227   24      -1      39      94085      2   1.70      2        0
## 231   231   47      22      92      94720      1   2.80      2        0
## 232   232   35      10      61      94304      4   2.10      3        0
## 233   233   46      19      38      94122      3   2.50      2      135
## 234   234   62      37      58      91320      4   1.70      1        0
## 236   236   38       8      71      94720      4   1.80      3        0
## 237   237   43      18      89      93407      3   0.50      3        0
## 239   239   57      32      28      95831      3   0.20      1        0
## 240   240   28       3      52      94112      4   1.70      2        0
## 242   242   48      22      71      91711      1   1.40      3        0
## 243   243   41      16      75      94005      1   3.70      3      280
## 244   244   65      39     170      90095      3   7.90      3       99
## 245   245   41      17      78      94025      4   0.80      1       78
## 246   246   35      11      25      92614      2   1.00      2        0
## 249   249   55      29      99      92121      2   1.40      1      264
## 250   250   26       1      55      90089      3   2.60      3      113
## 252   252   54      28     170      92182      2   6.20      2      325
## 255   255   65      41     134      91942      3   3.90      3      121
## 257   257   26       0      99      92697      4   2.30      3        0
## 259   259   35       9      24      95747      4   0.30      1        0
## 260   260   56      30      55      94107      1   1.40      1       77
## 262   262   42      16     111      93106      2   1.20      3      251
## 265   265   45      19      38      90840      2   0.70      1        0
## 267   267   63      38      61      94720      2   1.50      1        0
## 268   268   47      22      81      90504      1   2.90      1      138
## 271   271   60      36      63      94063      4   2.20      1        0
## 272   272   40      14      70      94923      4   1.40      2        0
## 275   275   30       5      74      95616      4   2.20      1        0
## 278   278   29       2      30      92126      4   1.00      3        0
## 279   279   50      26      21      91125      4   1.00      1        0
## 281   281   33       8      64      92121      4   2.10      3      164
## 282   282   57      31      65      94118      4   2.60      3        0
## 283   283   34       9      71      91711      4   0.70      3        0
## 287   287   51      25      45      94806      3   0.60      2      131
## 288   288   37      12      62      92110      3   0.70      2        0
## 290   290   42      15      24      92121      3   1.00      2        0
## 292   292   43      16       8      90089      3   0.67      2       88
## 294   294   45      19      93      90095      4   2.60      3        0
## 295   295   35       9      55      94536      1   2.00      1        0
```

```
## 297   297  34       9   122   90623      1  0.00       1        0
## 299   299  43      19    81   92069      2  3.20       1        0
## 300   300  41      15   159   90057      1  5.50       3        0
## 301   301  34       9    70   92843      4  1.30       1        0
## 302   302  65      39   150   92120      2  6.90       1      196
## 303   303  45      21   152   94550      2  7.50       1        0
## 307   307  55      29    79   92373      3  0.80       1        0
## 308   308  42      18    33   90401      1  1.40       3        0
## 309   309  32       8   128   94720      2  4.33       1        0
## 310   310  62      38    91   95929      1  3.80       1        0
## 311   311  57      32    39   90277      4  0.90       1        0
## 312   312  52      26   121   94550      1  7.30       1      167
## 313   313  36       6    21   91741      1  0.67       3        0
## 316   316  24      -2    51   90630      3  0.30       3        0
## 318   318  40      16   119   91335      2  4.20       2        0
## 319   319  27       2   110   95670      4  1.80       3      190
## 320   320  65      39    20   90034      3  0.70       2        0
## 321   321  60      34    64   90266      1  0.80       2      248
## 322   322  44      20   101   92717      3  4.40       2       82
## 323   323  63      39   101   92007      1  3.90       1        0
## 325   325  56      30   158   90089      4  6.10       1        0
## 327   327  52      27    80   95616      1  1.30       3        0
## 329   329  60      35    49   94110      3  0.50       2        0
## 330   330  28       4   191   90064      1  6.33       1        0
## 334   334  63      38   140   92407      1  2.50       1        0
## 336   336  56      32   122   95827      2  0.30       1      360
## 338   338  57      27    68   94117      1  1.40       3        0
## 339   339  29       3   153   93657      2  2.00       1      392
## 340   340  39      13    89   92110      4  1.40       2        0
## 341   341  59      34    91   93524      1  2.60       1        0
## 346   346  51      27    12   92192      4  0.50       2       78
## 348   348  25       0    43   94305      2  1.60       3        0
## 350   350  26       2    60   93407      2  3.00       1      132
## 352   352  28       4   155   92182      4  5.30       2        0
## 353   353  52      28    91   92692      4  1.00       2        0
## 358   358  38      14    42   94610      1  2.00       2       81
## 359   359  30       6   141   94539      2  4.33       1        0
## 360   360  32       6    32   93106      1  1.90       3        0
## 361   361  35      10    55   94539      4  1.30       1        0
## 362   362  43      19   153   90254      2  7.50       1        0
## 363   363  58      32   113   94590      2  1.40       1      270
## 366   366  57      32   174   90089      1  6.80       2      466
## 367   367  50      24    35   92717      1  0.30       3        0
## 368   368  32       8    98   95054      2  2.00       2      175
## 369   369  63      37    30   92054      2  1.00       3      159
## 370   370  31       6    58   95051      2  2.50       1        0
## 371   371  36      12    25   92101      4  1.00       1      147
## 372   372  58      34    19   92029      4  0.70       1        0
## 373   373  56      30    44   93105      4  0.70       2      174
## 375   375  30       5    98   91941      2  3.10       1      220
## 376   376  33       7    90   92346      3  1.60       1        0
## 377   377  45      21    61   94304      3  0.70       1        0
## 379   379  47      23    38   94618      2  2.10       3        0
## 382   382  55      29    73   95616      2  2.30       3        0
```

```
## 383   383   65        41   133   94904   4   2.00   1        0
## 384   384   44        18    53   94608   1   0.20   1        0
## 386   386   35         9    40   93943   3   0.90   1        0
## 388   388   31         5    82   95482   4   1.80   2        0
## 390   390   45        20   155   90024   1   7.00   1        0
## 391   391   45        19    45   92521   1   0.20   1        0
## 392   392   58        32     9   94080   3   0.30   3        0
## 393   393   54        29    48   91709   4   1.80   3        0
## 394   394   53        28    18   90095   4   0.10   3      109
## 397   397   50        24    29   93023   4   0.10   1        0
## 399   399   54        30    23   94608   2   0.40   1        0
## 401   401   36        10   179   94542   3   6.60   1        0
## 402   402   29         2    30   95747   4   1.50   2      112
## 403   403   54        28    93   91604   1   4.90   1      133
## 404   404   55        30    39   92647   2   1.90   2        0
## 405   405   61        36    60   92866   3   0.50   2      182
## 407   407   45        19   125   92354   1   2.40   1        0
## 409   409   60        36    89   91745   2   2.80   1        0
## 412   412   60        36    54   92182   4   2.30   3        0
## 416   416   35         8    38   93106   4   1.00   2      124
## 417   417   40        15    85   94304   2   0.40   1        0
## 419   419   27         0    33   90089   4   1.00   3        0
## 421   421   47        22    58   93105   4   3.60   3        0
## 422   422   28         3   115   92333   4   3.10   2        0
## 423   423   46        20   145   91380   2   6.30   1        0
## 424   424   43        19   161   95616   2   7.50   1        0
## 426   426   28         3    28   90505   4   0.80   1        0
## 427   427   42        18    75   92182   3   2.33   1        0
## 428   428   32         7    35   92521   3   1.30   1      116
## 429   429   62        38    24   94720   2   1.00   1      116
## 431   431   51        26   113   94086   1   1.30   3      161
## 432   432   39        13    75   94305   3   2.10   1      224
## 434   434   52        28    31   91330   4   0.20   1      141
## 435   435   30         6    45   95819   1   1.80   2        0
## 436   436   52        26    80   94709   3   0.80   1        0
## 439   439   58        32   113   93943   2   3.80   2      119
## 441   441   64        39    59   92626   2   1.50   1      139
## 442   442   52        27    43   93555   1   1.30   2        0
## 443   443   58        28   122   95136   1   3.00   3      115
## 445   445   64        40    91   93106   2   0.00   3        0
## 448   448   49        23    71   95134   1   1.40   3        0
## 449   449   31         4    60   94588   4   2.00   2        0
## 451   451   51        25    69   95747   1   0.30   1        0
## 453   453   39        13    21   94022   3   0.20   2        0
## 455   455   50        24    29   94110   3   0.90   3        0
## 456   456   30         4    60   91107   4   2.20   2        0
## 458   458   29         3    69   94303   3   0.30   3        0
## 459   459   48        24    20   95841   1   1.00   1        0
## 461   461   60        36   141   90277   2   2.10   1        0
## 462   462   55        30    81   92123   2   3.70   1        0
## 465   465   43        19    83   94305   4   3.60   3        0
## 467   467   25         0    13   91342   2   0.90   3        0
## 470   470   48        23    10   94609   2   0.70   3        0
## 472   472   50        24    30   91768   4   0.10   1      161
```

```
## 473   473   43       19     31   90007   4  0.30      1    156
## 479   479   44       20    150   95060   2  3.30      1      0
## 481   481   54       29     68   94998   3  1.60      3      0
## 483   483   56       32    173   94022   1  4.60      2     88
## 484   484   29        5     30   90095   3  1.00      2      0
## 485   485   25        1    113   95023   2  0.20      1      0
## 487   487   55       30     84   92173   2  3.70      1    304
## 489   489   37       13     43   94122   3  2.80      1      0
## 490   490   53       28     43   91380   2  2.10      3      0
## 491   491   34       10     90   94303   2  2.70      1      0
## 492   492   42       18     34   92115   4  0.30      1    104
## 493   493   60       36     38   94596   4  1.30      1      0
## 496   496   25        0     44   94545   4  0.60      2      0
## 497   497   50       24     83   94301   2  0.40      3      0
## 498   498   48       22     94   90623   4  2.60      3      0
## 499   499   32        8     43   95023   1  2.10      3      0
## 500   500   50       25     42   93108   3  1.70      2      0
## 501   501   59       33     34   92177   2  0.30      1      0
## 502   502   50       26     39   90640   3  1.90      2      0
## 503   503   44       19     70   92833   1  0.10      2      0
## 505   505   40       10     44   94720   3  2.00      3      0
## 506   506   36       12     69   94305   3  3.10      2      0
## 507   507   51       25     44   94608   3  0.90      3      0
## 508   508   64       40     32   91380   3  0.10      3      0
## 510   510   52       28    118   90503   2  6.80      1    112
## 511   511   51       26     62   95136   1  1.30      2    221
## 512   512   31        5     82   94143   4  2.20      2      0
## 516   516   41       16    113   92780   1  1.00      3    211
## 517   517   53       27     81   90009   3  1.70      2      0
## 519   519   28        4     34   92677   1  1.80      2      0
## 521   521   61       37     54   90024   4  1.20      2    129
## 522   522   48       24     75   92518   4  1.40      2      0
## 524   524   56       31     39   93023   4  0.90      1      0
## 526   526   64       38     79   94024   2  2.80      1    179
## 530   530   39       15     82   95207   1  0.80      2      0
## 531   531   54       30     21   91706   2  0.20      1      0
## 532   532   32        6     50   90401   4  2.10      3      0
## 533   533   62       37     39   94305   2  2.80      1    113
## 534   534   27        2    101   92807   1  1.90      1      0
## 535   535   53       28     41   93117   2  0.60      3      0
## 537   537   25       -1     43   92173   3  2.40      2    176
## 538   538   44       20    131   90717   1  4.90      3      0
## 542   542   30        6    141   95014   2  4.33      1      0
## 543   543   40       14     81   94709   3  0.10      1      0
## 544   544   63       38     54   94704   3  2.40      1     90
## 549   549   49       23     61   94117   1  1.40      3      0
## 551   551   60       34     54   94301   3  0.30      2      0
## 554   554   52       28    101   91330   2  0.30      1      0
## 555   555   28        2    149   94720   2  7.20      1      0
## 556   556   34        8     35   92037   4  0.80      1    137
## 557   557   60       34     21   93105   3  0.30      3    129
## 558   558   39       15    118   95039   2  1.90      1      0
## 559   559   30        5     38   95064   4  2.00      2      0
## 560   560   49       25     24   95818   4  0.20      1    138
```

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## 563   563   28     3    85   94035   1   0.80   2     0
## 566   566   55    29    79   90210   3   0.80   1     0
## 570   570   40    14    70   95136   3   2.10   1   185
## 573   573   39    15   128   92333   1   3.40   1     0
## 574   574   55    28    50   95020   3   1.00   2     0
## 575   575   29     5    80   94709   2   2.00   2     0
## 576   576   54    30    93   91107   1   2.70   2     0
## 577   577   25    -1    48   92870   3   0.30   3     0
## 579   579   46    19    49   92124   3   2.50   2     0
## 580   580   57    33    88   93524   1   2.70   2     0
## 581   581   52    22    22   90049   4   0.40   3     0
## 584   584   24    -1    38   95045   2   1.70   2     0
## 585   585   40    16   114   91604   1   3.40   1   300
## 586   586   34     4    83   92653   4   4.00   3     0
## 588   588   50    24    94   93305   1   4.90   1   272
## 589   589   41    17    40   93117   2   2.50   1     0
## 590   590   31     7   128   92821   1   6.00   1     0
## 591   591   29     3    39   94612   4   2.10   3     0
## 593   593   44    20    79   95051   4   2.00   3     0
## 595   595   50    26    85   94143   1   0.00   1   144
## 596   596   42    18    41   92121   1   1.80   1    94
## 597   597   48    22   152   94022   1   3.50   3     0
## 598   598   24    -2   125   92835   2   7.20   1     0
## 600   600   28     4   103   94720   2   2.50   1     0
## 601   601   56    30   141   94143   2   0.50   1     0
## 604   604   63    38    28   94720   2   0.50   2    89
## 608   608   28     3   170   95014   1   0.10   3     0
## 609   609   27     2    55   91910   4   1.70   2     0
## 610   610   37    11    24   91770   4   1.50   3     0
## 616   616   63    37   139   93943   2   6.90   1     0
## 617   617   40    14    33   94025   2   1.40   3     0
## 619   619   63    37    42   91320   2   0.70   3   115
## 620   620   57    27    73   93106   1   3.00   3     0
## 621   621   33     8   115   91129   4   2.90   2     0
## 623   623   41    17    92   93555   2   1.90   1   131
## 626   626   52    28    64   95605   2   1.00   3   211
## 627   627   30     6    42   94305   1   0.20   3   100
## 628   628   45    19    70   92677   3   2.10   1     0
## 629   629   49    24    51   90071   1   1.30   2     0
## 632   632   45    18    40   94960   3   1.00   2     0
## 633   633   57    32   165   94720   4   2.70   3     0
## 635   635   57    31    32   90034   3   1.40   1     0
## 637   637   40    16   120   92037   2   6.10   1   196
## 638   638   53    28    31   90245   4   0.10   3     0
## 640   640   62    36    32   92646   2   0.20   3     0
## 641   641   43    18    85   94960   1   3.70   3   327
## 642   642   35    10   139   95060   2   7.80   1     0
## 648   648   62    38    64   95064   4   2.20   1   123
## 650   650   25    -1    82   92677   4   2.10   3     0
## 655   655   54    29   129   93940   4   4.20   3     0
## 656   656   50    25    13   91109   2   0.70   3     0
## 658   658   38     8    23   95207   1   0.67   3     0
## 660   660   63    39    79   93009   4   1.70   2     0
## 663   663   65    41   185   93561   3   2.00   2     0
```

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## 664  664  46        20    49   90503    3  2.20        2         0
## 666  666  54        24    61   92866    4  2.00        3         0
## 667  667  52        26   112   92120    1  2.40        1         0
## 668  668  63        39    72   93106    3  2.00        3       190
## 670  670  56        29    41   94109    4  2.50        2         0
## 671  671  23        -1    61   92374    4  2.60        1       239
## 672  672  65        41   105   92612    1  3.00        2       282
## 674  674  34        10    22   95670    1  0.50        3        85
## 676  676  29         2    33   91711    1  2.00        2       160
## 677  677  47        23    11   94063    1  0.90        3       103
## 678  678  46        21   204   92780    2  2.80        1         0
## 679  679  52        27    61   92101    4  1.80        3       207
## 680  680  55        31   103   92093    3  1.80        2       364
## 682  682  34         9   164   94720    1  6.00        3         0
## 684  684  40        16    82   91311    1  3.60        2         0
## 685  685  43        17   164   90266    1  2.40        1       449
## 688  688  48        22    65   92120    2  1.50        2         0
## 689  689  44        20    71   94304    4  1.90        1       207
## 695  695  32         7   112   90740    1  3.80        1        81
## 696  696  29         4   115   92717    1  1.90        1         0
## 700  700  44        20    68   95060    1  0.80        3        91
## 701  701  37        11    84   90089    2  1.80        1         0
## 702  702  44        19    62   93106    3  0.80        3         0
## 703  703  35         9   109   92709    3  4.00        1         0
## 705  705  56        32   129   94065    1  7.40        1         0
## 707  707  58        34   148   95819    1  4.70        1         0
## 708  708  47        20    25   95064    3  0.67        2         0
## 710  710  29         4    72   95841    4  2.20        1         0
## 711  711  43        17    59   94085    3  0.90        3        87
## 713  713  41        16    10   94123    2  0.30        2         0
## 714  714  34         9    84   92009    3  0.60        2         0
## 716  716  47        23    32   92130    1  1.00        1         0
## 717  717  29         5    31   96064    4  0.40        2       161
## 719  719  56        31    21   90024    2  0.20        3       137
## 721  721  58        32    38   94025    1  2.20        3         0
## 723  723  45        21   132   91103    3  1.20        2         0
## 726  726  39        15   119   92037    2  6.10        1         0
## 730  730  58        28    90   93106    1  3.00        3         0
## 731  731  43        18   140   95616    1  7.00        1       205
## 733  733  26         1    85   90064    1  1.90        1         0
## 734  734  49        24    80   92009    1  1.20        1         0
## 735  735  66        42    53   92182    2  1.10        1         0
## 736  736  33         7    49   95403    4  2.20        2         0
## 739  739  36        10    80   94596    4  2.20        2         0
## 741  741  52        27   195   90266    1  8.10        1         0
## 743  743  32         6    81   92626    1  2.50        1         0
## 746  746  30         4    49   93955    3  1.10        2         0
## 747  747  62        37    85   95051    4  3.40        2         0
## 748  748  57        32    21   94112    3  0.10        2         0
## 756  756  56        30    45   91103    4  0.70        2         0
## 757  757  56        31    82   95348    4  1.30        3         0
## 761  761  29         3    52   92122    3  1.10        2         0
## 763  763  32         6    85   90504    1  2.70        2       100
## 764  764  54        28    65   94122    1  0.20        1         0
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## 765   765   37         13    89    95051   2  1.70         2    314
## 767   767   37         12    81    94538   1  2.80         1      0
## 769   769   43         19    72    90024   2  1.70         1      0
## 770   770   33          6    78    90250   4  2.00         2    119
## 774   774   41         16   120    92612   2  3.90         1      0
## 775   775   55         29    39    92154   1  0.20         1      0
## 781   781   32          7    42    92634   4  0.80         1      0
## 782   782   56         32   158    94588   3  3.70         3      0
## 784   784   44         20   160    94606   2  7.60         1      0
## 786   786   46         22   164    94122   2  7.60         1      0
## 787   787   45         21    42    94305   2  2.50         1      0
## 788   788   45         15   202    91380   3 10.00         3      0
## 789   789   58         34    10    92521   4  0.70         1      0
## 792   792   55         29    65    94501   4  2.80         2      0
## 796   796   57         32    15    92806   2  0.20         3      0
## 797   797   30          6    82    93657   2  2.50         1      0
## 798   798   42         17    61    94998   3  0.50         3      0
## 802   802   47         23     8    92612   4  0.20         1      0
## 803   803   36         12    51    92521   3  2.00         1    214
## 806   806   55         29   132    95758   3  5.90         2    307
## 807   807   53         27    44    94542   4  1.50         3      0
## 809   809   64         39    64    92068   3  2.20         1      0
## 810   810   54         29   111    94304   1  0.10         3      0
## 812   812   63         33    52    94720   4  1.67         3      0
## 813   813   36         10    65    90089   4  2.20         2      0
## 814   814   50         25   130    94720   1  1.10         2      0
## 815   815   33          8    45    93943   2  0.10         1      0
## 818   818   41         15    38    90291   2  0.70         1     91
## 819   819   51         27    42    95039   4  1.10         2      0
## 821   821   51         25   145    90740   1  0.30         1      0
## 823   823   61         35    60    96091   3  1.40         3      0
## 825   825   39         15    72    94801   4  2.40         1      0
## 827   827   48         21    23    93555   3  0.67         2      0
## 829   829   35          9    28    94542   4  1.00         1     75
## 830   830   55         30    81    90254   4  3.80         2      0
## 832   832   61         31    49    94066   4  1.67         3      0
## 835   835   36         12   150    95138   4  5.40         1      0
## 836   836   58         33   142    92691   2  3.90         1    193
## 838   838   30          4    24    92096   1  0.40         2     81
## 839   839   45         20    29    92507   4  1.90         3      0
## 840   840   39         15    79    92646   4  2.40         1      0
## 842   842   57         33   121    94542   1  4.30         1      0
## 843   843   34         10    54    92101   3  2.00         1      0
## 846   846   44         17    29    94706   3  1.00         2      0
## 847   847   51         27    93    92154   1  2.70         1      0
## 851   851   46         20    39    95054   1  0.20         1      0
## 852   852   41         16    23    94521   2  1.40         2      0
## 854   854   27          2   155    95138   1  0.80         1      0
## 855   855   52         28    90    95814   1  2.60         2      0
## 856   856   59         33   113    92152   2  2.00         1     77
## 858   858   49         25    30    95616   4  0.20         1      0
## 859   859   45         19    19    94720   3  0.50         2      0
## 860   860   63         37   124    92182   3  5.00         2    170
## 861   861   57         31    30    95841   2  0.70         2    145
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## 862   862   60        30     28   92354   1   1.50   3   124
## 863   863   50        23     15   94025   2   1.00   2   101
## 864   864   54        30     70   90095   1   1.60   3   265
## 865   865   28         2     10   94080   1   0.10   2     0
## 866   866   60        34     22   92037   3   0.30   3   139
## 867   867   44        20     70   94611   4   1.90   1     0
## 870   870   54        30     29   93014   2   0.80   1     0
## 871   871   43        19     35   92106   3   0.50   1     0
## 872   872   54        28     48   96091   4   2.80   2     0
## 873   873   32         7     44   90095   4   0.80   1     0
## 875   875   30         4     40   92056   4   2.10   3     0
## 880   880   63        37     84   91768   4   1.90   2     0
## 882   882   44        19    154   92116   2   8.80   1     0
## 885   885   38        13     55   91709   2   1.10   2     0
## 888   888   41        16    118   94720   2   3.30   1     0
## 889   889   57        33    182   94114   2   3.30   3   372
## 891   891   55        29     29   92780   4   1.50   3    79
## 892   892   32         6    120   94102   4   5.40   1   301
## 893   893   38        12     53   95616   2   2.40   2     0
## 895   895   29         4     59   95064   4   2.20   1   232
## 896   896   43        17     84   94608   4   2.60   3   289
## 897   897   50        24    161   95133   3   3.40   1   212
## 898   898   62        37     21   92691   4   0.40   2   137
## 900   900   30         3    172   91302   3   3.40   2     0
## 901   901   30         4     51   94709   4   0.20   1   172
## 902   902   57        33     24   95616   4   0.70   1     0
## 904   904   43        18     59   90048   1   2.40   1   250
## 905   905   28         2     51   90503   4   1.80   2     0
## 906   906   46        22     28   94720   1   1.00   1    84
## 907   907   29         3    154   94720   2   2.00   1   130
## 908   908   64        40     15   91711   2   0.30   3   115
## 910   910   23        -1    149   91709   1   6.33   1   305
## 913   913   35        10     78   94105   1   2.60   2     0
## 914   914   57        32     34   92507   2   2.00   2     0
## 917   917   44        20     85   92192   2   3.20   1     0
## 918   918   45        20    200   90405   2   8.80   1     0
## 919   919   41        16     64   92325   3   0.50   3     0
## 920   920   51        27     88   91116   1   2.60   2     0
## 921   921   27         1     42   94501   3   2.40   2     0
## 924   924   55        30     28   95123   1   1.50   2     0
## 925   925   55        30     32   91330   4   0.10   3     0
## 927   927   33         9     22   93940   4   0.40   2   103
## 928   928   65        40     95   95014   3   3.70   2   138
## 929   929   35        10     74   90638   4   1.30   1     0
## 930   930   55        30     22   92121   1   1.50   2    91
## 932   932   27         3     43   91302   1   1.00   3     0
## 933   933   51        27    112   94720   3   1.80   2     0
## 935   935   58        33     81   91320   2   0.00   3     0
## 937   937   62        32     19   92109   1   1.50   3     0
## 939   939   62        37     19   95818   4   0.40   2   124
## 940   940   56        32      8   93943   2   0.30   1     0
## 942   942   38        13    129   92093   4   4.40   1   140
## 943   943   55        29     30   91320   4   0.70   2     0
## 944   944   30         4     80   94701   4   1.80   2     0
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## 945   945  41      15     22    90503    4  1.50     3        0
## 947   947  36      11     64    91355    4  2.10     3        0
## 949   949  30       4     81    92037    1  2.90     3      259
## 951   951  32       6    112    95054    4  1.80     2        0
## 952   952  59      34     83    94105    2  3.40     3        0
## 954   954  51      26     28    92130    4  0.20     2        0
## 955   955  37      12    169    91107    2  5.20     3      249
## 956   956  59      35     14    90840    4  0.70     1        0
## 960   960  49      24     68    94143    1  0.20     2      163
## 961   961  46      22    144    93611    2  3.30     1        0
## 962   962  35       9     30    94114    4  1.00     1      163
## 964   964  39      14     24    94305    2  0.30     2        0
## 965   965  27       1     78    92037    4  2.30     3      157
## 966   966  62      36    135    94301    2  5.20     2        0
## 967   967  57      32     44    91605    2  1.60     3        0
## 972   972  43      19    174    92028    3  1.70     3      231
## 974   974  43      18     85    92703    1  4.00     3      287
## 978   978  54      30     45    95134    4  1.10     2      205
## 980   980  50      26     48    94720    4  0.10     3        0
## 981   981  38      13    114    92697    1  1.00     3        0
## 982   982  36      12    142    90064    3  2.30     2        0
## 983   983  58      33     52    94402    3  0.50     2        0
## 985   985  50      25     15    92173    1  0.40     3        0
## 987   987  53      27    101    90245    4  4.90     1        0
## 988   988  62      36     84    94609    2  2.80     1        0
## 993   993  34       9     93    94608    1  0.00     1        0
## 994   994  41      15    185    91775    1  3.60     2        0
## 995   995  32       8     42    90650    1  1.80     2        0
## 996   996  28       3     45    94305    2  1.60     3        0
## 997   997  33       6     49    92037    2  1.67     2      214
## 1000 1000  60      35     18    92120    1  1.50     2        0
## 1001 1001  59      35      8    92691    4  0.70     1       91
## 1002 1002  57      32     55    90717    4  2.10     1      108
## 1003 1003  46      20     85    95617    2  0.40     3        0
## 1006 1006  38      12    138    95112    2  0.00     1        0
## 1008 1008  44      19     99    95064    3  3.50     3      357
## 1009 1009  50      24    152    92220    1  7.30     1        0
## 1011 1011  27       3     98    95616    2  2.50     1      361
## 1013 1013  50      25     40    95820    1  1.30     2        0
## 1015 1015  50      26    192    90245    2  1.80     3      301
## 1016 1016  60      34     62    94303    1  0.80     2        0
## 1017 1017  30       5     69    94720    1  0.80     2        0
## 1019 1019  39      15     61    90018    2  0.60     3      127
## 1020 1020  29       3     30    91745    4  0.30     2      157
## 1022 1022  35       8     41    92612    2  1.00     2        0
## 1023 1023  27       3    118    95605    1  3.30     2        0
## 1024 1024  45      20    109    94117    1  7.00     1      366
## 1025 1025  58      33    122    93711    4  0.20     2        0
## 1026 1026  62      37     50    94545    3  1.50     1      169
## 1027 1027  28       4     43    95616    3  0.10     2        0
## 1030 1030  41      17     20    94720    1  1.40     3        0
## 1032 1032  56      32     25    95403    1  0.10     2      136
## 1033 1033  37      12     42    94720    3  0.70     2        0
## 1035 1035  49      23     84    90095    3  2.10     1      134
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## 1039 1039  56      30  145  95831  4  5.70    2      0
## 1041 1041  36       6   78  91107  4  1.80    3    163
## 1045 1045  49      24   79  95827  1  0.20    2     83
## 1049 1049  62      37   90  95747  3  0.50    1      0
## 1050 1050  35      10   23  94501  4  0.20    3      0
## 1051 1051  53      27  145  90095  2  6.10    3    294
## 1054 1054  58      32   51  95819  1  2.80    2      0
## 1055 1055  63      38    8  95136  4  0.60    2      0
## 1056 1056  31       6   62  95630  1  1.00    1      0
## 1058 1058  30       0   63  95503  2  1.75    3      0
## 1064 1064  56      30   39  90024  3  1.40    1    131
## 1065 1065  41      17  138  95008  3  6.90    2      0
## 1066 1066  25       1  113  90401  3  2.50    1      0
## 1068 1068  50      24  195  95035  1  1.70    1      0
## 1070 1070  44      18   75  91203  2  3.50    1      0
## 1071 1071  36       9   40  90840  2  1.00    2      0
## 1072 1072  39      14   61  94005  3  0.50    3    137
## 1073 1073  54      24   75  90089  2  4.50    3      0
## 1074 1074  33       8  122  94583  1  0.00    1      0
## 1075 1075  39      14   75  95762  3  3.00    1      0
## 1079 1079  51      27   39  92709  2  0.80    1    182
## 1080 1080  54      30  145  94591  2  6.80    1      0
## 1081 1081  47      22   24  90717  4  0.40    2    142
## 1083 1083  30       5   85  94115  1  2.60    2      0
## 1084 1084  28       3   65  95014  3  2.60    3      0
## 1085 1085  60      35  191  93407  4  5.60    3      0
## 1086 1086  51      26   11  92612  2  0.00    1      0
## 1088 1088  38      13   54  92028  3  0.70    2    196
## 1089 1089  59      35   95  95521  1  3.80    1      0
## 1090 1090  53      29   94  92103  4  1.00    2      0
## 1092 1092  41      17   48  94720  3  0.30    3      0
## 1093 1093  25       1   70  92120  4  2.60    1      0
## 1094 1094  27       3   40  94550  3  0.10    2    111
## 1095 1095  50      24   44  94086  4  1.80    1      0
## 1096 1096  50      25   43  92129  1  1.40    3    137
## 1099 1099  46      20  114  90720  1  0.00    1      0
## 1100 1100  30       6   52  92717  3  0.70    2      0
## 1101 1101  42      16   13  91711  1  0.20    1      0
## 1104 1104  38      14   49  90037  1  1.80    1      0
## 1105 1105  51      25  181  93106  1  1.70    1      0
## 1107 1107  37      13   70  92101  2  2.70    1      0
## 1108 1108  47      21   79  94110  3  1.10    1    185
## 1109 1109  55      29   61  95051  4  2.80    2      0
## 1110 1110  65      41  121  92126  2  2.10    1      0
## 1112 1112  54      28  183  90071  1  1.00    1    442
## 1113 1113  52      28   51  94949  1  1.60    3      0
## 1115 1115  32       8   39  95827  1  1.70    1      0
## 1116 1116  51      24   84  94117  3  2.00    2      0
## 1117 1117  43      18  122  92056  1  7.00    1      0
## 1118 1118  42      18  145  94709  1  1.70    1    132
## 1119 1119  42      17   98  95670  2  0.40    1      0
## 1122 1122  30       6   49  91330  3  0.70    2    196
## 1123 1123  32       7   38  90041  1  1.00    1      0
## 1124 1124  46      20   91  92521  4  2.60    3      0
```

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## 1126 1126  37    13    172    95003    2   6.50    1       0
## 1127 1127  32     8    104    95192    2   3.70    1       0
## 1132 1132  57    27     90    91709    2   4.50    3       0
## 1135 1135  39    14     42    95616    1   2.50    3       0
## 1136 1136  57    33      9    93106    1   0.10    2      91
## 1137 1137  47    21     65    94086    1   1.50    2       0
## 1138 1138  51    26    134    90230    4   4.50    3       0
## 1140 1140  55    28     38    95616    3   1.00    2       0
## 1141 1141  32     6     13    94611    4   0.30    1       0
## 1143 1143  44    20     75    91335    4   1.90    1       0
## 1144 1144  33     7    120    94022    1   3.20    3       0
## 1145 1145  49    24     91    95822    1   2.80    2       0
## 1147 1147  31     7     71    90034    1   0.10    1      78
## 1148 1148  37    13    111    91367    1   0.80    2       0
## 1150 1150  56    32    158    91763    1   7.40    1       0
## 1151 1151  55    31     81    95521    3   2.67    1       0
## 1154 1154  55    30     55    92821    4   0.90    1     215
## 1156 1156  41    16     81    92653    2   0.40    1       0
## 1157 1157  49    25     13    94305    4   0.20    1      87
## 1158 1158  48    23    132    94998    1   0.60    1     157
## 1161 1161  28     1     40    95134    1   2.00    2       0
## 1163 1163  38    14    112    94501    2   2.20    1     394
## 1167 1167  30     5    112    91711    4   5.00    2       0
## 1168 1168  37    12    190    92354    2   3.00    1     475
## 1169 1169  62    37     38    91706    1   1.10    3       0
## 1170 1170  40    16     32    92110    1   1.40    3     158
## 1173 1173  49    24     45    92104    3   1.70    2       0
## 1175 1175  36    10     42    93106    4   1.20    2       0
## 1176 1176  29     4     58    91006    1   0.80    2       0
## 1178 1178  28     3     71    90405    1   3.30    2     149
## 1180 1180  36    11     98    90291    3   1.20    3       0
## 1182 1182  25     0     65    90095    4   0.20    1       0
## 1183 1183  28     2     19    94720    4   0.40    1       0
## 1184 1184  50    25     35    94105    3   1.70    2       0
## 1185 1185  34     9     71    90041    4   1.30    1       0
## 1186 1186  43    19     31    94025    3   0.50    1       0
## 1188 1188  61    36     24    94309    1   1.50    2      87
## 1189 1189  45    19     58    94305    2   0.40    3       0
## 1191 1191  39    15    168    93117    2   8.00    1     152
## 1193 1193  45    20    138    92870    1   7.00    1       0
## 1194 1194  58    32     81    92121    3   1.70    2       0
## 1195 1195  29     3     41    94305    4   1.30    3       0
## 1196 1196  32     7    123    92407    2   2.90    2       0
## 1198 1198  48    23      8    92866    1   0.40    3       0
## 1199 1199  40    14     42    94801    2   0.70    1     101
## 1200 1200  29     4     62    92064    2   2.50    1     184
## 1201 1201  36    12     22    92507    4   1.00    1      91
## 1203 1203  35    11     24    95521    4   0.40    2       0
## 1204 1204  62    37     50    91311    3   2.40    1       0
## 1205 1205  26     1    190    91604    4   1.30    2     197
## 1207 1207  63    37    165    95035    4   5.10    3       0
## 1212 1212  61    36    131    92407    1   0.90    1       0
## 1213 1213  34     8     44    91101    4   0.20    1       0
## 1215 1215  61    36     15    92521    4   0.40    2       0
```

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## 1216 1216  45      20      38      94550    4  1.90    3       144
## 1217 1217  50      25      84      91107    1  1.30    3         0
## 1218 1218  44      20     122      94305    1  0.30    1         0
## 1219 1219  62      36      98      92122    2  2.80    1         0
## 1222 1222  30       5     121      94132    2  3.30    1         0
## 1224 1224  45      19      11      96150    1  0.20    1        91
## 1225 1225  59      35      45      94920    1  1.80    3         0
## 1226 1226  30       6     118      94534    2  2.80    2         0
## 1227 1227  60      36      14      90089    2  0.30    1       109
## 1229 1229  56      30      45      92870    1  0.20    1        98
## 1231 1231  27       1      25      94920    4  0.30    2         0
## 1232 1232  66      41     144      94306    1  2.50    1         0
## 1234 1234  53      29      22      93943    2  0.40    1         0
## 1235 1235  44      18      33      90405    3  1.50    1         0
## 1236 1236  54      28      60      94110    4  2.60    3         0
## 1237 1237  31       6      81      95762    4  2.20    2       116
## 1238 1238  38      13     169      92093    1  6.80    3         0
## 1239 1239  28       2      63      91116    2  1.60    3         0
## 1240 1240  51      26      12      90245    2  0.70    3       109
## 1242 1242  64      38      39      92120    1  0.50    3         0
## 1243 1243  29       4      44      91380    4  2.00    2         0
## 1244 1244  34      10     110      92697    1  4.00    1         0
## 1245 1245  33       8     130      94720    3  6.30    2        99
## 1246 1246  46      21      41      94025    1  1.40    3       128
## 1247 1247  48      22      59      91775    1  1.40    3       241
## 1250 1250  51      27      80      90032    1  2.60    2         0
## 1251 1251  47      20      81      94301    1  2.67    2         0
## 1252 1252  39      13      31      95120    2  0.80    3         0
## 1257 1257  31       7      20      92115    1  0.40    3         0
## 1259 1259  34       8      31      91203    1  0.30    1       104
## 1261 1261  57      31      40      91107    3  1.40    3       137
## 1262 1262  63      39      84      94901    1  1.80    3         0
## 1266 1266  32       2      71      95014    2  1.75    3       108
## 1267 1267  64      39     113      92121    1  0.80    3         0
## 1270 1270  36      11      14      92673    4  0.20    3       100
## 1271 1271  43      18      60      91311    2  2.20    3         0
## 1272 1272  28       4      94      92115    3  0.80    1       236
## 1276 1276  27       2      92      95616    2  3.10    1       178
## 1277 1277  42      16      20      95351    2  0.80    3       117
## 1281 1281  65      40      98      95064    3  1.80    2       333
## 1282 1282  39      15      52      92093    3  2.33    1         0
## 1284 1284  30       6      64      94305    4  3.40    1       117
## 1286 1286  38      13     113      94720    4  1.70    2         0
## 1287 1287  29       3      50      94010    3  1.10    2         0
## 1288 1288  42      18      54      94010    4  2.20    2         0
## 1291 1291  62      38     100      90277    4  1.70    2         0
## 1293 1293  56      30     164      94610    4  0.50    2       234
## 1294 1294  56      31      81      92373    2  3.70    1       121
## 1295 1295  34      10      71      95003    1  0.10    1       257
## 1297 1297  30       6      80      92399    3  1.50    1       219
## 1301 1301  61      36      23      91754    2  0.50    2       103
## 1302 1302  41      17     153      92121    1  1.70    1       337
## 1304 1304  29       5     112      94720    2  2.00    2       382
## 1305 1305  51      26     145      90025    1  8.10    1       397
```

```
## 1306 1306 32     6    28 94025 2 0.30 2   88
## 1308 1308 26     2   195 94546 1 6.33 1    0
## 1309 1309 54    24    50 92037 3 2.00 3    0
## 1311 1311 62    36    21 95616 3 0.30 3    0
## 1317 1317 28     3    51 94086 2 1.60 3  123
## 1318 1318 55    30    40 95521 2 2.30 3    0
## 1319 1319 52    26   178 94234 1 1.00 1    0
## 1322 1322 27     3   123 95138 1 5.40 1    0
## 1323 1323 32     5    48 94022 2 1.67 2    0
## 1324 1324 52    26    45 91604 3 0.60 2    0
## 1330 1330 28     4    32 90095 3 1.00 2    0
## 1331 1331 34     9    64 92346 2 0.10 1  224
## 1332 1332 31     7    84 92692 1 0.10 1    0
## 1334 1334 62    38    99 95014 4 1.70 2    0
## 1336 1336 50    24   180 94539 1 1.70 1    0
## 1338 1338 26     0   179 92028 4 2.10 2    0
## 1339 1339 51    27    42 90245 4 0.10 3    0
## 1341 1341 35    11    82 94131 4 3.40 1    0
## 1342 1342 42    16    55 91355 2 0.70 1  149
## 1343 1343 36    12    79 90041 2 2.20 1    0
## 1344 1344 41    17    48 92831 2 0.60 3  215
## 1347 1347 44    20    50 95670 3 2.33 1  200
## 1349 1349 38    14    35 95051 1 1.50 2   97
## 1352 1352 59    35    84 94588 1 1.80 3    0
## 1353 1353 51    27    20 90401 4 0.50 2    0
## 1354 1354 50    25    14 94124 1 0.40 3    0
## 1358 1358 55    29    53 95134 1 1.40 1    0
## 1359 1359 50    25    83 92007 1 2.80 2    0
## 1361 1361 54    28    85 92028 4 4.90 1    0
## 1362 1362 50    26    38 95039 4 0.90 2    0
## 1363 1363 31     5    85 92130 3 1.60 1  157
## 1365 1365 44    19    69 92129 4 0.40 1    0
## 1366 1366 60    35    43 94720 3 0.90 3    0
## 1371 1371 30     5    20 94545 4 0.50 3  117
## 1372 1372 58    32    65 95621 3 2.50 1  222
## 1373 1373 39    13   139 95616 3 3.40 1  483
## 1374 1374 60    35   135 92612 3 0.30 3    0
## 1377 1377 63    39    45 92870 4 1.30 2   86
## 1380 1380 62    37   162 95051 1 1.30 1    0
## 1381 1381 60    34   105 92103 2 1.40 1    0
## 1382 1382 38    12    22 91380 3 0.20 2    0
## 1383 1383 34     8    82 91775 2 1.80 1  178
## 1385 1385 55    31    62 91711 1 1.80 3    0
## 1386 1386 57    31    82 95032 2 2.00 1   83
## 1387 1387 27     3    72 95616 4 0.00 1    0
## 1388 1388 35    10    38 95762 4 1.70 1    0
## 1389 1389 52    28    25 90212 4 1.00 1    0
## 1390 1390 45    15    20 94107 1 0.75 3    0
## 1392 1392 44    18    84 91330 3 1.10 1    0
## 1393 1393 47    23    33 90095 1 1.00 1    0
## 1395 1395 52    27    33 90095 2 0.70 2    0
## 1396 1396 47    23   190 92831 4 0.30 3  305
## 1397 1397 42    18    43 91107 1 0.30 3  158
## 1399 1399 42    18   141 93407 1 3.50 1    0
```

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## 1400 1400  40       16    69   92009   4  2.40      1       0
## 1401 1401  32        8    78   90401   4  0.10      2       0
## 1403 1403  55       29   172   95064   1  5.20      2       0
## 1405 1405  58       28    75   92121   1  1.40      3       0
## 1406 1406  46       22   183   91605   1  3.10      2       0
## 1407 1407  53       23    20   92123   4  0.40      3       0
## 1409 1409  40       14   129   90089   1  5.90      3       0
## 1411 1411  60       35    44   92126   4  2.10      1       0
## 1412 1412  65       39   184   91302   1  5.40      3     176
## 1414 1414  48       24    12   90058   3  0.40      1       0
## 1415 1415  59       33    68   94105   2  2.30      3     128
## 1416 1416  33        8    48   94019   1  1.00      1     212
## 1420 1420  30        4    39   91105   1  1.50      1       0
## 1421 1421  30        4    40   91605   1  0.30      1       0
## 1423 1423  32        8    32   94143   2  1.00      2     103
## 1424 1424  55       30    64   90250   2  2.30      3       0
## 1426 1426  64       38    40   91330   1  2.50      3      94
## 1428 1428  31        5    85   95828   2  1.30      1     119
## 1429 1429  25       -1    21   94583   4  0.40      1      90
## 1431 1431  32        7    52   92660   2  0.10      1       0
## 1432 1432  58       34   128   90058   1  7.40      1       0
## 1433 1433  26        2   195   90245   1  6.33      1       0
## 1436 1436  43       17    55   90266   1  0.20      1       0
## 1438 1438  28        3   123   92007   1  0.80      1     146
## 1439 1439  63       37    90   94105   4  1.90      2     106
## 1440 1440  59       29    61   94025   1  1.40      3       0
## 1441 1441  42       15    41   94610   3  2.50      2       0
## 1445 1445  60       33   154   90740   1  3.00      2       0
## 1446 1446  47       21   141   90095   1  2.40      1       0
## 1447 1447  29        4    22   92661   2  0.90      3     110
## 1448 1448  52       28   145   94131   2  6.80      1       0
## 1450 1450  63       37   109   90740   1  2.00      1       0
## 1451 1451  59       34    80   90086   3  0.50      1       0
## 1456 1456  63       39   160   91330   2  2.10      1       0
## 1458 1458  42       16    25   94304   2  0.80      3       0
## 1459 1459  51       25    33   93033   1  1.40      3       0
## 1461 1461  40       16    85   92677   4  0.20      3       0
## 1462 1462  54       28    48   93022   1  0.20      1       0
## 1466 1466  45       19    60   91911   1  0.70      3     159
## 1469 1469  45       18    78   92129   3  2.67      2       0
## 1470 1470  59       35    59   90005   4  1.20      2       0
## 1472 1472  52       26   180   94305   1  1.00      1       0
## 1473 1473  34        8     8   94710   3  0.10      2      83
## 1474 1474  65       35    23   91711   1  1.50      3       0
## 1475 1475  48       23    79   92124   2  3.80      3       0
## 1476 1476  44       19    78   92064   2  3.80      3     268
## 1477 1477  61       37    64   92028   1  0.00      2       0
## 1478 1478  40       14    64   91320   4  0.20      3       0
## 1480 1480  28        4    43   91304   1  1.00      3     102
## 1481 1481  67       42    32   93943   1  1.10      3       0
## 1483 1483  60       35     8   94143   1  0.10      1       0
## 1485 1485  55       30    40   94126   2  2.30      3       0
## 1487 1487  35        9   141   93022   2  4.50      2       0
## 1488 1488  28        4   159   93907   1  1.50      1       0
```

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## 1491 1491  30      4    18   95020   4  0.30      2         0
## 1493 1493  33      8   133   90024   1  0.00      1         0
## 1495 1495  59     35    60   90089   1  0.00      2         0
## 1497 1497  36     12    18   91330   1  0.50      3         0
## 1498 1498  45     21    73   95020   1  0.80      3         0
## 1503 1503  65     39   113   90036   1  2.00      1         0
## 1504 1504  34      8    52   94720   4  2.20      2         0
## 1505 1505  30      6   191   92028   2  4.40      2         0
## 1507 1507  52     27    25   95138   2  0.00      1         0
## 1508 1508  43     18    50   91006   4  1.90      3         0
## 1510 1510  56     26    92   92647   2  4.50      3         0
## 1511 1511  57     32    33   95747   2  2.00      2         0
## 1513 1513  53     28    44   91604   3  1.70      1         0
## 1517 1517  41     17    49   92130   4  2.20      2         0
## 1521 1521  54     30   120   95039   1  7.40      1       119
## 1522 1522  33      8   175   92354   2  6.70      1       102
## 1523 1523  25     -1   101   94720   4  2.30      3       256
## 1525 1525  40     16   155   94002   4  0.10      3         0
## 1526 1526  43     18    58   95747   1  2.40      1         0
## 1527 1527  36     10    80   94608   4  2.20      2         0
## 1528 1528  57     33    45   94117   1  1.80      3       195
## 1529 1529  34      9   134   94550   1  4.60      1       164
## 1530 1530  38     14    58   91709   4  2.00      3       153
## 1531 1531  47     21    20   94066   1  0.20      1         0
## 1532 1532  39     13    25   90304   4  1.50      3         0
## 1533 1533  45     20    55   94588   1  0.30      1         0
## 1534 1534  62     37   155   93943   1  1.30      1         0
## 1537 1537  36     12    73   95617   4  2.00      3       188
## 1538 1538  58     34    41   94608   4  1.30      1         0
## 1539 1539  55     30    34   95820   4  0.10      3       157
## 1541 1541  34      8    11   91320   4  0.30      1         0
## 1542 1542  61     35   154   92704   2  6.90      1         0
## 1543 1543  50     20    19   92612   4  0.40      3         0
## 1544 1544  52     26   101   93407   2  2.40      2         0
## 1545 1545  39     15    24   92123   1  1.00      1       116
## 1546 1546  55     29   131   92675   2  2.70      1         0
## 1547 1547  33      9   105   95136   1  4.00      1         0
## 1550 1550  57     31    45   94305   3  1.40      1       198
## 1552 1552  50     25   192   94115   2  2.80      1       238
## 1554 1554  46     22    83   95616   3  0.70      1         0
## 1556 1556  59     33    49   93009   4  1.70      2       104
## 1557 1557  31      1    60   94143   4  4.00      3       244
## 1558 1558  51     25    41   94939   4  1.80      1         0
## 1559 1559  35     10    72   91320   3  2.30      1       285
## 1560 1560  59     35   102   92677   4  3.00      2       115
## 1561 1561  35     10    31   95605   3  1.30      1         0
## 1562 1562  46     20    73   93106   1  1.50      2       128
## 1563 1563  34      9    89   91763   1  0.00      1         0
## 1564 1564  55     29    19   92109   4  0.70      3       121
## 1565 1565  64     40    63   94706   4  1.20      2         0
## 1570 1570  51     27    44   94305   3  1.90      2       141
## 1574 1574  44     20    69   92028   1  0.80      3       184
## 1578 1578  34      8    65   92093   1  3.00      1       227
## 1579 1579  38     13    12   94143   2  0.30      2       104
```

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## 1580 1580  29     5   122   94305   4  3.00      1      0
## 1582 1582  53    29    24   94105   2  0.20      1      0
## 1583 1583  43    19   170   92037   4  4.25      1    318
## 1585 1585  46    20    25   93401   4  0.60      3    125
## 1586 1586  57    31   131   90502   2  2.70      1      0
## 1587 1587  59    33    50   94122   2  2.30      3      0
## 1588 1588  52    28    21   94035   2  0.40      1      0
## 1590 1590  57    32   124   90049   1  0.20      2      0
## 1591 1591  49    23    58   95819   4  2.60      1    188
## 1593 1593  56    31   192   90089   1  7.00      3      0
## 1596 1596  56    26    38   94305   3  1.00      3    110
## 1599 1599  40    15    85   94550   2  0.40      1      0
## 1601 1601  60    36   129   92028   2  6.00      1      0
## 1602 1602  31     7   180   93407   1  4.30      1      0
## 1603 1603  40    14    74   90245   4  1.40      2      0
## 1604 1604  36     6   138   92152   1  7.00      3     86
## 1605 1605  55    29   111   90502   2  3.60      3      0
## 1606 1606  54    28    83   93555   3  0.80      1      0
## 1608 1608  55    29    21   92028   4  0.70      3      0
## 1610 1610  66    41   105   93023   1  0.80      3      0
## 1611 1611  38    14   103   94305   1  0.80      2      0
## 1612 1612  58    32    75   92096   2  2.30      3      0
## 1613 1613  41    17    33   94550   1  0.70      1    104
## 1614 1614  60    34    52   94305   4  1.70      2      0
## 1616 1616  62    36    63   93109   1  2.50      3      0
## 1620 1620  45    21    29   90005   1  0.30      3      0
## 1621 1621  39    14    22   94035   2  0.30      2      0
## 1622 1622  31     6    53   92093   4  2.20      1    114
## 1624 1624  63    38   153   90045   1  1.30      1    455
## 1625 1625  28     2    31   90024   2  0.30      2      0
## 1628 1628  46    20    82   91016   3  0.70      2      0
## 1629 1629  42    18    90   95064   4  0.80      1    245
## 1630 1630  53    29   154   93407   4  7.40      3      0
## 1631 1631  41    17    99   92096   2  1.80      2      0
## 1633 1633  31     5    93   95032   2  3.10      2      0
## 1636 1636  49    24    70   91330   1  2.90      1      0
## 1638 1638  30     6   193   94022   3  6.30      3      0
## 1640 1640  56    31    68   94571   2  0.00      3      0
## 1641 1641  36    10    55   90009   1  2.00      1     95
## 1643 1643  27     3    84   95814   3  1.50      1      0
## 1645 1645  59    35    33   91355   4  0.40      1    131
## 1646 1646  56    32    89   92096   4  1.00      2     90
## 1648 1648  35     5    68   90509   4  1.80      3      0
## 1652 1652  62    36   158   94301   2  6.30      3      0
## 1654 1654  26     1    24   96651   2  0.90      3    123
## 1655 1655  60    34   102   94305   2  2.00      1      0
## 1656 1656  35    11    53   91355   3  2.80      1      0
## 1657 1657  40    15   175   92646   2  3.30      1      0
## 1660 1660  33     7   139   95828   1  4.00      3    106
## 1661 1661  37    11    34   95747   3  0.90      1      0
## 1662 1662  38    14    64   92093   1  1.50      3      0
## 1664 1664  57    32    42   95070   3  0.50      2      0
## 1665 1665  61    35    63   91605   1  1.60      1      0
## 1666 1666  37    12   100   92735   3  1.20      3    341
```

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## 1667 1667 51      25  190  95138  2  4.20  2    0
## 1672 1672 34       9   20  92648  4  1.10  3    0
## 1676 1676 60      35  119  90266  2  3.90  1    0
## 1677 1677 46      20   74  92821  4  2.60  3  104
## 1678 1678 34      10   42  92173  1  1.50  2  131
## 1680 1680 57      31  114  94590  4  5.20  1    0
## 1683 1683 51      26   14  92182  2  0.00  1  103
## 1684 1684 55      29   33  92660  2  0.40  3    0
## 1685 1685 60      34   83  94028  2  2.00  1  249
## 1687 1687 62      38   39  96003  4  2.20  1    0
## 1689 1689 60      34  108  92152  2  2.00  1  359
## 1690 1690 59      34   21  92028  3  1.30  2    0
## 1691 1691 26       1  102  95521  1  1.90  1    0
## 1692 1692 56      32   48  94117  1  1.60  3    0
## 1694 1694 57      31   43  95616  1  0.20  1    0
## 1695 1695 48      23   35  94025  4  0.40  2  118
## 1696 1696 30       6  184  91911  1  6.00  1    0
## 1697 1697 45      21  140  91024  2  7.60  1  132
## 1701 1701 43      16   71  90089  3  2.33  2    0
## 1703 1703 56      30  122  93555  2  0.50  1    0
## 1705 1705 46      22  198  95521  2  6.67  1    0
## 1706 1706 48      24   79  90245  4  1.40  2    0
## 1708 1708 61      37   31  92374  3  0.40  2    0
## 1709 1709 46      20   12  90250  4  0.60  3    0
## 1711 1711 31       5   29  95405  2  0.30  2  131
## 1714 1714 44      20   15  90405  1  1.00  1    0
## 1715 1715 51      27  155  94720  2  0.40  1  107
## 1716 1716 39      13   25  95370  3  0.20  2    0
## 1718 1718 33       7  101  93727  1  2.70  2  233
## 1720 1720 36      12  188  91304  2  6.50  1    0
## 1722 1722 54      29   59  92867  2  2.30  3  152
## 1723 1723 26       2   72  92647  4  2.60  1    0
## 1724 1724 39      15   55  95821  1  1.50  3    0
## 1726 1726 57      32   19  95348  1  1.30  1    0
## 1727 1727 59      33   71  91335  2  2.30  3  150
## 1728 1728 52      26   54  90049  2  1.50  2    0
## 1733 1733 25       0   88  94566  2  1.80  2  319
## 1734 1734 40      16  125  95125  2  2.20  1    0
## 1736 1736 60      36   31  95051  3  0.40  2    0
## 1737 1737 57      31  131  95133  2  2.70  1  394
## 1738 1738 44      19   70  92399  1  0.20  2  230
## 1740 1740 33       7   83  95211  1  2.50  1    0
## 1742 1742 45      21  121  94066  1  4.70  1    0
## 1744 1744 50      24   32  94701  4  1.80  1  109
## 1746 1746 37      12   40  90065  2  1.10  2    0
## 1747 1747 62      36   25  90740  3  0.30  3    0
## 1748 1748 29       5   21  90717  4  0.40  2   89
## 1750 1750 46      22   52  95814  2  2.10  3  221
## 1751 1751 60      34   61  95521  4  1.70  2  229
## 1752 1752 55      31   25  94720  2  0.20  1    0
## 1753 1753 33       8  155  92717  1  7.40  3    0
## 1756 1756 28       3   55  92647  4  1.70  2    0
## 1758 1758 33       9   60  90630  1  1.20  1    0
## 1759 1759 40      14   54  96003  2  0.70  1    0
```

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## 1761 1761 41      16      33    94309   4  0.00      2         0
## 1762 1762 52      27      45    94720   2  2.00      2       121
## 1765 1765 45      21      44    94596   3  0.60      2         0
## 1767 1767 64      38      22    92697   2  0.20      3         0
## 1769 1769 43      18     128    92093   4  5.30      1        84
## 1771 1771 62      37       9    91320   1  0.10      1        94
## 1773 1773 36      11      15    94720   2  0.30      2       119
## 1775 1775 43      18      83    93109   3  0.50      3         0
## 1776 1776 46      22      73    91360   1  0.80      3       117
## 1778 1778 52      27      34    93117   2  0.70      2       114
## 1779 1779 27       3      32    94710   3  1.00      2         0
## 1785 1785 54      29     119    91355   3  2.00      1         0
## 1786 1786 29       3     190    94080   2  4.50      1         0
## 1790 1790 44      20     171    91330   4  0.70      1       567
## 1792 1792 48      22     139    94309   1  0.00      1         0
## 1794 1794 35       9     113    94596   3  0.80      3         0
## 1796 1796 49      24      70    90024   1  2.90      1         0
## 1800 1800 38      14      28    95821   4  0.40      2       100
## 1802 1802 35      10      78    92121   1  2.60      2         0
## 1804 1804 58      32      59    94542   1  1.60      1         0
## 1807 1807 61      36      10    90740   1  0.10      1         0
## 1812 1812 28       3      11    94534   4  0.50      3         0
## 1815 1815 48      22      79    95747   3  0.70      2         0
## 1816 1816 65      39      18    94923   2  0.40      1         0
## 1817 1817 45      19      91    92373   2  1.70      2         0
## 1818 1818 36      11       9    94604   4  0.20      3         0
## 1819 1819 45      20      62    95818   2  2.20      3         0
## 1821 1821 47      22      25    90404   1  0.10      1       148
## 1823 1823 48      23     112    93014   1  5.10      2        86
## 1824 1824 33       8     125    91320   1  0.00      1         0
## 1825 1825 49      23     194    94022   4  8.30      2         0
## 1828 1828 56      30     113    92704   2  2.70      1       352
## 1829 1829 30       4      25    92123   2  0.30      2         0
## 1830 1830 59      29      45    95630   3  2.00      3         0
## 1831 1831 38      13     119    94571   2  7.80      1       221
## 1832 1832 47      22      30    94118   4  0.40      2       115
## 1833 1833 54      29      79    91330   4  3.80      2         0
## 1835 1835 41      16      23    94143   2  0.30      2       118
## 1836 1836 47      23     171    94546   2  1.40      1       284
## 1838 1838 43      18     103    90089   3  1.00      1       180
## 1839 1839 31       7      99    94720   1  4.00      1         0
## 1840 1840 28       2      43    95616   4  1.30      3         0
## 1842 1842 42      17      91    94583   1  0.10      2       199
## 1843 1843 53      29      93    95051   1  2.70      2       256
## 1844 1844 30       6     154    90230   1  6.00      1         0
## 1845 1845 65      40      21    92717   3  0.10      3         0
## 1847 1847 56      32      15    90089   1  0.10      2         0
## 1848 1848 25       0      52    95126   3  2.60      3       159
## 1849 1849 35      10      30    95032   3  1.30      1         0
## 1850 1850 50      26      42    90630   1  1.60      2         0
## 1851 1851 36      10      20    90033   4  0.30      1        97
## 1852 1852 34       8      60    94015   4  2.20      2         0
## 1857 1857 51      24      21    95014   2  1.00      2         0
## 1859 1859 35      11      65    90747   3  2.80      1       240
```

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## 1860 1860 67      41    20   91741  2  0.40  1    80
## 1861 1861 30       6   179   91103  3  4.90  1   142
## 1862 1862 62      38   161   90274  1  2.90  1     0
## 1866 1866 36       6    90   91342  4  1.80  3     0
## 1867 1867 48      24    90   94523  1  2.60  2   334
## 1869 1869 25       1   118   92833  1  5.40  1     0
## 1870 1870 55      30    44   94025  2  2.00  2     0
## 1872 1872 31       5    99   94065  4  1.80  2   268
## 1873 1873 43      17    98   94402  3  1.10  1     0
## 1875 1875 37      11    82   95819  3  0.90  2   218
## 1879 1879 56      30    59   95833  3  0.80  1   159
## 1881 1881 44      19    49   94720  4  1.90  3    89
## 1883 1883 56      32   125   91330  3  0.60  1   342
## 1885 1885 57      33   163   94132  1  7.40  1     0
## 1886 1886 31       6    19   96001  4  1.10  3   104
## 1888 1888 31       7    81   95006  2  2.00  2     0
## 1889 1889 36      10    93   94305  1  2.80  3     0
## 1891 1891 52      27   184   90630  1  8.10  1     0
## 1892 1892 42      18    50   95126  4  2.20  2     0
## 1893 1893 55      30    55   94110  3  1.70  1     0
## 1894 1894 49      24    13   94608  1  0.40  3   101
## 1895 1895 51      25    29   94303  4  0.10  1     0
## 1896 1896 26       2    72   95003  4  2.60  1     0
## 1897 1897 32       7    83   94304  1  2.60  2     0
## 1899 1899 50      24    43   95630  4  0.10  1     0
## 1901 1901 61      36    10   91365  4  0.40  2     0
## 1903 1903 39      14    85   94005  3  1.20  3   107
## 1904 1904 56      26    50   90095  3  1.40  3     0
## 1908 1908 42      18   115   93711  1  0.30  1     0
## 1909 1909 50      26    22   92037  4  0.50  2   112
## 1910 1910 56      30   101   90048  3  1.70  2     0
## 1911 1911 43      18    83   95616  2  3.80  3   112
## 1912 1912 60      35    52   94709  3  0.50  2     0
## 1913 1913 42      16   191   94304  3  4.80  2     0
## 1915 1915 48      24    54   95616  1  1.60  2   186
## 1916 1916 37      11    69   91911  3  2.10  1     0
## 1919 1919 39       9   118   93555  2  6.00  3   246
## 1920 1920 38      13    19   92069  2  1.40  2   120
## 1922 1922 45      21    63   95621  1  0.80  3   245
## 1924 1924 45      19    22   90639  1  0.20  1     0
## 1925 1925 62      38    78   92009  1  1.80  3     0
## 1927 1927 30       6    41   90095  1  2.40  2     0
## 1933 1933 64      39    73   90073  3  2.40  1   185
## 1937 1937 50      24    82   90291  3  3.00  2     0
## 1938 1938 51      25   181   95051  1  3.30  3   589
## 1941 1941 57      33    55   92630  1  1.80  3     0
## 1943 1943 61      36    29   90210  2  0.50  2     0
## 1945 1945 52      28    39   90095  3  1.90  2    83
## 1947 1947 53      23    58   94720  4  2.00  3     0
## 1948 1948 52      28    62   94111  1  1.80  3   231
## 1949 1949 39      15    62   93955  4  2.40  1    86
## 1951 1951 36      12    38   94109  1  1.50  2     0
## 1952 1952 45      21    84   94550  4  2.00  3     0
## 1953 1953 30       5    78   92037  1  2.60  2     0
```

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## 1954 1954  49        25        22      90058      4  0.20      1        83
## 1955 1955  44        20        81      90245      4  2.00      3       277
## 1956 1956  43        17        32      90401      3  0.50      2         0
## 1957 1957  42        18        89      94539      4  0.80      1       184
## 1959 1959  28         2        42      95762      1  1.50      1         0
## 1960 1960  50        24       130      95833      1  1.00      1         0
## 1961 1961  44        19        30      95616      4  0.00      2         0
## 1962 1962  52        26       114      94304      1  4.90      1         0
## 1964 1964  62        38        50      94539      2  1.10      1         0
## 1965 1965  34        10        34      95060      1  1.50      2       111
## 1966 1966  45        20        94      90095      3  0.50      3         0
## 1970 1970  64        38       115      94105      1  2.00      1         0
## 1973 1973  28         2       114      94606      4  2.10      3         0
## 1974 1974  47        22        11      92192      2  0.00      1        78
## 1975 1975  39        13        63      90095      4  0.20      3       242
## 1978 1978  41        15        54      94303      3  0.50      3         0
## 1979 1979  37        11        32      94612      2  1.40      3         0
## 1981 1981  45        19       141      94706      1  2.40      1         0
## 1982 1982  52        26        84      91768      3  3.00      2         0
## 1985 1985  26         1        55      92630      4  1.70      2       175
## 1986 1986  31         7        31      94920      4  0.40      2        79
## 1988 1988  56        31        52      94118      3  2.00      2         0
## 1989 1989  52        28        18      91301      1  0.30      1       120
## 1993 1993  52        28        38      94302      2  0.80      1         0
## 1995 1995  32         8       183      94080      1  6.00      1         0
## 1997 1997  49        24        38      94305      1  1.40      3         0
## 1999 1999  56        32       103      94111      3  4.00      3         0
## 2000 2000  48        22        80      93940      2  2.40      2         0
## 2002 2002  44        17       128      94928      2  3.25      2         0
## 2003 2003  30         4       142      92126      3  4.20      1       359
## 2004 2004  44        20       124      90277      1  4.70      1         0
## 2007 2007  64        39        75      94720      4  0.10      2         0
## 2008 2008  48        21        78      94010      3  2.00      2         0
## 2009 2009  63        38        31      92037      1  1.10      3       125
## 2010 2010  25         0        99      92735      1  1.90      1       323
## 2012 2012  46        21        39      92507      4  0.00      2         0
## 2018 2018  42        15        14      92064      3  1.00      2         0
## 2020 2020  43        17        44      94611      1  0.20      1         0
## 2021 2021  59        34        33      94303      3  0.20      1         0
## 2023 2023  33         3        71      93561      4  1.80      3       236
## 2025 2025  36        12       113      94305      4  0.20      1         0
## 2029 2029  42        17         9      91710      2  0.00      3         0
## 2030 2030  30         3        61      92152      4  2.00      2         0
## 2031 2031  63        38       111      95814      2  3.90      1       207
## 2032 2032  60        35        80      94608      3  0.50      1         0
## 2033 2033  62        37        32      90266      3  0.20      1         0
## 2037 2037  46        19        19      94305      3  0.67      2         0
## 2038 2038  35         8        52      95616      2  1.00      2         0
## 2039 2039  50        24       150      94551      1  7.30      1         0
## 2040 2040  51        25        32      91605      2  0.40      3         0
## 2041 2041  41        16        91      94720      3  0.50      3         0
## 2043 2043  41        17       121      94102      1  0.30      1         0
## 2044 2044  57        32        25      90049      2  0.20      3         0
## 2045 2045  51        25       102      92677      1  0.30      1         0
```

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## 2046 2046 52       28     44    95051    4  0.90    2     107
## 2047 2047 43       16    161    95134    3  8.00    2       0
## 2049 2049 28        4     43    94803    1  1.80    2       0
## 2053 2053 28        3    120    94080    1  0.80    1     170
## 2054 2054 58       32     85    92110    2  2.00    1     161
## 2055 2055 39       15     89    92126    2  1.90    1       0
## 2056 2056 49       23     25    90274    1  1.40    3       0
## 2057 2057 33        8     20    92691    3  1.30    1      83
## 2059 2059 33        7     18    92093    1  0.60    3       0
## 2060 2060 28        3    173    92121    2  6.70    1     222
## 2062 2062 63       38    159    93950    4  4.90    2     111
## 2063 2063 57       31     55    92521    3  2.50    1     219
## 2065 2065 54       29     65    94545    4  1.80    3       0
## 2066 2066 29        5     83    92354    3  1.50    1       0
## 2071 2071 62       37     95    91107    3  0.50    1       0
## 2072 2072 52       28     83    94705    1  0.00    1       0
## 2073 2073 29        3     39    95831    4  0.20    1     137
## 2077 2077 49       23    119    91030    1  7.30    1     398
## 2079 2079 35       11     21    95814    2  1.00    2       0
## 2080 2080 26        2     40    94132    1  1.00    3       0
## 2081 2081 65       40     69    91706    4  0.10    2       0
## 2083 2083 32        7     55    91301    4  2.00    2       0
## 2085 2085 36        9     44    93907    4  1.00    2     101
## 2086 2086 50       24     45    94105    3  0.60    2     117
## 2089 2089 39        9     29    94701    3  2.00    3     151
## 2091 2091 50       25     79    95023    1  2.90    1     307
## 2093 2093 53       23     19    92673    4  0.40    3      84
## 2095 2095 57       31     64    90024    3  2.50    1     208
## 2096 2096 47       21    174    94025    4  3.20    3       0
## 2097 2097 55       29     54    95051    2  2.30    3      93
## 2099 2099 59       35     94    90089    1  3.80    1     272
## 2100 2100 53       29     10    90095    2  0.40    1       0
## 2101 2101 31        6    145    93940    1  0.80    1      84
## 2102 2102 35        5    203    95032    1 10.00    3       0
## 2106 2106 31        5     49    94114    4  1.80    3       0
## 2108 2108 41       17     85    90291    4  0.20    3     229
## 2109 2109 56       32     85    94132    3  2.67    1       0
## 2112 2112 60       34     40    94105    1  1.60    1       0
## 2114 2114 57       33     25    92064    2  1.00    1       0
## 2115 2115 62       36     69    95039    2  1.70    3       0
## 2118 2118 31        7     15    91380    3  0.90    3       0
## 2119 2119 31        5    125    91320    2  1.30    1       0
## 2120 2120 39       13     50    94923    3  0.50    3       0
## 2124 2124 28        2      9    95014    1  0.10    2       0
## 2125 2125 35        9     44    92054    3  0.90    1      89
## 2127 2127 44       19     83    92121    4  0.40    1     141
## 2128 2128 40       14    179    94720    2  0.00    1       0
## 2129 2129 65       40     40    94104    1  1.10    3       0
## 2130 2130 35       10     58    91754    4  0.70    3     232
## 2131 2131 55       31     74    94607    3  2.67    1       0
## 2133 2133 59       35     11    94949    2  1.00    1       0
## 2134 2134 39       15     41    95035    1  2.00    2     176
## 2141 2141 53       27     89    92130    1  0.80    3       0
## 2142 2142 28        4     38    92109    4  1.60    1       0
```

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## 2143 2143 55        31      62    93943   4  1.50        1          0
## 2145 2145 33         6     168    94720   3  5.67        2          0
## 2146 2146 57        32      40    94720   3  1.70        1          0
## 2148 2148 27         3      20    92007   4  1.00        1          0
## 2150 2150 48        22     150    95039   1  7.30        1        193
## 2153 2153 62        38      30    94304   3  0.10        3        128
## 2155 2155 32         8      45    94558   1  2.40        2          0
## 2156 2156 62        38     154    94305   1  2.90        1          0
## 2157 2157 35        11      93    90747   2  2.70        1          0
## 2158 2158 25         0      71    93727   4  0.20        1         78
## 2159 2159 50        25      83    94720   4  3.10        1          0
## 2160 2160 61        35      99    94085   1  4.80        3        255
## 2165 2165 27         3     104    92007   2  2.50        1        184
## 2166 2166 27         0      38    95929   4  1.00        3        154
## 2168 2168 65        40     162    94596   1  1.30        1          0
## 2169 2169 55        29      64    93063   4  2.60        3          0
## 2170 2170 52        27      30    94305   2  0.70        2          0
## 2172 2172 35        11      42    93108   1  1.50        3          0
## 2173 2173 39        15      79    92028   2  1.80        2        219
## 2174 2174 34        10      34    93407   1  1.70        1        164
## 2177 2177 41        14      51    91320   3  2.33        2          0
## 2178 2178 31         7     108    94507   1  4.00        1          0
## 2179 2179 37        13     158    93943   2  2.30        2          0
## 2180 2180 49        23      68    90024   1  1.50        2          0
## 2182 2182 45        15      32    94143   1  0.75        3        105
## 2183 2183 40        14      22    94566   2  1.40        3          0
## 2185 2185 62        36     183    90095   2  3.40        3          0
## 2187 2187 26         2      92    96001   2  0.20        1          0
## 2189 2189 29         4       9    92037   4  0.50        3         86
## 2190 2190 48        23     128    94309   1  0.60        1          0
## 2193 2193 25         1      13    95814   4  1.00        1         95
## 2197 2197 51        24     189    95211   4  4.75        2          0
## 2198 2198 60        35      34    94102   1  0.30        3          0
## 2199 2199 59        35      58    91355   1  0.00        2          0
## 2201 2201 50        25      29    90095   2  1.30        1          0
## 2203 2203 49        24      43    94709   4  1.90        3          0
## 2204 2204 50        25     130    91320   1  0.60        1        311
## 2205 2205 63        37      20    94704   2  0.40        1         76
## 2206 2206 63        37     101    95819   2  2.80        1          0
## 2207 2207 33         7      48    92831   4  2.20        2        207
## 2208 2208 38        12     180    90245   1  2.80        3        158
## 2209 2209 64        40      92    91109   2  0.00        3        185
## 2210 2210 36        10      33    94080   3  0.90        1          0
## 2211 2211 58        33      51    95006   2  1.90        2          0
## 2215 2215 53        27      89    92735   1  0.80        3        146
## 2216 2216 28         3     193    94501   3  4.00        2          0
## 2217 2217 64        40      89    94707   1  3.80        1          0
## 2218 2218 48        24     162    91355   4  3.30        2        446
## 2220 2220 52        22      58    93101   4  2.00        3        223
## 2221 2221 65        40      80    94105   1  0.80        3          0
## 2222 2222 59        33      73    92056   2  1.70        3          0
## 2224 2224 53        28      74    91711   3  2.00        2          0
## 2225 2225 38        12      29    92084   2  1.40        3          0
## 2226 2226 54        24      25    90505   4  0.40        3        115
```

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## 2227 2227 25        1     98  90717   1  5.40        1         0
## 2228 2228 61       35     59  90840   4  1.70        2         0
## 2229 2229 48       23     43  90254   4  1.90        3         0
## 2233 2233 59       33    140  95035   2  0.50        1       262
## 2235 2235 36       12     35  95812   4  0.40        2         0
## 2238 2238 30        5    134  92647   1  0.00        1         0
## 2239 2239 48       22     35  92709   1  1.40        3         0
## 2240 2240 55       29     42  95833   4  2.50        1         0
## 2242 2242 26        0     14  94301   4  0.40        1        94
## 2243 2243 41       17     45  93437   1  1.80        1       172
## 2245 2245 57       31     53  92806   1  0.80        2       120
## 2247 2247 35       11    190  92093   3  3.10        2       266
## 2249 2249 63       37      8  94618   1  0.80        2        97
## 2250 2250 41       14     38  95814   3  1.00        2       150
## 2252 2252 31        5     54  92173   4  2.20        2         0
## 2254 2254 59       35     25  95827   2  0.30        1        75
## 2256 2256 33        9     79  94612   1  0.10        1         0
## 2261 2261 39       14     15  93561   2  0.30        2        92
## 2262 2262 30        3    150  94305   4  5.00        2         0
## 2264 2264 47       21     28  92868   3  1.50        1         0
## 2267 2267 38       13    143  94550   1  4.10        1         0
## 2269 2269 27        3    105  94304   1  3.00        2         0
## 2271 2271 26        2     51  92103   4  2.60        1         0
## 2272 2272 60       34    101  94928   3  4.40        1         0
## 2273 2273 27        3     90  91365   3  0.80        1         0
## 2274 2274 27        1     83  91775   4  2.10        3         0
## 2276 2276 40       16    115  94305   1  3.40        1         0
## 2277 2277 29        3    172  92093   4  4.40        1         0
## 2280 2280 47       23     34  91711   4  0.60        1         0
## 2281 2281 33        7     30  94920   2  2.00        3       132
## 2283 2283 38       14     90  94110   2  2.70        1         0
## 2284 2284 54       28     79  92677   4  2.60        3         0
## 2285 2285 47       23     22  94901   4  0.60        1         0
## 2286 2286 48       22    114  92007   1  2.40        3         0
## 2287 2287 62       36     42  94122   1  0.50        3       128
## 2288 2288 30        6     29  92121   1  0.20        3        90
## 2289 2289 35       11     72  94706   3  2.60        2         0
## 2290 2290 59       35     68  93117   1  1.80        3        95
## 2291 2291 38       13     78  91942   4  0.70        3         0
## 2292 2292 47       23     90  95449   1  2.70        1       323
## 2295 2295 39       15    129  90035   2  1.90        1         0
## 2297 2297 27        3     82  94305   2  0.20        1         0
## 2300 2300 62       37     15  94583   3  0.10        3        91
## 2302 2302 38       13     84  93403   4  0.70        3         0
## 2306 2306 32        7    185  92009   2  6.70        1         0
## 2307 2307 37       13     82  92373   2  2.20        1         0
## 2308 2308 56       31     60  92009   3  1.70        1         0
## 2309 2309 39       13     58  94590   2  2.40        2         0
## 2312 2312 62       37    115  90245   4  3.40        2         0
## 2317 2317 54       30    112  94920   2  6.80        1         0
## 2319 2319 60       34     23  94803   1  0.80        2       112
## 2322 2322 41       15     39  91380   3  0.50        3         0
## 2323 2323 62       37    129  94143   1  1.30        1         0
## 2324 2324 31        7    113  94542   2  2.00        2       315
```

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## 2325 2325 41     11    35   93107    1  0.75      3     114
## 2326 2326 55     30    85   94591    1  0.10      3       0
## 2327 2327 45     19    73   94086    4  2.90      1       0
## 2330 2330 30      4    39   94022    1  1.50      1       0
## 2332 2332 61     37    68   90245    4  2.30      3       0
## 2333 2333 40     16    35   94022    1  1.40      3       0
## 2335 2335 45     21    69   90025    4  1.90      1       0
## 2337 2337 34      8    99   93460    2  4.50      3     217
## 2338 2338 43     16   201   95054    1 10.00      2       0
## 2339 2339 42     18   130   94611    2  7.50      1       0
## 2341 2341 33      9    44   94112    1  1.20      1       0
## 2343 2343 62     37    92   94608    3  0.50      1     310
## 2344 2344 58     34    55   90032    1  0.80      1     168
## 2346 2346 65     40    89   90291    1  4.10      1     299
## 2347 2347 52     26    59   92660    2  1.50      2     239
## 2348 2348 64     39     8   92104    3  0.10      3      87
## 2349 2349 51     25    85   94015    4  4.90      1       0
## 2352 2352 55     31    74   94611    2  3.20      3       0
## 2353 2353 46     19    59   93555    3  2.67      2       0
## 2354 2354 61     36    12   93023    4  0.60      2       0
## 2355 2355 35      9     8   94043    1  0.40      2       0
## 2356 2356 56     31    74   94920    3  1.60      3       0
## 2358 2358 44     19    34   95005    4  0.00      2       0
## 2360 2360 36     12   123   95060    2  5.60      2       0
## 2361 2361 27      1    85   93302    2  1.60      3       0
## 2362 2362 36     12   109   94928    3  0.50      3       0
## 2363 2363 40     15    31   94720    1  0.60      3       0
## 2366 2366 43     18    22   91311    2  0.30      2       0
## 2369 2369 48     22    78   94588    3  2.10      1       0
## 2370 2370 50     24    45   94005    4  0.10      1      93
## 2371 2371 33      7    51   94040    4  2.10      3       0
## 2372 2372 32      6   111   95014    2  1.50      3       0
## 2373 2373 34     10    45   93943    3  2.80      1     153
## 2374 2374 33      9   184   94304    2  4.80      2       0
## 2375 2375 32      5    41   92008    2  1.00      2     112
## 2376 2376 55     30    69   91007    4  1.30      3       0
## 2378 2378 47     23   160   92037    2  6.67      1       0
## 2379 2379 30      5    61   95605    1  0.80      2     251
## 2380 2380 42     18   110   94720    2  6.10      1     182
## 2381 2381 40     16    50   92606    2  0.60      3       0
## 2385 2385 62     37    53   92028    2  2.80      1       0
## 2389 2389 64     39    23   91768    3  0.50      1       0
## 2391 2391 33      9    41   95814    3  2.00      1     108
## 2394 2394 53     28    14   94005    4  0.80      1       0
## 2395 2395 42     18   145   94065    2  8.00      1     505
## 2396 2396 44     17    25   95064    3  1.00      2       0
## 2398 2398 47     22    93   90266    1  0.20      2     309
## 2399 2399 53     29    90   95053    2  0.30      1     217
## 2402 2402 42     17    63   95814    2  2.20      3       0
## 2403 2403 48     21    23   94720    3  0.67      2      95
## 2406 2406 57     32    13   94588    4  0.90      2      78
## 2407 2407 31      7    10   92354    1  0.50      3      81
## 2408 2408 39     15   100   94720    1  0.80      2       0
## 2409 2409 48     22    85   94105    3  1.10      1     203
```

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## 2410 2410  55      31     73   95207   3   2.67     1    219
## 2411 2411  29       4    130   92630   2   6.70     1      0
## 2413 2413  61      36     59   93118   4   1.70     1    148
## 2414 2414  60      34     31   91007   2   1.00     3      0
## 2416 2416  45      21     11   94143   4   0.20     1    106
## 2417 2417  60      35     32   93611   1   0.30     3     80
## 2421 2421  63      39     40   91304   1   0.80     1    118
## 2422 2422  43      19     40   94949   3   0.60     2      0
## 2423 2423  58      32    163   95014   2   0.50     1    400
## 2425 2425  38      12     89   94583   4   1.40     2      0
## 2426 2426  54      30     78   92507   4   1.60     2      0
## 2427 2427  61      36     55   94132   3   0.90     3    197
## 2428 2428  29       5     34   92675   4   0.40     2      0
## 2431 2431  23      -1     73   92120   4   2.60     1      0
## 2433 2433  54      30     45   92182   4   0.90     2      0
## 2436 2436  34       9    102   92115   4   2.20     2      0
## 2439 2439  62      37     29   91030   1   0.30     3      0
## 2440 2440  51      25     30   91116   3   0.60     2    144
## 2442 2442  64      38     38   94305   2   0.30     1    186
## 2443 2443  39      15     41   90028   2   1.70     1      0
## 2444 2444  28       3    161   92646   4   1.70     3    422
## 2445 2445  60      35     38   94701   3   0.50     2      0
## 2447 2447  25       1     70   93010   4   2.60     1    218
## 2449 2449  51      26     42   92103   2   0.60     3      0
## 2450 2450  31       7     64   94720   1   1.20     1      0
## 2451 2451  32       7     28   90034   4   1.10     3      0
## 2452 2452  51      25    119   93940   1   4.90     1    208
## 2453 2453  25       1     28   94596   1   1.00     3      0
## 2458 2458  42      17     19   92115   2   0.00     3     85
## 2459 2459  46      20     72   93108   2   0.80     3      0
## 2461 2461  31       5     32   92123   2   0.30     2    130
## 2462 2462  30       5     69   94302   1   0.80     2      0
## 2463 2463  52      28     23   95828   3   0.40     1      0
## 2464 2464  35       9     44   92009   4   0.20     1      0
## 2465 2465  60      36     32   92407   3   0.40     2    165
## 2466 2466  58      34     25   90059   2   0.30     1    123
## 2467 2467  24      -2     80   94105   2   1.60     3      0
## 2468 2468  40      16     83   92350   1   0.80     2    230
## 2469 2469  49      23    133   94304   1   7.30     1      0
## 2470 2470  43      18     89   92780   1   0.10     2    307
## 2472 2472  36      11     44   91040   2   1.10     2     85
## 2473 2473  62      36    119   94720   2   2.00     1      0
## 2476 2476  52      26     79   95817   3   0.80     1    183
## 2477 2477  54      28     30   95616   4   0.70     2      0
## 2480 2480  55      30     82   94720   4   3.80     2      0
## 2482 2482  55      30     64   94306   2   1.90     2      0
## 2483 2483  28       4    129   92115   1   1.50     1      0
## 2484 2484  44      18     68   93943   4   2.90     1      0
## 2486 2486  61      36     48   94025   3   1.50     1      0
## 2487 2487  61      36    130   92717   1   1.30     1    257
## 2489 2489  38      14    105   94708   2   1.90     1      0
## 2492 2492  38      14     80   92868   2   2.70     1      0
## 2493 2493  28       3    134   96091   2   3.10     1      0
## 2494 2494  34       9     49   94025   1   2.50     3      0
```

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## 2495 2495  35      9    63   92697    2  1.80      1        0
## 2496 2496  46     22    70   94701    4  1.90      1      212
## 2499 2499  38     14   111   92028    2  6.10      1      326
## 2501 2501  28      2   121   92096    2  2.00      1      341
## 2502 2502  44     18    90   95616    4  2.60      3        0
## 2503 2503  58     31   178   92009    2  6.00      2        0
## 2504 2504  38     14    20   94024    4  0.40      2       79
## 2506 2506  33      7    43   96064    4  0.80      1        0
## 2507 2507  66     42    39   94590    1  1.90      2        0
## 2508 2508  59     34    60   90048    4  2.10      1      234
## 2509 2509  40     15    63   93407    3  3.00      1        0
## 2511 2511  62     38    52   95616    4  1.30      2        0
## 2512 2512  51     27    92   92121    4  3.00      1        0
## 2515 2515  41     16    25   92182    2  0.10      2       91
## 2516 2516  31      5    34   94558    1  1.90      3      156
## 2517 2517  28      3    74   94720    3  2.60      3        0
## 2519 2519  61     37    50   95125    4  1.30      2        0
## 2520 2520  60     36    10   92121    2  1.00      1        0
## 2521 2521  56     29    45   90095    4  2.50      2      113
## 2522 2522  49     23    29   94551    4  1.80      1        0
## 2523 2523  63     37   145   94025    2  6.90      1        0
## 2525 2525  49     25    24   95678    3  0.40      1        0
## 2526 2526  32      8    60   95816    1  1.20      1        0
## 2528 2528  27      1    43   95120    3  1.10      2        0
## 2529 2529  57     31    79   91335    3  4.40      1        0
## 2530 2530  29      5    44   95819    3  0.10      2        0
## 2531 2531  56     30    31   90024    4  1.50      3        0
## 2532 2532  59     35    14   94305    2  1.00      1      107
## 2533 2533  53     28    19   94608    4  0.80      1      106
## 2534 2534  54     29   111   93023    1  1.10      2        0
## 2535 2535  56     30    90   94402    1  1.90      2        0
## 2537 2537  51     25   104   94949    1  4.20      2        0
## 2538 2538  53     27    75   94303    1  1.90      2        0
## 2539 2539  37     12   175   92037    2  7.80      1      297
## 2542 2542  34      8   171   90212    2  2.20      2      569
## 2543 2543  54     30    79   92630    4  1.60      2        0
## 2544 2544  64     39    24   94117    4  0.60      2        0
## 2550 2550  41     15    63   95060    1  0.70      3       79
## 2553 2553  39     15    65   95822    1  1.50      3        0
## 2554 2554  39     15    91   93907    2  1.70      2      151
## 2555 2555  63     39    53   93940    1  0.80      1        0
## 2556 2556  58     32   110   94143    3  1.70      2        0
## 2558 2558  36     11    23   94553    4  0.20      3        0
## 2562 2562  31      5   180   94720    1  2.90      3      144
## 2563 2563  45     21    39   92521    2  2.10      3      184
## 2565 2565  43     16    25   94126    3  1.00      2        0
## 2566 2566  40     15    10   94708    2  0.00      3      102
## 2567 2567  30      5    42   94305    1  1.00      1      184
## 2569 2569  46     21    34   92373    2  1.30      1        0
## 2570 2570  35     10   139   90024    1  4.60      1        0
## 2571 2571  30      4   154   95621    2  4.50      1      207
## 2572 2572  34      8    40   91768    2  2.00      3       89
## 2574 2574  58     34    80   90095    2  1.60      1        0
## 2575 2575  45     18    10   92037    3  0.67      2      100
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## 2576 2576 42        16     41      90401      3  0.50      3       0
## 2578 2578 55        29     78      95521      1  0.80      3     190
## 2579 2579 45        21    164      90638      1  5.00      1       0
## 2580 2580 52        27     23      92780      1  0.40      3       0
## 2582 2582 60        34     25      94132      4  0.70      3       0
## 2583 2583 33         9     42      95010      1  2.10      3       0
## 2588 2588 60        33     55      94998      4  2.50      2       0
## 2589 2589 61        36     29      93065      1  1.30      1       0
## 2590 2590 64        40    123      90840      1  3.80      1       0
## 2591 2591 46        20    152      95814      1  7.40      3     374
## 2592 2592 31         7      8      95131      4  0.70      2       0
## 2593 2593 57        32     69      94710      4  0.70      1     245
## 2595 2595 48        23     79      94024      1  0.20      2       0
## 2599 2599 46        20      9      94005      1  0.20      1       0
## 2601 2601 42        18     51      92868      3  2.10      3       0
## 2602 2602 50        24     32      90277      1  1.40      3     167
## 2603 2603 52        26    161      93108      4  4.30      1       0
## 2605 2605 37        10     35      92521      4  1.00      2       0
## 2607 2607 46        22     73      92648      2  1.70      1     216
## 2608 2608 57        33     49      94305      4  1.50      1     214
## 2610 2610 42        18    120      93407      2  7.50      1       0
## 2611 2611 40        16     60      94501      2  3.20      1       0
## 2612 2612 33         8     78      95051      3  0.60      2       0
## 2613 2613 50        26     40      95138      4  1.10      2     131
## 2617 2617 56        31     49      92182      2  1.60      3     103
## 2619 2619 23        -3     55      92704      3  2.40      2     145
## 2620 2620 33         8     62      92093      3  2.30      1      98
## 2621 2621 48        22    152      95616      1  0.00      1       0
## 2624 2624 42        17    111      94304      3  3.00      1       0
## 2625 2625 47        21     82      94109      3  2.10      1       0
## 2626 2626 61        36    108      93943      4  3.40      2       0
## 2628 2628 56        30     61      93106      3  2.50      1     193
## 2630 2630 44        18     18      93943      2  0.10      3       0
## 2632 2632 47        20     62      92521      1  2.67      2       0
## 2633 2633 50        24     81      94720      1  4.90      1     248
## 2635 2635 34         9     75      94303      1  2.80      1     194
## 2636 2636 40        14     33      95616      2  0.80      3      89
## 2640 2640 52        26     59      95762      3  3.00      2       0
## 2642 2642 29         5    133      90095      1  5.40      1     212
## 2643 2643 54        29     81      92096      2  0.00      3       0
## 2647 2647 45        20    191      92007      3  2.60      3     123
## 2648 2648 61        37    155      91605      1  2.90      1       0
## 2649 2649 26         0    155      93105      2  7.20      1       0
## 2651 2651 64        40     52      95060      2  1.10      1     226
## 2652 2652 43        17     51      94025      1  0.70      3       0
## 2653 2653 24         0     44      90089      4  1.60      1     180
## 2657 2657 40        15    144      91040      1  4.10      1       0
## 2658 2658 31         6     72      94583      1  2.60      2       0
## 2659 2659 30         4     44      94304      1  1.50      1     109
## 2660 2660 60        35     43      91763      3  0.90      3     175
## 2662 2662 66        41    145      90009      1  2.50      1       0
## 2663 2663 65        41    158      92346      2  2.10      1       0
## 2665 2665 54        29    154      95014      1  2.40      2     352
## 2667 2667 32         7    100      92126      3  0.60      2       0
```

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## 2668 2668  63       39    58    94112   1  0.00   2      0
## 2669 2669  60       35   113    94507   1  0.90   1    406
## 2670 2670  43       18    10    91902   2  0.10   2      0
## 2671 2671  59       33   142    94080   2  2.70   1      0
## 2675 2675  30        6   101    90245   2  0.60   1      0
## 2676 2676  31        1    70    92115   2  1.75   3      0
## 2677 2677  44       20   122    91765   1  0.30   1      0
## 2679 2679  63       38   148    93023   2  4.30   3      0
## 2680 2680  57       32    43    92704   2  2.10   3    166
## 2684 2684  51       25    19    95812   1  1.40   3     98
## 2685 2685  30        5    98    92028   4  1.80   3    129
## 2686 2686  28        2   101    90280   4  2.10   3      0
## 2687 2687  50       24    81    95053   2  0.40   3      0
## 2688 2688  52       27   135    93561   1  0.60   1    452
## 2689 2689  56       30    34    94542   2  0.70   2      0
## 2690 2690  40       16   104    91730   1  3.40   1    249
## 2691 2691  64       38    29    90245   3  0.70   2      0
## 2692 2692  61       36   119    95064   2  5.40   2      0
## 2694 2694  55       29    62    90089   1  0.20   1      0
## 2696 2696  40       15     8    94960   2  0.10   2      0
## 2697 2697  63       37    78    91711   4  1.70   3      0
## 2699 2699  38       14   122    95819   2  8.00   1      0
## 2700 2700  37       11    22    90035   3  0.10   2    114
## 2702 2702  50       26    55    94305   1  1.60   2      0
## 2706 2706  53       26    22    92831   1  0.50   2    100
## 2707 2707  43       17   158    90740   1  2.40   1      0
## 2709 2709  49       24    75    95670   1  2.80   2    160
## 2710 2710  28        4    69    94305   3  0.70   2    170
## 2714 2714  44       18   129    92028   1  5.70   1      0
## 2715 2715  46       20   158    92870   3  5.40   1    432
## 2721 2721  48       23    32    93302   1  0.10   1      0
## 2722 2722  58       33   173    92121   2  7.20   3      0
## 2724 2724  54       29    72    94558   2  3.70   1    144
## 2730 2730  58       34    63    90007   4  1.50   1      0
## 2732 2732  29        5    28    96651   1  0.20   3      0
## 2734 2734  55       29    72    93107   3  0.30   2    147
## 2735 2735  56       31    64    94126   4  0.90   1      0
## 2737 2737  53       29    12    95621   1  0.30   1      0
## 2740 2740  43       18    42    91330   1  0.30   3      0
## 2743 2743  39       14    89    95762   2  0.40   1      0
## 2744 2744  32        8    22    94583   4  0.70   2      0
## 2747 2747  54       29    49    92703   2  2.10   3     95
## 2748 2748  38       12    30    91765   2  1.40   3      0
## 2749 2749  32        7    82    94305   1  2.60   2    240
## 2753 2753  51       25    34    95819   3  0.90   3    111
## 2754 2754  54       27   195    93117   2  4.75   2    477
## 2756 2756  37       11    22    93711   3  0.10   2      0
## 2758 2758  63       38    50    93943   2  2.80   1    205
## 2759 2759  62       36    35    94501   2  0.70   3      0
## 2760 2760  59       33    64    95617   3  0.30   2      0
## 2762 2762  35        8    44    95045   4  1.00   2    192
## 2763 2763  56       31    65    93403   2  3.70   1      0
## 2764 2764  55       31    13    93943   4  0.70   1      0
## 2765 2765  31        5    84    91320   1  2.90   3    105
```

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## 2766 2766 54     29   28  92093  4  0.20  2   101
## 2768 2768 48     24   59  90401  1  0.00  1   144
## 2769 2769 48     22  163  95819  1  2.40  1   396
## 2774 2774 63     37  185  94309  2  7.90  2   358
## 2778 2778 59     33   91  94122  2  0.70  2     0
## 2780 2780 59     35  168  95521  4  4.10  2     0
## 2781 2781 39     13   69  90630  3  0.90  2     0
## 2782 2782 47     21   22  92037  1  0.20  1   104
## 2783 2783 47     22   53  92691  1  0.30  1   213
## 2784 2784 53     26   25  92123  2  1.00  2     0
## 2785 2785 36      9  115  91765  4  2.20  2     0
## 2786 2786 34      9   31  92521  4  1.10  3    85
## 2787 2787 36     10   83  94705  1  2.80  3     0
## 2788 2788 60     34  152  92807  2  6.90  1     0
## 2789 2789 45     20   30  96003  1  0.10  1     0
## 2791 2791 47     22   44  95821  1  1.40  3     0
## 2793 2793 54     30   44  95616  3  1.50  1   117
## 2794 2794 57     33  122  94301  2  6.00  1   153
## 2796 2796 51     25   91  92407  1  0.80  3     0
## 2797 2797 57     32   30  94024  2  2.00  2     0
## 2799 2799 58     33   28  94720  1  0.30  3     0
## 2803 2803 52     22  154  90650  1  5.00  3     0
## 2805 2805 56     32   33  95014  3  1.50  1     0
## 2809 2809 53     27   35  94583  3  0.90  3   136
## 2810 2810 42     16  185  94705  3  2.20  2     0
## 2811 2811 58     34   45  93943  4  1.30  2   201
## 2813 2813 53     28  183  96008  3  8.20  3   467
## 2815 2815 54     28   53  94002  1  2.20  3     0
## 2816 2816 26      1   48  94019  3  2.60  3   169
## 2818 2818 31      7  105  94025  1  4.00  1   331
## 2819 2819 35      9   40  93943  3  0.90  1     0
## 2822 2822 57     32   31  94143  3  0.10  2     0
## 2825 2825 62     36   44  92867  2  0.30  1     0
## 2826 2826 35     10   48  95060  1  2.50  3   164
## 2828 2828 37     11   84  90266  4  2.20  2     0
## 2831 2831 59     35   39  95616  4  1.30  1     0
## 2833 2833 45     21  133  92056  4  5.70  3     0
## 2834 2834 46     22  152  90009  2  1.40  1     0
## 2835 2835 40     16   12  90033  1  1.00  1    91
## 2836 2836 42     16   32  94112  3  1.50  1   149
## 2838 2838 39     14   54  92037  2  1.10  2   159
## 2839 2839 30      6  181  94542  3  4.10  2     0
## 2840 2840 58     33   75  90034  2  0.00  3     0
## 2841 2841 41     15   95  91101  3  0.10  1   240
## 2842 2842 37     11  190  94305  4  7.30  2   565
## 2844 2844 27      3   20  95616  4  1.00  1   134
## 2846 2846 62     36   85  90019  2  1.70  3    98
## 2848 2848 44     18   21  90840  1  0.20  1     0
## 2850 2850 45     21  158  94085  2  6.67  1   132
## 2851 2851 58     34  125  94720  1  4.30  1   219
## 2852 2852 61     36   81  95449  3  1.80  2     0
## 2853 2853 54     29  183  93105  1  8.10  1     0
## 2857 2857 36     10  172  94704  4  1.00  2   295
## 2858 2858 34      8  184  93106  3  7.50  1     0
```

```
## 2859 2859 36    11  158  95054   2  7.80   1    114
## 2860 2860 35    11  188  94596   1  0.90   3    282
## 2862 2862 42    18   60  92677   4  0.20   3    151
## 2863 2863 65    39  113  92096   4  2.40   3      0
## 2867 2867 46    22  141  90089   2  3.30   1      0
## 2868 2868 59    33  110  90007   3  4.40   1    264
## 2869 2869 52    26   31  94923   4  1.80   1      0
## 2871 2871 43    17   91  95134   1  5.20   1      0
## 2873 2873 50    26   23  92630   1  0.30   1      0
## 2875 2875 49    25  114  91380   1  2.50   3      0
## 2876 2876 58    33   18  94402   3  0.10   2      0
## 2881 2881 64    40   40  96064   2  1.10   1      0
## 2882 2882 49    25   55  92103   4  0.10   3      0
## 2884 2884 40    14   92  90024   4  1.40   2      0
## 2885 2885 28     2   48  93943   4  2.10   3      0
## 2890 2890 53    29   33  94591   3  1.90   2    144
## 2891 2891 48    24   18  94304   4  0.20   1      0
## 2893 2893 58    32   43  92093   1  2.80   2      0
## 2896 2896 60    36   39  94501   4  1.30   2    140
## 2898 2898 28     2   34  92161   4  1.30   3      0
## 2900 2900 42    18  114  94305   1  0.30   1      0
## 2901 2901 52    28   55  91320   2  3.20   3    151
## 2904 2904 58    34   41  95833   3  1.50   1      0
## 2906 2906 64    40    8  94110   2  0.30   3      0
## 2908 2908 45    20   40  91763   2  1.30   1      0
## 2909 2909 57    32   22  95616   3  0.10   2      0
## 2910 2910 35     8   44  94590   2  1.67   2      0
## 2911 2911 46    22  102  95039   3  4.50   3      0
## 2912 2912 30     4   54  93033   4  1.80   3    235
## 2913 2913 44    20  130  90291   4  3.20   2      0
## 2915 2915 42    18   42  95929   2  1.70   1      0
## 2917 2917 46    20   40  92037   1  1.20   2      0
## 2920 2920 35    10   64  94542   3  2.30   1      0
## 2924 2924 51    27   12  91007   2  0.20   1      0
## 2925 2925 51    26   98  90024   1  1.30   3      0
## 2927 2927 53    28   44  92152   2  0.60   3      0
## 2928 2928 43    17  124  94117   1  5.20   1      0
## 2929 2929 31     6  175  95005   2  6.70   1      0
## 2930 2930 32     6   22  94061   4  0.30   1      0
## 2931 2931 41    17   78  95929   4  2.67   1     99
## 2932 2932 31     4   54  91741   2  1.00   2    109
## 2933 2933 41    16  154  92407   1  7.00   1      0
## 2934 2934 47    22   42  95820   3  2.70   2      0
## 2936 2936 53    23   80  93023   1  3.00   3      0
## 2938 2938 62    36   89  94022   2  2.00   1      0
## 2939 2939 33     9   61  93943   3  2.60   2      0
## 2941 2941 27     3   43  90245   3  0.10   2    163
## 2942 2942 60    35  122  92606   1  2.60   1    352
## 2943 2943 29     5  160  90405   1  4.30   1    385
## 2945 2945 55    30   79  92182   2  0.00   3      0
## 2947 2947 33     9  145  94110   1  4.30   1    437
## 2949 2949 44    18   14  94720   2  0.10   3     98
## 2950 2950 37    11   19  95054   3  0.20   2      0
## 2951 2951 42    16   55  95820   1  0.70   3    135
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## 2953 2953 33      8  182  94065  1  8.60  1    0
## 2957 2957 62     38  195  91125  4  5.20  3  522
## 2959 2959 66     41   65  92612  3  2.40  1    0
## 2960 2960 38     12   43  94305  4  0.20  1    0
## 2961 2961 55     29   38  90035  4  1.50  3    0
## 2962 2962 60     36   50  95741  1  1.80  3    0
## 2965 2965 35     10   73  93943  3  2.30  1    0
## 2966 2966 53     27   31  91605  2  0.40  3  104
## 2967 2967 32      7   84  91320  3  0.60  2    0
## 2968 2968 38     14   95  94109  2  1.90  1    0
## 2969 2969 44     18  162  90840  4  1.30  1  301
## 2970 2970 43     18   60  95039  2  2.20  3  115
## 2972 2972 52     25   43  91380  3  1.00  2  165
## 2973 2973 31      7   38  92182  1  1.80  2  182
## 2974 2974 47     22   82  92084  1  2.90  1  276
## 2975 2975 42     18   52  95008  4  1.90  1    0
## 2976 2976 57     33   43  91016  3  1.50  1  168
## 2977 2977 33      8   82  95747  1  2.60  2    0
## 2978 2978 35     10  161  94109  1  4.10  1    0
## 2979 2979 56     30   24  94550  2  0.70  2    0
## 2980 2980 57     32  102  90210  1  2.60  1    0
## 2981 2981 25     -1   53  94305  3  2.40  2    0
## 2982 2982 53     28   85  92037  1  1.20  1    0
## 2984 2984 56     32   90  95054  2  0.30  1    0
## 2985 2985 54     28   94  92709  2  1.10  1  188
## 2986 2986 48     23   63  94606  4  3.60  3    0
## 2988 2988 33      7   39  92037  2  2.00  3    0
## 2991 2991 49     25  163  94608  2  0.40  1    0
## 3000 3000 60     34   44  94143  1  0.20  1    0
## 3001 3001 40     14  164  94720  1  4.30  2    0
## 3002 3002 33      7   81  92647  3  1.60  1    0
## 3003 3003 37     13   95  90095  2  1.70  2   83
## 3005 3005 33      7   88  94583  3  1.60  1    0
## 3006 3006 62     36  148  94111  3  7.00  2    0
## 3008 3008 63     37   11  91711  1  0.80  2  102
## 3009 3009 55     25   92  94550  1  3.00  3  158
## 3010 3010 33      9   74  92120  3  2.60  2    0
## 3013 3013 29      3  172  92373  2  4.50  1  415
## 3014 3014 45     21  183  90029  2  1.40  1    0
## 3017 3017 48     23   78  91423  4  3.60  3    0
## 3018 3018 57     32   68  90041  2  3.70  1  184
## 3021 3021 44     20  151  95193  1  3.50  1  392
## 3024 3024 63     37  105  92694  4  1.70  3  244
## 3025 3025 61     35   78  90840  2  2.00  1    0
## 3026 3026 58     32  128  94609  2  2.70  1  344
## 3027 3027 44     20   81  90254  4  0.80  1  228
## 3028 3028 53     29   50  93305  4  0.10  3  152
## 3032 3032 51     25   29  90212  1  1.40  3  102
## 3033 3033 47     22   19  94590  1  0.40  3    0
## 3038 3038 27      2  158  95060  3  0.40  2    0
## 3039 3039 34      8   39  92124  4  0.20  1  115
## 3040 3040 34      9  141  95616  2  4.90  3    0
## 3041 3041 28      2   33  95814  3  1.00  1  167
## 3042 3042 29      5   92  95006  2  0.60  1    0
```

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## 3046 3046 58       32   48   91768   1  2.80   2     0
## 3047 3047 37       12   63   95630   3  2.30   1     0
## 3049 3049 63       39   49   90275   1  0.80   1   103
## 3050 3050 60       35  125   94720   2  3.90   1     0
## 3054 3054 28        4  114   92521   2  0.20   1     0
## 3057 3057 54       29   62   94301   4  3.80   2   149
## 3058 3058 42       18   45   95616   1  0.70   1     0
## 3059 3059 30        4  113   90064   2  0.20   1     0
## 3062 3062 38       13   81   90095   1  4.00   3   206
## 3063 3063 39       14   75   92521   1  0.10   2   297
## 3064 3064 54       29   21   95841   4  0.10   3     0
## 3067 3067 63       33   40   91320   4  1.67   3     0
## 3068 3068 31        5  101   94501   1  2.90   3   170
## 3069 3069 56       26   90   92120   2  4.50   3     0
## 3070 3070 47       20   68   91320   1  2.67   2     0
## 3073 3073 54       30   51   92821   2  3.20   3     0
## 3076 3076 26        0   85   95616   2  1.60   3     0
## 3077 3077 29       -1   62   92672   2  1.75   3     0
## 3079 3079 38       13   63   92325   3  0.50   3   190
## 3080 3080 55       31   23   95616   2  0.30   1     0
## 3081 3081 48       22   40   94063   3  2.20   2    87
## 3083 3083 39       13   40   92122   3  0.90   3   129
## 3084 3084 40       16   78   90720   4  2.40   1     0
## 3086 3086 55       29   71   91311   3  0.30   2     0
## 3090 3090 31        5   23   94110   3  1.00   1    95
## 3091 3091 61       31   19   91109   1  1.50   3     0
## 3093 3093 43       18  113   90036   2  0.40   1   325
## 3094 3094 29        5   34   90717   4  0.40   2     0
## 3099 3099 41       16   21   92024   2  0.10   2     0
## 3100 3100 65       40  115   92647   1  2.50   1   174
## 3101 3101 52       27   81   90024   4  3.80   2     0
## 3102 3102 55       31   91   93555   2  2.80   1     0
## 3103 3103 49       25   30   90095   4  0.90   2     0
## 3104 3104 52       22   55   92129   3  1.40   3     0
## 3105 3105 56       31   48   91775   2  2.10   3     0
## 3108 3108 41       17   55   92374   2  1.70   1     0
## 3110 3110 60       34   40   93940   3  2.20   3     0
## 3111 3111 44       20   30   95020   4  0.30   1     0
## 3112 3112 34        9   78   90095   3  0.60   2     0
## 3114 3114 31        5   50   91330   4  2.10   3   209
## 3115 3115 29        4   55   90024   4  2.00   2     0
## 3116 3116 31        5  111   94305   2  0.20   1     0
## 3118 3118 42       16   65   92614   3  0.50   3   256
## 3119 3119 64       39  114   90095   1  0.80   3     0
## 3120 3120 61       36   54   91320   3  0.90   3   179
## 3122 3122 28        2   13   91791   4  0.40   1     0
## 3126 3126 46       20   18   92521   1  0.20   1     0
## 3127 3127 57       32   74   92780   4  0.70   1     0
## 3128 3128 40       14   61   94539   4  0.20   3     0
## 3130 3130 39       14   10   92705   2  0.30   2     0
## 3131 3131 23       -2   82   92152   2  1.80   2     0
## 3132 3132 47       22   61   94025   3  2.70   2   168
## 3135 3135 54       30   22   95060   2  0.40   1    89
## 3136 3136 25        0   91   95039   2  1.80   2   321
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## 3137 3137 60        34      65      95354   3   2.20      3        94
## 3140 3140 52        26      95      92130   1   0.30      1         0
## 3142 3142 57        31     131      90405   3   0.60      1         0
## 3143 3143 34         8     175      95051   4   1.10      3         0
## 3144 3144 50        24      38      91105   4   0.10      1         0
## 3145 3145 43        18     104      91711   3   1.00      1         0
## 3146 3146 34        10     114      94305   3   3.30      3         0
## 3147 3147 26         1      38      91910   4   1.70      2         0
## 3149 3149 48        22      19      95616   2   0.10      3       106
## 3150 3150 49        25      25      95192   4   1.00      1         0
## 3151 3151 47        22     124      90027   4   5.00      3         0
## 3152 3152 43        19      20      94110   3   0.50      1         0
## 3153 3153 40        15      83      90275   1   1.00      3         0
## 3154 3154 31         5      18      94111   4   0.30      2         0
## 3156 3156 55        29      62      92626   3   0.30      2         0
## 3157 3157 54        30      24      92647   1   0.10      2         0
## 3159 3159 54        28      64      90095   2   0.80      3         0
## 3161 3161 41        15     158      94304   1   4.70      2         0
## 3162 3162 28         4      88      94024   1   5.40      1         0
## 3163 3163 33         7      28      94109   4   0.80      1         0
## 3165 3165 28         4      82      95136   4   0.00      1         0
## 3166 3166 63        37     140      91711   2   6.90      1        97
## 3168 3168 62        38      58      94720   4   1.20      2       228
## 3169 3169 51        25     180      94701   1   1.70      1         0
## 3170 3170 52        28      55      94608   1   1.60      2       227
## 3171 3171 43        16      65      94110   3   2.67      2       100
## 3172 3172 39        12      62      91910   3   2.33      2         0
## 3173 3173 35         9      23      95670   4   0.30      1         0
## 3174 3174 34        10      35      94309   1   1.70      1         0
## 3176 3176 43        18      74      92009   4   0.40      1         0
## 3177 3177 48        24      14      91330   3   0.40      1         0
## 3178 3178 30         4      83      91007   2   1.50      3       199
## 3179 3179 46        21      71      95814   4   1.90      3         0
## 3182 3182 39        15     109      95827   1   1.70      1         0
## 3183 3183 58        33      60      94304   2   1.90      2        94
## 3184 3184 44        17      12      94542   3   0.67      2         0
## 3185 3185 39        15     141      92354   2   8.00      1         0
## 3186 3186 35        10     128      92843   1   3.80      1         0
## 3187 3187 41        16      98      95192   3   1.00      1       296
## 3188 3188 43        18      41      94035   1   0.50      3         0
## 3189 3189 55        25      90      90717   2   4.50      3         0
## 3190 3190 32         6      31      92675   1   0.30      1         0
## 3191 3191 56        26      74      91335   1   3.00      3         0
## 3192 3192 30         5      83      93101   4   1.80      3         0
## 3193 3193 65        39      35      94005   1   0.50      3         0
## 3195 3195 41        15      65      90019   3   0.50      3         0
## 3196 3196 55        29      35      90007   3   1.40      1         0
## 3200 3200 33         9      20      95521   4   0.70      2         0
## 3202 3202 28         3      81      92121   4   0.20      1         0
## 3203 3203 30         4      25      92173   2   0.30      1         0
## 3204 3204 44        20     119      92677   2   7.50      1       239
## 3206 3206 59        33      38      92407   1   1.40      1         0
## 3207 3207 33         7      80      91103   2   1.50      3         0
## 3208 3208 56        32      84      93407   1   4.30      1         0
```

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## 3211 3211  43    19    60   94301   2  2.50    1      0
## 3212 3212  35     9    83   90277   2  4.50    3      0
## 3213 3213  61    35    59   92697   1  2.80    2      0
## 3214 3214  39     9    32   90212   3  2.00    3    116
## 3215 3215  61    37    33   91775   3  0.10    3      0
## 3216 3216  40    15    19   90630   4  0.20    3      0
## 3219 3219  40    16   154   94122   2  6.10    1    325
## 3220 3220  39    15    33   92346   1  2.00    2      0
## 3221 3221  61    35    28   93302   2  0.20    3    135
## 3222 3222  40    16    44   93407   1  1.80    1      0
## 3225 3225  45    21    58   94025   3  0.30    3      0
## 3226 3226  52    28    38   95064   4  0.90    2      0
## 3229 3229  27     2    45   94305   2  1.70    2      0
## 3230 3230  33     9    64   92507   4  3.40    1      0
## 3232 3232  62    37    24   90717   1  0.30    3      0
## 3233 3233  55    25    65   92093   4  2.00    3      0
## 3238 3238  35     9    22   94085   3  0.10    2      0
## 3240 3240  30     4    40   90095   1  0.30    1      0
## 3241 3241  62    36    63   93407   1  1.60    1    118
## 3242 3242  41    15    55   94305   1  2.80    1      0
## 3243 3243  38    14    33   92096   1  2.00    2      0
## 3244 3244  52    26    31   92054   4  1.50    3      0
## 3245 3245  48    24    24   92624   4  0.20    1      0
## 3246 3246  47    22    81   90009   4  3.60    3      0
## 3247 3247  41    17    81   95422   1  0.80    2    223
## 3249 3249  31     6    92   92037   2  3.30    1      0
## 3250 3250  50    25    81   92806   1  1.20    1      0
## 3251 3251  36    11   101   90212   3  1.20    3      0
## 3252 3252  52    26    78   90720   3  3.00    2      0
## 3254 3254  55    30    35   94025   1  1.50    2    118
## 3256 3256  34     7    82   95741   4  2.00    2      0
## 3258 3258  59    35    84   92407   1  1.80    3      0
## 3259 3259  41    17    42   91910   4  2.20    2    185
## 3261 3261  55    30    84   95821   2  0.00    3      0
## 3262 3262  64    40   131   91103   1  3.80    1      0
## 3265 3265  67    41   114   95616   4  2.40    3      0
## 3266 3266  40    14    61   94612   3  0.50    3      0
## 3267 3267  57    31    39   92821   1  2.20    3      0
## 3268 3268  59    35    21   95818   2  1.00    1    120
## 3271 3271  50    23   179   94609   4  3.60    2      0
## 3273 3273  35     9    85   92121   2  1.80    1      0
## 3274 3274  40    15   180   90095   1  4.10    1      0
## 3276 3276  32     8    65   95134   1  1.20    1    268
## 3279 3279  31     6   132   94571   1  3.80    1      0
## 3280 3280  26    -1    44   94901   1  2.00    2      0
## 3281 3281  58    33    98   90277   1  2.60    1      0
## 3283 3283  45    21    91   95054   1  4.70    1      0
## 3284 3284  56    30    29   92152   4  0.70    2     87
## 3285 3285  25    -1   101   95819   4  2.10    3      0
## 3286 3286  38    13    65   91706   3  0.70    2      0
## 3287 3287  62    36    58   95020   1  2.80    2      0
## 3291 3291  52    27   113   92038   1  0.10    3      0
## 3294 3294  44    20    62   94939   2  2.50    1      0
## 3300 3300  60    34    90   92192   4  1.90    2      0
```

```
## 3301 3301  62     38    43     92354    1  1.90    2       0
## 3303 3303  37     11    28     94501    2  0.80    3       0
## 3305 3305  42     17   108     95120    3  1.00    1     383
## 3307 3307  47     22    65     90840    1  2.40    1       0
## 3309 3309  48     23   108     92120    2  3.80    3       0
## 3311 3311  53     29    95     94720    4  1.00    2       0
## 3312 3312  49     25    24     95819    1  0.30    1       0
## 3313 3313  47     22   190     94550    2  8.80    1       0
## 3315 3315  38     13    41     90073    4  1.70    1       0
## 3317 3317  56     26    63     94501    3  2.00    3       0
## 3318 3318  65     41    79     90035    3  2.00    3       0
## 3319 3319  46     20   105     90089    4  3.20    1       0
## 3322 3322  41     15   120     94521    1  5.20    1       0
## 3323 3323  41     16   104     92008    1  4.00    3       0
## 3325 3325  57     31    41     91401    1  1.40    1       0
## 3326 3326  48     23    35     93302    2  1.30    1       0
## 3327 3327  53     27   174     91006    1  2.90    2       0
## 3328 3328  42     18   164     93407    1  1.30    3       0
## 3331 3331  34      9    32     95054    4  1.10    3       0
## 3332 3332  67     42    21     94607    3  0.10    3       0
## 3334 3334  37     13    79     91711    4  0.10    2     280
## 3335 3335  40     14    30     94720    2  0.80    3      86
## 3337 3337  60     34    11     94305    4  0.70    3       0
## 3338 3338  59     29    61     92008    3  2.00    3       0
## 3339 3339  35      9    43     92037    4  1.20    2       0
## 3341 3341  29      3    54     94104    4  1.80    3       0
## 3344 3344  62     37   125     94801    1  1.00    3       0
## 3345 3345  43     19   110     90639    1  3.40    1       0
## 3347 3347  41     15    65     92037    2  2.80    1       0
## 3349 3349  61     35    18     94303    3  0.30    3       0
## 3350 3350  55     25    95     92407    2  4.50    3     275
## 3353 3353  34      4    19     92521    1  0.67    3      83
## 3354 3354  49     23    19     94521    4  0.60    3       0
## 3355 3355  42     18    39     92703    1  0.30    3       0
## 3356 3356  49     23    93     90036    1  2.40    1       0
## 3357 3357  49     23   115     95051    3  4.60    3       0
## 3359 3359  59     35    40     94536    4  0.40    1       0
## 3360 3360  43     19    45     91773    3  0.60    2       0
## 3361 3361  48     24   133     90740    1  5.00    1       0
## 3364 3364  58     34    54     93003    4  1.30    2       0
## 3365 3365  41     15    41     94143    2  2.40    2     105
## 3367 3367  33      9   152     90024    1  6.00    1       0
## 3368 3368  51     27    53     92122    1  1.60    2       0
## 3369 3369  45     18   163     94720    3  5.33    2       0
## 3370 3370  34     10    84     95616    4  0.10    2       0
## 3371 3371  39     13    59     90033    3  0.90    3     199
## 3373 3373  55     29    81     94928    4  4.90    1     209
## 3375 3375  57     31    61     91360    1  2.20    3       0
## 3376 3376  43     18    88     90089    4  1.10    2       0
## 3377 3377  46     21   170     95136    2  2.80    1       0
## 3378 3378  35     10    83     95370    4  0.70    3     315
## 3379 3379  25      0    44     94536    4  0.60    2       0
## 3381 3381  64     38    21     95422    1  0.80    2      76
## 3384 3384  46     22   135     95135    3  4.10    1     213
```

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## 3387 3387   35      10    142    94061   4  0.80    3         0
## 3389 3389   45      21    115    91320   2  3.30    1        85
## 3391 3391   29       3     73    94720   3  0.30    3         0
## 3393 3393   32       7     58    92612   1  1.00    1         0
## 3394 3394   37      11     81    95123   3  0.90    2         0
## 3395 3395   25      -1    113    90089   4  2.10    3         0
## 3396 3396   41      16     35    94061   2  1.40    2       135
## 3397 3397   52      28     65    93106   1  0.00    1         0
## 3398 3398   31       6    170    94010   2  6.70    1       137
## 3400 3400   54      29     54    94720   2  2.10    3        97
## 3401 3401   48      22     39    94065   1  1.20    2         0
## 3402 3402   39      15     28    95818   1  1.40    3       118
## 3403 3403   64      40     95    90095   2  0.00    3         0
## 3405 3405   39      14     21    94303   1  0.60    3       101
## 3407 3407   42      12     34    92177   3  2.00    3         0
## 3409 3409   45      21     71    90029   4  1.90    1         0
## 3412 3412   63      37    118    94010   1  2.00    1       427
## 3413 3413   55      29     79    90029   4  4.90    1         0
## 3415 3415   61      36     18    95010   1  1.30    1         0
## 3419 3419   57      31     40    91775   3  1.40    3         0
## 3421 3421   66      41    114    94305   1  0.80    3         0
## 3422 3422   49      23    125    90245   1  2.40    1         0
## 3423 3423   48      23     41    92677   1  1.40    3         0
## 3424 3424   61      35     38    93009   2  1.00    3         0
## 3426 3426   23      -1     12    91605   4  1.00    1        90
## 3427 3427   31       5    115    90025   2  1.50    3       189
## 3429 3429   45      21     24    93106   1  0.90    3         0
## 3430 3430   39      14     28    91320   2  1.40    2       108
## 3433 3433   47      23     32    95370   1  1.00    1         0
## 3434 3434   34       9     60    94306   4  1.30    1         0
## 3435 3435   56      31     53    95521   2  1.60    3        78
## 3436 3436   33       8     58    92037   4  1.30    1         0
## 3437 3437   56      29     42    92104   4  2.50    2         0
## 3438 3438   57      31     39    94304   4  0.70    2         0
## 3440 3440   43      17     80    95020   3  0.10    1         0
## 3442 3442   64      40     18    94309   2  0.30    3         0
## 3443 3443   43      18     30    93940   1  0.50    3         0
## 3444 3444   44      18     54    90639   1  2.80    1       202
## 3446 3446   37      13     38    94701   1  1.50    2       116
## 3448 3448   54      29     25    90747   4  0.10    3       109
## 3452 3452   54      30     70    92182   1  1.60    3       251
## 3453 3453   61      37     23    94720   3  0.40    2         0
## 3455 3455   47      21    132    92120   1  0.30    1         0
## 3458 3458   55      31     91    94110   2  2.80    1         0
## 3461 3461   63      37     84    92691   4  2.40    3         0
## 3462 3462   57      27     64    92007   3  2.00    3       142
## 3463 3463   58      33     28    94608   2  0.50    2       146
## 3464 3464   28       3    149    92121   1  0.80    1         0
## 3465 3465   61      37    172    92612   4  4.25    1         0
## 3466 3466   65      41     42    95616   1  1.90    2         0
## 3467 3467   33       6     53    94122   2  1.00    2        96
## 3468 3468   63      37    149    90840   2  0.20    3       364
## 3470 3470   26       2     79    95630   2  2.50    1         0
## 3473 3473   54      27    120    92672   4  3.00    2       431
```

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## 3474 3474 59    34    52   92173    4  0.70    1       0
## 3475 3475 49    24    42   92121    2  0.70    2       0
## 3476 3476 54    30    13   92037    1  0.30    1       0
## 3478 3478 34    10   131   94024    2  4.33    1     156
## 3480 3480 31     6    64   94720    2  2.50    1       0
## 3481 3481 64    39    49   94591    2  1.50    1       0
## 3483 3483 57    33    91   95133    1  4.30    1      81
## 3484 3484 60    36   195   90066    1  4.70    1       0
## 3485 3485 45    18    53   92104    3  2.50    2     112
## 3486 3486 39    13    39   92103    2  0.80    3       0
## 3487 3487 25     1    20   92806    4  1.00    1       0
## 3489 3489 40    15    51   94117    2  1.10    2     131
## 3490 3490 36    12   154   91320    3  6.40    1       0
## 3494 3494 54    28    33   94710    2  0.40    3       0
## 3495 3495 29     2    31   91330    4  1.50    2       0
## 3496 3496 32     8    44   91401    1  1.80    2     192
## 3497 3497 37    13    49   91711    4  2.00    3     192
## 3498 3498 55    31   134   92130    2  0.30    1       0
## 3501 3501 51    26    90   94110    1  2.80    2       0
## 3502 3502 65    39   105   91380    4  1.70    3       0
## 3503 3503 32     8    58   95616    3  2.00    1      90
## 3504 3504 29     3    53   95814    4  2.10    3       0
## 3505 3505 46    20    15   95370    4  0.60    3       0
## 3506 3506 64    39   103   90304    1  0.80    3       0
## 3507 3507 27     1    58   95827    4  1.80    2     154
## 3510 3510 38    12    61   91330    3  0.90    3       0
## 3511 3511 38    11    69   92124    3  2.33    2       0
## 3513 3513 46    20    70   90405    4  2.90    1       0
## 3514 3514 31     4    39   94501    2  1.00    2       0
## 3515 3515 35     9    41   90024    4  1.20    2       0
## 3516 3516 50    26   148   94143    2  0.40    1     508
## 3518 3518 30     6    95   94234    1  3.90    3     146
## 3519 3519 60    36   129   95039    2  6.00    1       0
## 3521 3521 60    35    29   92126    3  1.30    2       0
## 3522 3522 36    10    30   91711    2  0.80    3       0
## 3525 3525 58    33    15   94583    4  0.90    2       0
## 3531 3531 54    28    49   90073    4  2.80    2       0
## 3532 3532 38    12    58   94542    3  0.90    3     128
## 3533 3533 38    12   141   94022    2  0.00    1       0
## 3534 3534 57    32    50   94545    4  2.10    1     211
## 3540 3540 56    30    60   91380    1  2.20    3       0
## 3543 3543 30     5   118   92182    4  3.00    3       0
## 3544 3544 37    11   194   94303    2  0.00    1       0
## 3545 3545 45    19   109   92037    3  1.10    1       0
## 3547 3547 65    40    34   94720    1  1.10    3     119
## 3548 3548 46    20    84   92354    3  0.70    2       0
## 3549 3549 40    16    41   91107    1  2.00    2       0
## 3550 3550 33     7    92   90840    3  1.60    1       0
## 3551 3551 40    10    19   94609    1  0.75    3     116
## 3552 3552 60    35    55   92807    3  0.50    2     172
## 3554 3554 41    16   155   95070    1  7.00    1       0
## 3556 3556 35     9    81   91107    1  2.70    2       0
## 3558 3558 46    20    54   90755    4  2.90    1     189
## 3559 3559 60    34    60   94065    3  2.50    1       0
```

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## 3560 3560  51        25      68      94065   1  1.50    2         0
## 3561 3561  31         5      65      94591   4  2.20    2       126
## 3563 3563  32         8     169      94596   1  6.50    3       272
## 3565 3565  33         7      29      94720   1  0.60    3         0
## 3566 3566  40        15      43      92120   2  1.10    2         0
## 3567 3567  57        33      80      92064   2  2.80    1         0
## 3568 3568  51        26      43      91040   1  1.30    2       123
## 3569 3569  30         4     194      93407   2  4.50    1         0
## 3571 3571  54        29      32      91107   2  0.60    3         0
## 3572 3572  42        18     153      93955   3  5.60    1       416
## 3575 3575  56        30      64      95123   3  0.30    2         0
## 3578 3578  39         9      32      91016   3  2.00    3         0
## 3579 3579  29         5     128      91302   2  4.10    2       209
## 3580 3580  28         2      84      94305   1  2.90    3       102
## 3581 3581  41        16      62      94553   2  2.20    3         0
## 3582 3582  28         4      33      91330   3  1.00    2         0
## 3584 3584  30         3      33      95112   4  1.50    2        85
## 3585 3585  63        37      15      92121   1  0.80    2       115
## 3589 3589  62        38      65      91768   1  0.00    2         0
## 3590 3590  38        12      52      92807   2  2.40    2       147
## 3591 3591  32         7      64      92630   2  0.10    1         0
## 3592 3592  58        32      73      94109   2  2.30    3       224
## 3593 3593  33         3      20      94704   1  0.67    3         0
## 3595 3595  34         8      79      95616   1  2.50    1         0
## 3597 3597  44        20      88      94720   1  4.70    1         0
## 3598 3598  56        26      51      92028   3  2.00    3         0
## 3599 3599  37        11      61      95120   3  0.90    2         0
## 3600 3600  45        19      23      93101   2  0.10    3        91
## 3603 3603  47        21      42      95841   4  0.10    1         0
## 3605 3605  63        38      59      92612   3  0.50    2         0
## 3609 3609  59        35     202      94025   1  4.70    1       553
## 3612 3612  64        39     145      92705   1  0.90    1         0
## 3613 3613  50        25      99      90245   1  4.60    1       368
## 3614 3614  35        11     148      92672   1  5.80    3         0
## 3615 3615  34        10     154      94583   3  5.40    2         0
## 3617 3617  41        15      69      92507   1  1.50    3        78
## 3618 3618  37        11      30      94304   2  0.30    1       146
## 3622 3622  53        27      81      91730   3  1.70    2       193
## 3624 3624  28         3      45      91105   4  1.70    2        95
## 3625 3625  58        28      70      92028   1  1.40    3         0
## 3626 3626  47        21      71      92037   4  2.90    1         0
## 3628 3628  27         1      83      90034   2  0.20    1         0
## 3629 3629  42        18     131      94949   1  3.40    1         0
## 3630 3630  50        26      82      95051   1  0.00    1         0
## 3631 3631  41        16      79      95020   1  4.00    3       225
## 3632 3632  46        21      51      90089   4  1.90    3         0
## 3636 3636  58        33      24      95616   2  0.50    2         0
## 3637 3637  37        11      64      96094   3  0.90    2         0
## 3638 3638  39        14     104      94608   3  1.00    1       242
## 3641 3641  64        34      53      95821   4  1.67    3         0
## 3642 3642  59        35      74      94402   4  2.30    3         0
## 3645 3645  59        33      41      91711   4  2.50    1       174
## 3646 3646  42        17      79      92103   1  3.70    3         0
## 3652 3652  49        23     140      90504   1  1.90    3         0
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## 3657 3657  35       8    30  95014  4  1.00      2        0
## 3658 3658  52      26   104  94025  2  2.40      2        0
## 3660 3660  33       7    22  94002  1  0.40      2        0
## 3662 3662  29       4   120  94553  1  4.10      2        0
## 3668 3668  27       3    59  94590  4  1.60      1        0
## 3669 3669  38      13   129  92037  4  0.30      3       75
## 3672 3672  50      25    18  93106  1  0.40      3        0
## 3673 3673  38      13    65  91320  3  0.50      3        0
## 3675 3675  42      16    38  93437  1  0.20      1        0
## 3679 3679  49      25    30  92093  4  0.60      1        0
## 3680 3680  49      23   134  90095  2  6.30      1        0
## 3682 3682  33       9   139  95054  1  4.30      1        0
## 3683 3683  43      17    45  95051  2  0.70      1        0
## 3684 3684  53      27    62  95070  3  3.00      2        0
## 3685 3685  57      31    51  92093  4  1.70      2      103
## 3686 3686  53      27    93  94588  1  0.80      3      313
## 3687 3687  60      35   122  92521  1  1.30      1        0
## 3688 3688  34      10    45  93943  1  1.33      1        0
## 3689 3689  51      26   179  90245  1  8.10      1        0
## 3691 3691  63      39    41  95449  2  1.10      1        0
## 3692 3692  37      13    58  95211  2  0.60      3        0
## 3693 3693  57      33    64  94132  4  2.20      1        0
## 3694 3694  52      27    28  93117  3  1.70      2        0
## 3695 3695  38       8    21  92037  1  0.67      3        0
## 3696 3696  61      35    60  90272  1  2.80      2        0
## 3697 3697  31       5    78  94309  2  0.20      1        0
## 3698 3698  39      13    59  95616  3  0.50      3        0
## 3699 3699  38      12    59  96001  3  0.50      3        0
## 3701 3701  48      22   128  94608  1  5.70      1        0
## 3703 3703  50      25   160  93108  4  4.30      3      410
## 3705 3705  36      11   184  91304  2  5.10      2        0
## 3706 3706  30       4    30  91770  3  1.00      1        0
## 3707 3707  58      33    51  94305  2  1.60      3      123
## 3708 3708  43      18    35  92647  1  0.60      3        0
## 3709 3709  31       1    74  92116  4  4.00      3        0
## 3711 3711  49      22    23  90032  2  1.00      2        0
## 3712 3712  27       1    20  94720  4  0.40      1       99
## 3714 3714  46      20    74  90064  3  0.70      2        0
## 3717 3717  55      29    65  91773  3  2.50      1        0
## 3718 3718  61      37    73  94550  3  2.00      3      285
## 3719 3719  45      19     8  92833  2  0.10      3        0
## 3720 3720  33       8    53  92126  3  2.30      1       76
## 3721 3721  63      39   131  92521  3  2.60      3      229
## 3722 3722  32       6    13  91040  4  0.30      1        0
## 3724 3724  51      27    45  94022  1  1.60      2       82
## 3726 3726  33       6    78  94305  4  2.00      2        0
## 3728 3728  56      30    31  94117  2  0.30      1      109
## 3729 3729  28       3   118  91902  3  2.40      2      161
## 3730 3730  43      17    82  94040  3  0.10      1        0
## 3732 3732  34       8    10  92867  1  0.40      2        0
## 3736 3736  40      14    78  91103  1  5.20      1        0
## 3737 3737  54      30    78  96001  3  1.80      2        0
## 3739 3739  54      28    45  95008  3  1.40      1        0
## 3740 3740  39      14    80  90502  2  0.40      1        0
```

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## 3741 3741  59      35    174   92660    1  4.70     1        0
## 3743 3743  32       8    181   94596    1  6.00     1        0
## 3744 3744  40      14     78   94720    4  1.40     2      194
## 3745 3745  54      29     79   90025    3  1.60     3        0
## 3746 3746  27       3    119   90640    1  5.40     1      118
## 3747 3747  63      39     49   93943    4  1.20     2      109
## 3748 3748  26       0     83   91360    3  3.90     2        0
## 3749 3749  33       7    100   94025    1  2.70     2      126
## 3750 3750  43      19     70   90095    3  2.33     1        0
## 3752 3752  26       2     12   94591    4  1.00     1        0
## 3755 3755  63      37    112   93106    4  2.40     3        0
## 3757 3757  35      11     83   92122    2  2.20     1        0
## 3760 3760  31       4     29   92093    4  1.50     2      121
## 3761 3761  56      26     70   91107    3  1.40     3      273
## 3762 3762  49      24     25   95831    2  0.70     3        0
## 3763 3763  53      27     84   95616    2  1.10     1        0
## 3764 3764  62      36     81   95051    3  4.40     1        0
## 3766 3766  26       0     54   94706    3  0.30     3        0
## 3767 3767  59      35    108   90245    4  3.80     2      304
## 3768 3768  40      16     83   95819    4  2.67     1        0
## 3771 3771  40      16     75   94306    3  2.33     1       79
## 3772 3772  31       7    109   91711    2  2.00     2      341
## 3773 3773  35      10    152   94112    2  3.00     1        0
## 3778 3778  62      37     98   94706    1  0.90     1      151
## 3779 3779  66      41     14   95814    4  0.60     2        0
## 3781 3781  49      25    109   92780    2  6.80     1        0
## 3782 3782  65      40    118   94104    1  1.30     1      333
## 3783 3783  30       5     80   91311    4  2.20     2        0
## 3784 3784  60      34     51   90028    3  1.40     3        0
## 3785 3785  30       6    115   94611    4  3.80     2        0
## 3786 3786  54      28     83   95841    1  2.40     1        0
## 3788 3788  37      12     28   95616    4  1.70     1        0
## 3789 3789  32       7     82   95616    2  2.50     1      221
## 3790 3790  51      27     24   94301    3  0.40     1        0
## 3791 3791  46      22     71   92029    2  1.70     1        0
## 3792 3792  41      17     80   91330    1  0.30     1        0
## 3794 3794  54      28    140   91711    1  2.90     1        0
## 3795 3795  52      27     39   92612    4  0.20     2        0
## 3796 3796  51      25     39   94010    1  1.20     2       98
## 3798 3798  61      35     31   92521    2  0.30     1        0
## 3800 3800  37      11     44   93109    4  0.20     1        0
## 3801 3801  64      38     35   93955    1  0.50     3        0
## 3802 3802  34       8     20   95616    2  0.30     1      106
## 3804 3804  42      18     83   96001    4  2.00     3        0
## 3805 3805  47      22    203   95842    2  8.80     1        0
## 3806 3806  29       5     84   93109    3  0.80     1        0
## 3807 3807  34       8     41   92096    4  0.80     1        0
## 3811 3811  48      24     12   94707    4  1.00     1       89
## 3814 3814  62      37     19   91343    3  1.30     2       97
## 3815 3815  34       9     35   94304    3  1.30     1        0
## 3818 3818  65      40    140   92093    1  0.90     1        0
## 3819 3819  26       0    102   94305    4  2.30     3        0
## 3821 3821  32       7     61   94102    3  2.30     1      205
## 3823 3823  63      33    178   91768    4  9.00     3        0
```

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## 3825 3825  23        -1     12    95064    4  1.00        1       0
## 3826 3826  30         6     69    94305    4  3.40        1     188
## 3828 3828  39        14    128    93943    2  3.90        1     196
## 3830 3830  65        39     44    92038    1  0.50        3       0
## 3831 3831  34         8     34    92130    2  2.00        3       0
## 3833 3833  62        38    158    90230    2  2.10        1       0
## 3834 3834  33         9     83    93943    1  0.10        1       0
## 3835 3835  48        22     28    94720    1  1.40        3      75
## 3837 3837  45        19     31    95616    3  0.50        2       0
## 3839 3839  37        11     71    94501    2  1.80        1     127
## 3840 3840  31         5     42    93010    2  2.00        3       0
## 3841 3841  56        31     35    95211    3  0.10        2     114
## 3845 3845  51        27     75    95828    1  2.70        1       0
## 3846 3846  26         1     54    94061    4  0.60        2     230
## 3847 3847  31         5     43    94720    1  1.50        1       0
## 3850 3850  42        18     34    92653    1  2.00        2       0
## 3852 3852  46        21     99    90277    2  3.80        3     194
## 3855 3855  31         6     83    94720    4  1.80        3       0
## 3857 3857  56        30     81    90401    4  2.60        3       0
## 3859 3859  42        18    158    92124    2  0.40        2     277
## 3861 3861  31         6     64    92121    2  0.10        1       0
## 3862 3862  65        40     29    90025    1  1.50        2       0
## 3864 3864  34        10     21    91770    4  0.70        2       0
## 3865 3865  62        32    142    95112    2  2.80        3       0
## 3866 3866  56        30     64    93105    3  2.50        1       0
## 3867 3867  51        25     40    91401    4  1.80        1       0
## 3871 3871  25         0     25    94596    2  0.90        3       0
## 3874 3874  54        30     54    94550    1  1.60        3     185
## 3875 3875  36        12     92    94709    2  0.00        1     184
## 3877 3877  35        11     40    91784    1  2.40        2       0
## 3878 3878  29         4     41    93105    1  1.00        1       0
## 3883 3883  31         7     43    92646    1  2.10        3     166
## 3885 3885  27         1    112    91330    4  2.30        3     402
## 3887 3887  67        43     79    95616    4  1.70        2     215
## 3888 3888  24        -2    118    92634    2  7.20        1       0
## 3889 3889  45        18     81    95133    3  2.67        2     251
## 3890 3890  26         0     19    93014    1  0.10        2     121
## 3892 3892  65        40     63    94701    3  0.50        2       0
## 3894 3894  30         5     40    92521    4  1.70        2       0
## 3896 3896  36        12     59    94104    3  2.00        1     216
## 3897 3897  48        24    224    93940    2  6.67        1       0
## 3898 3898  56        31     64    90245    2  2.30        3       0
## 3899 3899  44        20    129    96001    2  3.30        1       0
## 3902 3902  34        10     53    94107    3  2.60        2       0
## 3905 3905  29         5     18    94122    1  0.40        3      94
## 3906 3906  52        28     55    94596    1  1.60        3       0
## 3907 3907  61        35     60    90245    1  2.50        3       0
## 3910 3910  33         7    111    90245    2  1.30        1       0
## 3911 3911  33         8     62    94596    1  1.00        1       0
## 3912 3912  52        26     44    94025    2  0.80        3     148
## 3915 3915  27         3     35    94080    1  1.80        2       0
## 3916 3916  38        13     91    92037    1  2.80        1       0
## 3918 3918  41        15     89    94608    3  0.10        1     292
## 3919 3919  60        34     65    90024    4  1.70        2       0
```

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## 3920 3920 64    34   179  90024  2 4.50  3  400
## 3921 3921 34     8    82  93106  2 1.50  3    0
## 3922 3922 30     6    48  95812  1 1.20  1    0
## 3923 3923 31     4    20  95616  4 1.50  2    0
## 3925 3925 61    37   122  94609  2 6.00  1    0
## 3926 3926 42    18    22  90717  1 1.40  3    0
## 3927 3927 48    23    43  94301  2 1.30  1    0
## 3928 3928 59    34    38  90291  4 1.70  1    0
## 3930 3930 37    13    33  91773  4 0.40  2    0
## 3931 3931 53    27   145  95605  1 2.90  1  345
## 3932 3932 53    27   170  95003  1 1.00  1    0
## 3934 3934 39    14    40  91302  1 2.50  3    0
## 3935 3935 35    11    68  94923  2 0.00  1  126
## 3936 3936 59    33    53  90034  3 2.50  1    0
## 3937 3937 43    18    63  95616  3 0.80  3    0
## 3938 3938 39    15   123  91604  2 2.20  1   92
## 3939 3939 49    24    13  95929  2 0.00  1    0
## 3940 3940 47    23    12  92110  4 0.20  1  102
## 3942 3942 57    33    79  94588  1 2.70  2  294
## 3943 3943 42    17    89  90095  1 0.10  2  170
## 3945 3945 56    26    62  91320  3 1.40  3    0
## 3947 3947 25    -1    40  93117  3 2.40  2    0
## 3948 3948 32     8   119  94710  4 5.00  3    0
## 3951 3951 38    14    62  94143  1 1.50  3  255
## 3953 3953 61    36   124  94611  2 3.90  1    0
## 3954 3954 50    26    52  93555  4 0.10  3    0
## 3956 3956 62    36    58  94501  1 0.80  2    0
## 3957 3957 62    37    45  90033  3 0.50  2  200
## 3960 3960 43    19   123  91107  3 1.30  1    0
## 3963 3963 29     5    31  93014  1 1.00  3    0
## 3964 3964 58    32    38  93106  3 2.20  3    0
## 3965 3965 43    18    78  94025  4 1.90  3    0
## 3966 3966 39    15    94  91941  2 1.90  1    0
## 3967 3967 33     7    84  95051  1 2.90  3    0
## 3968 3968 40    15    22  94306  1 0.60  3    0
## 3970 3970 38    11    75  94305  3 2.33  2    0
## 3971 3971 65    40    71  95060  3 2.20  1    0
## 3972 3972 35    11    24  95616  1 0.50  3    0
## 3974 3974 61    35    53  90064  1 2.80  2  167
## 3975 3975 46    21    41  94305  1 0.50  3    0
## 3977 3977 60    33    42  90277  4 2.50  2  194
## 3978 3978 54    27    51  94309  3 1.00  2  113
## 3979 3979 43    18    19  92325  2 0.30  2    0
## 3980 3980 38    14    90  93010  2 0.00  1  258
## 3981 3981 46    22    89  92866  4 1.40  2    0
## 3982 3982 64    39    22  92691  3 0.50  1    0
## 3983 3983 24     0   119  94566  1 1.50  1    0
## 3986 3986 65    40    32  90095  1 1.10  3  120
## 3987 3987 38    14   182  92152  3 2.60  3    0
## 3988 3988 62    36    19  95833  2 0.20  3    0
## 3990 3990 49    25    90  92709  4 1.40  2    0
## 3991 3991 57    32    59  95014  2 3.70  1  134
## 3995 3995 42    18    88  92675  4 0.80  1    0
## 3996 3996 53    28    34  92697  2 0.60  3    0
```

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## 3998 3998 62      38    80   94545   4 1.70    2       0
## 3999 3999 34      10    41   94102   1 1.33    1       0
## 4003 4003 59      34    60   94015   2 2.80    1       0
## 4006 4006 56      32    32   95827   2 0.80    1      79
## 4009 4009 61      31   154   94555   3 7.50    3     351
## 4011 4011 44      19    40   94618   4 1.90    3      84
## 4013 4013 30       6   124   91320   2 0.60    1       0
## 4014 4014 62      38    23   91304   2 0.30    3       0
## 4015 4015 56      32    23   94720   4 0.70    1       0
## 4016 4016 25      -1   139   93106   2 2.00    1       0
## 4018 4018 26       0    42   92009   4 1.30    3     153
## 4020 4020 62      36    28   95020   3 0.70    2       0
## 4021 4021 58      32   191   93943   4 5.20    3     194
## 4022 4022 40      14    42   90638   2 0.30    1     106
## 4023 4023 35       5    81   94234   4 4.00    3       0
## 4025 4025 41      15    82   94720   3 0.10    1       0
## 4026 4026 51      27    53   94114   1 1.80    3       0
## 4027 4027 27       1   142   92038   3 5.50    1       0
## 4028 4028 46      21    42   93727   4 1.90    3       0
## 4033 4033 59      35    93   94301   2 1.60    1       0
## 4035 4035 35      11    82   94022   2 1.70    2       0
## 4037 4037 46      21    13   93117   2 0.70    3       0
## 4039 4039 55      30    54   91367   3 1.70    1       0
## 4044 4044 49      23    64   94588   4 2.60    1       0
## 4045 4045 36      11     9   90266   2 0.30    2      99
## 4046 4046 57      31    38   94720   4 0.70    2       0
## 4047 4047 25       0    72   94303   3 2.60    3       0
## 4048 4048 43      17    82   94114   1 5.20    1      79
## 4049 4049 27       2    48   90049   2 1.60    3     119
## 4050 4050 54      28    82   94122   4 2.60    3     294
## 4052 4052 55      29   162   93105   1 2.90    1       0
## 4053 4053 43      19    54   94608   2 1.70    1       0
## 4054 4054 35      11    90   94720   2 0.00    1       0
## 4062 4062 33       3    59   91040   2 1.75    3       0
## 4063 4063 38      14    43   95053   2 1.70    1       0
## 4065 4065 63      39    50   94402   1 0.00    2     166
## 4068 4068 52      28    21   94025   4 0.50    2       0
## 4069 4069 59      34    21   95035   2 0.50    2       0
## 4070 4070 56      32    31   94596   4 1.30    1       0
## 4071 4071 58      33    70   94720   4 0.70    1       0
## 4072 4072 30       6    25   94304   3 1.00    2     135
## 4073 4073 42      17    78   92521   1 1.00    3       0
## 4074 4074 51      27    19   92120   1 0.20    1       0
## 4075 4075 60      35    23   94608   1 0.30    3       0
## 4077 4077 49      23    22   92220   1 0.30    3       0
## 4078 4078 26       0    71   92093   4 1.80    2       0
## 4079 4079 36      12    58   91320   1 3.60    2       0
## 4082 4082 60      35   155   92521   1 1.50    3       0
## 4086 4086 28       2    53   94609   3 2.40    2       0
## 4088 4088 52      28   179   94583   4 4.20    3       0
## 4091 4091 42      18    49   92717   3 2.10    3       0
## 4093 4093 40      15   171   94539   2 3.30    1       0
## 4094 4094 49      24   138   93111   2 2.20    2       0
## 4097 4097 38      14    49   90740   3 2.80    1       0
```

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## 4098 4098  60      34    92   95670   2  2.00     1      0
## 4101 4101  27       2    41   90254   2  1.70     2      0
## 4102 4102  45      21    40   93460   3  0.60     2      0
## 4105 4105  38      14    25   95616   4  1.00     1      0
## 4106 4106  39      15   139   91801   1  3.40     1    353
## 4107 4107  48      22    54   93106   1  1.20     2      0
## 4108 4108  47      22    81   94123   1  2.90     1      0
## 4111 4111  66      41    59   95617   3  2.40     1      0
## 4115 4115  52      28    52   92126   4  0.10     3    121
## 4116 4116  45      20    84   94131   4  1.10     2    180
## 4118 4118  39      14    18   92037   4  0.20     3      0
## 4120 4120  30       5    85   92624   4  1.80     3      0
## 4121 4121  49      23    23   94080   1  1.40     3      0
## 4123 4123  56      30   195   90089   1  2.90     1      0
## 4125 4125  53      29   141   90064   2  0.20     3      0
## 4126 4126  60      34    95   94104   2  0.70     2    322
## 4127 4127  58      33    23   90095   3  1.30     2    131
## 4129 4129  46      21    53   93555   4  1.90     3      0
## 4130 4130  29       3    10   91320   4  0.40     1     87
## 4132 4132  48      23    23   94534   4  0.40     2    122
## 4134 4134  41      17   129   94720   1  3.40     1      0
## 4137 4137  43      19    83   92691   4  2.00     3      0
## 4138 4138  37      12    52   93943   2  1.10     2      0
## 4139 4139  47      22   114   95819   1  0.60     1      0
## 4141 4141  63      38    32   94015   1  1.50     2      0
## 4142 4142  43      19    63   94118   3  2.10     3      0
## 4144 4144  55      31    20   94720   2  0.30     1      0
## 4145 4145  47      23   138   91367   2  3.30     1      0
## 4146 4146  58      34    63   94305   4  1.60     2      0
## 4148 4148  59      35   180   96008   2  6.50     2      0
## 4149 4149  46      22    80   95747   4  2.00     3      0
## 4151 4151  46      20    72   92009   2  1.70     2     75
## 4152 4152  44      18   123   95841   3  5.90     1      0
## 4153 4153  44      18    91   91361   2  0.80     3      0
## 4155 4155  51      25   163   94305   2  1.30     3      0
## 4158 4158  34      10    22   94545   3  0.90     3      0
## 4160 4160  45      20    70   94305   4  1.90     3      0
## 4161 4161  30       4    11   95054   1  0.10     2      0
## 4163 4163  61      37    41   94704   1  0.80     1      0
## 4164 4164  54      28   108   94110   4  1.90     2      0
## 4165 4165  35      10    23   90058   4  1.10     3      0
## 4166 4166  63      38   135   91768   2  3.80     3    183
## 4168 4168  48      24   144   94025   4  3.50     2      0
## 4170 4170  41      17   143   90059   2  2.70     3    209
## 4171 4171  31       7    44   93561   1  1.20     1      0
## 4172 4172  58      31    49   94521   4  2.50     2      0
## 4176 4176  42      17   154   93955   3  4.90     1      0
## 4178 4178  47      23    75   93106   1  2.60     2      0
## 4179 4179  59      35    88   91311   2  1.60     1    278
## 4181 4181  36       6    11   92008   1  0.67     3      0
## 4183 4183  55      29    49   92691   2  0.80     3    220
## 4184 4184  41      17   140   94542   1  3.50     1    342
## 4185 4185  51      25    99   90277   2  2.40     2      0
## 4186 4186  26       2    82   91950   2  2.50     1    199
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## 4187 4187  33      9    10  90005  4  1.00  1    81
## 4188 4188  30      5   109  94305  4  2.20  2   103
## 4189 4189  30      4    45  90041  4  1.30  3     0
## 4190 4190  45     19    93  91116  2  1.70  2     0
## 4191 4191  40     16    89  95814  3  3.90  2   216
## 4192 4192  42     15    39  91711  3  1.00  2   132
## 4193 4193  50     26    21  91768  1  0.20  1    89
## 4194 4194  62     37    31  95008  3  0.20  1     0
## 4199 4199  61     36    50  96003  4  1.70  1   189
## 4200 4200  43     19    81  90630  4  0.20  3     0
## 4201 4201  43     19    74  94035  4  1.90  1     0
## 4203 4203  35      9    82  95064  3  0.90  2     0
## 4205 4205  40     16    61  91711  3  2.10  3     0
## 4209 4209  56     32    58  95064  1  1.80  3   241
## 4210 4210  35      9    21  91125  2  1.40  3   125
## 4211 4211  35      8    43  95819  2  1.67  2     0
## 4212 4212  40     16   104  94301  2  1.80  2     0
## 4214 4214  49     25    39  91125  3  1.90  2     0
## 4216 4216  64     40    21  94028  2  0.30  3     0
## 4219 4219  52     27    43  94005  4  0.20  2     0
## 4221 4221  54     30    39  94806  4  0.10  3     0
## 4222 4222  48     22    83  90028  2  0.40  3   248
## 4223 4223  51     25    58  93106  3  0.70  2   223
## 4224 4224  53     26     8  94709  1  0.50  2     0
## 4225 4225  57     27    39  95929  3  1.00  3     0
## 4226 4226  43     18   204  91902  2  8.80  1     0
## 4227 4227  37     13    45  94591  1  1.80  1     0
## 4228 4228  32      7   111  90277  1  3.80  1     0
## 4229 4229  34     10    83  95060  2  2.00  2   148
## 4231 4231  62     36   115  92093  2  2.80  1   202
## 4233 4233  39     15    53  94116  1  1.80  1     0
## 4234 4234  32      7   134  95929  2  3.30  1     0
## 4235 4235  50     24    91  93555  1  0.80  3     0
## 4236 4236  27      1    91  92173  2  0.20  1     0
## 4237 4237  37     12   128  91342  2  3.90  1     0
## 4238 4238  60     34    78  90401  3  4.40  1     0
## 4241 4241  39     14   161  95064  1  4.10  1   509
## 4242 4242  34      9    40  95054  4  2.00  2     0
## 4243 4243  46     21    68  94720  1  0.20  2     0
## 4247 4247  60     35    24  94920  1  1.50  2     0
## 4249 4249  58     33   138  90720  2  3.90  1     0
## 4252 4252  42     16    62  95064  3  0.90  3     0
## 4253 4253  54     29    81  91107  1  0.10  3     0
## 4254 4254  54     28    61  90601  3  3.00  2     0
## 4256 4256  59     35    78  90095  2  2.80  1     0
## 4258 4258  43     17    48  95762  3  2.20  2     0
## 4260 4260  52     26   158  94920  2  3.70  3   251
## 4263 4263  58     33    42  92093  4  1.70  1     0
## 4264 4264  59     33    18  94542  2  0.20  3     0
## 4267 4267  42     16    11  94015  1  0.20  1    87
## 4270 4270  47     23    12  92518  4  0.50  2     0
## 4271 4271  45     19    19  93117  3  1.50  1    94
## 4273 4273  47     22    89  92647  4  1.90  3     0
## 4274 4274  44     19    83  95812  2  3.80  3     0
```

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## 4276 4276  63      38    102   95616  4  3.40   2      0
## 4277 4277  50      24    155   92717  1  7.30   1      0
## 4278 4278  40      16    138   92612  1  3.50   1      0
## 4279 4279  56      31     51   92028  3  1.70   1      0
## 4281 4281  42      18    135   95136  2  3.30   1      0
## 4283 4283  26       0    195   92093  3  6.33   3      0
## 4285 4285  38      13    173   94305  2  3.30   1    243
## 4286 4286  23      -3    149   93555  2  7.20   1      0
## 4287 4287  53      29     20   93955  1  0.20   1    131
## 4289 4289  42      17     28   94010  1  0.60   3      0
## 4291 4291  66      42     95   94596  2  0.00   3      0
## 4293 4293  63      37    191   94131  2  4.30   3    205
## 4295 4295  58      34    150   92110  1  7.40   1    481
## 4296 4296  65      41     91   91360  2  0.00   3    146
## 4299 4299  43      19    122   93106  1  0.30   1      0
## 4302 4302  49      24    130   92677  4  1.10   1    281
## 4303 4303  52      27     85   92037  3  3.40   3      0
## 4304 4304  45      21    134   94550  2  3.30   1      0
## 4308 4308  45      19    128   94928  4  6.00   3      0
## 4311 4311  65      41    170   94143  4  6.10   2      0
## 4312 4312  32       8     14   90034  3  0.90   3    111
## 4313 4313  41      15     93   95616  1  2.80   3      0
## 4314 4314  52      28     79   94596  1  2.70   2      0
## 4317 4317  30       6     95   91950  2  0.20   1      0
## 4322 4322  27       0     34   92717  1  2.00   2    112
## 4323 4323  38      14     44   91320  2  1.70   1      0
## 4324 4324  52      28     31   92008  4  0.90   2    151
## 4325 4325  49      24     13   94538  4  0.80   1    111
## 4326 4326  59      35     52   95616  4  1.50   1      0
## 4329 4329  64      38    143   95039  2  6.40   3      0
## 4330 4330  59      33     10   94063  4  0.70   3      0
## 4331 4331  62      37     44   90401  1  1.10   3      0
## 4333 4333  53      26     12   92672  2  1.00   2      0
## 4334 4334  51      26     59   90095  1  1.20   1    139
## 4336 4336  36      10     82   94542  2  2.80   1      0
## 4338 4338  26       2    182   93010  2  3.20   2      0
## 4339 4339  54      30    121   92121  2  0.40   1      0
## 4341 4341  34      10     92   90024  2  2.70   1      0
## 4342 4342  28       3     53   94305  2  1.60   3      0
## 4343 4343  32       7     45   93611  3  2.30   1     83
## 4348 4348  58      33     22   90024  3  0.20   1      0
## 4351 4351  64      39    101   95134  4  3.40   2      0
## 4352 4352  30       3     32   94132  1  2.00   2      0
## 4353 4353  40      16     59   94305  4  2.67   1      0
## 4354 4354  61      36     25   94015  2  0.50   2      0
## 4357 4357  43      19     35   90630  1  0.70   1      0
## 4358 4358  39      14    141   93302  4  6.30   1      0
## 4361 4361  67      43     41   90024  2  1.10   1      0
## 4362 4362  55      30     42   93940  2  2.00   2    196
## 4364 4364  30       4     18   93711  4  0.30   2     84
## 4365 4365  59      35     75   92121  4  2.30   3      0
## 4366 4366  26       2     85   95020  2  2.50   1      0
## 4367 4367  52      28     43   90089  4  1.10   2      0
## 4370 4370  50      25     19   94005  4  0.40   2    103
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## 4371 4371   27        3     18   93524   1  0.40      3         0
## 4372 4372   64       39     13   90024   4  0.60      2         0
## 4376 4376   34       10     51   90032   3  2.00      1       130
## 4377 4377   40       15     71   93950   3  3.00      1       272
## 4379 4379   38       12     45   91768   4  1.20      2       138
## 4381 4381   37       13     64   94105   1  1.50      3         0
## 4382 4382   33        8     39   94542   4  0.80      1         0
## 4383 4383   60       34     38   92182   3  2.20      3         0
## 4384 4384   28        4     85   94709   3  2.50      1         0
## 4386 4386   56       32     23   94610   1  1.20      3       127
## 4388 4388   37       12     72   91380   4  0.70      3         0
## 4389 4389   47       21    123   90840   1  7.30      1         0
## 4392 4392   46       22    113   94105   2  3.30      1         0
## 4394 4394   24        0     59   95521   4  1.60      1         0
## 4396 4396   66       41     25   94720   4  0.60      2         0
## 4397 4397   30        5     14   95014   4  0.50      3         0
## 4398 4398   48       23     19   90058   1  0.10      1         0
## 4401 4401   34       10     44   94143   1  1.33      1         0
## 4402 4402   60       35     42   91902   3  1.50      1         0
## 4404 4404   50       24    112   92064   1  0.00      1         0
## 4407 4407   50       25     24   95133   4  0.40      2       137
## 4408 4408   37       13     71   90755   2  1.70      2         0
## 4409 4409   64       40    181   93403   2  2.30      2         0
## 4411 4411   39       14    153   91614   2  3.00      1         0
## 4413 4413   34       10     19   91711   4  0.40      2         0
## 4416 4416   60       35     65   90245   2  1.50      1       220
## 4417 4417   49       25      8   94720   1  0.30      1        97
## 4419 4419   59       34    145   95125   4  1.80      1       198
## 4424 4424   61       36     40   95816   3  0.50      2       100
## 4426 4426   26        0    164   95973   2  4.00      3       301
## 4427 4427   33        8    140   95814   1  4.60      1         0
## 4429 4429   51       27     12   95818   4  1.00      1         0
## 4431 4431   38       12     24   94588   2  0.80      3         0
## 4432 4432   38       12     60   92806   2  1.80      1         0
## 4433 4433   53       27     50   92660   2  0.80      3         0
## 4435 4435   35        9     51   94596   4  2.20      2       110
## 4437 4437   60       35     33   90095   2  0.50      2         0
## 4438 4438   63       38     63   92507   2  1.50      1         0
## 4440 4440   33        7    104   94542   2  3.60      3         0
## 4442 4442   62       36     75   92709   2  1.70      3         0
## 4443 4443   48       23     62   91367   4  3.60      3        83
## 4445 4445   36       10     73   95035   2  2.80      1         0
## 4447 4447   61       35     61   92177   3  2.20      3       117
## 4448 4448   49       22     78   95616   3  2.00      2         0
## 4449 4449   59       34     40   94102   3  0.90      3         0
## 4450 4450   30        6     44   95211   1  0.20      3         0
## 4455 4455   50       24     38   94143   3  0.60      2         0
## 4456 4456   56       31     28   94040   1  1.50      2         0
## 4457 4457   29        3     35   94040   2  0.30      1        88
## 4459 4459   48       22     90   94590   2  0.80      3       205
## 4461 4461   47       22     78   92093   1  0.20      2         0
## 4463 4463   33        7     39   95630   4  0.80      1         0
## 4470 4470   40       14     53   94025   3  0.50      3         0
## 4472 4472   56       30     79   94588   3  0.80      1       302
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## 4475 4475 66      41    73    95817   3  2.40      1       0
## 4476 4476 43      18    59    95039   3  0.80      3      91
## 4477 4477 58      32    40    95833   2  0.30      1       0
## 4479 4479 33       9    53    91380   1  2.10      3       0
## 4480 4480 32       8   128    93117   2  4.33      1       0
## 4481 4481 55      30   145    92037   2  6.00      3       0
## 4482 4482 25      -2    35    95045   4  1.00      3       0
## 4483 4483 40      14    28    90404   2  0.80      3       0
## 4485 4485 36      11   195    95747   2  3.00      1       0
## 4486 4486 35       9    50    92182   4  2.20      2       0
## 4487 4487 44      19    48    92735   3  0.80      3       0
## 4488 4488 38      14    81    94583   1  3.60      2       0
## 4489 4489 30       4    50    91030   1  1.50      1       0
## 4490 4490 39      13    21    95518   3  0.20      2       0
## 4491 4491 35       9   142    90250   2  0.00      1       0
## 4492 4492 41      16    64    91604   4  0.40      1       0
## 4494 4494 52      28    74    96064   1  2.60      2       0
## 4495 4495 29       4   182    95354   1  3.70      3       0
## 4496 4496 38      14    82    95616   4  2.67      1       0
## 4498 4498 45      21    85    95136   2  3.20      1       0
## 4503 4503 57      32    80    92647   2  0.00      3       0
## 4504 4504 45      21    33    92374   3  0.50      1     108
## 4505 4505 27       1    41    93023   4  1.80      3     147
## 4506 4506 40      15    90    94063   4  1.10      2       0
## 4508 4508 26       1     8    94550   2  0.90      3       0
## 4511 4511 64      39    20    93109   3  0.10      3       0
## 4512 4512 41      17     9    91911   1  1.00      1       0
## 4513 4513 46      22    25    95747   4  0.60      1       0
## 4514 4514 43      19   114    92325   1  1.70      1       0
## 4515 4515 24      -3    41    91768   4  1.00      3       0
## 4516 4516 29       3    49    94305   4  2.10      3       0
## 4517 4517 58      32    12    95929   4  0.70      3       0
## 4518 4518 45      18    50    91902   3  2.50      2       0
## 4519 4519 53      28    30    94609   4  0.20      2       0
## 4520 4520 45      21    32    92399   4  0.60      1      77
## 4521 4521 32       7    41    94706   4  2.00      2       0
## 4523 4523 31       5    29    90630   1  0.30      1       0
## 4524 4524 29       4    50    94040   4  1.70      2       0
## 4526 4526 36      11   110    94110   1  3.80      1       0
## 4528 4528 41      16    18    90024   1  0.60      3       0
## 4530 4530 27       0    40    92103   4  1.00      3       0
## 4531 4531 33       9    19    95370   2  1.00      2      92
## 4532 4532 31       7    35    94025   1  1.33      1     131
## 4535 4535 41      17    83    94025   4  2.67      1       0
## 4536 4536 42      18    39    96091   3  2.10      3       0
## 4537 4537 62      37    38    92354   3  0.50      2       0
## 4538 4538 62      36    63    95929   1  2.50      3       0
## 4541 4541 56      32    64    90210   4  1.50      1       0
## 4542 4542 62      38   124    95023   1  3.80      1     405
## 4543 4543 53      29    20    94131   1  0.20      1       0
## 4544 4544 62      38    33    95134   3  0.10      3       0
## 4545 4545 28       4    80    95819   3  2.50      1       0
## 4546 4546 61      35    35    90025   2  0.20      3       0
## 4547 4547 48      24    74    91109   3  0.70      1       0
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## 4548 4548 50     25     32   94304   2 0.70     2      0
## 4549 4549 58     33     73   93109   4 0.70     1    241
## 4553 4553 50     23     64   92037   1 2.67     2      0
## 4555 4555 41     16    109   94801   3 1.00     1      0
## 4556 4556 43     19     71   95054   3 0.30     3    179
## 4559 4559 44     19     82   95521   2 0.40     1      0
## 4560 4560 47     20    101   91950   3 2.00     2    270
## 4561 4561 43     18     13   94709   2 0.10     2      0
## 4562 4562 59     33     59   91365   3 1.40     3      0
## 4563 4563 65     40     64   94928   2 1.50     1      0
## 4564 4564 28      2    188   92350   2 4.50     1      0
## 4565 4565 58     32     28   90095   2 0.30     1    148
## 4567 4567 24      0    131   92831   1 5.40     1      0
## 4569 4569 26      0     44   94305   4 1.30     3      0
## 4570 4570 47     21     49   92152   3 2.20     2      0
## 4574 4574 46     20     73   95616   2 0.80     3    264
## 4576 4576 53     27    115   90095   2 0.50     3      0
## 4578 4578 63     37     80   90401   2 1.70     3      0
## 4579 4579 45     20     90   94143   4 1.10     2      0
## 4580 4580 58     32     41   94305   1 0.20     1     81
## 4581 4581 50     24    102   91103   2 6.30     1      0
## 4582 4582 37     13     59   94234   1 1.50     3      0
## 4583 4583 25     -1     69   92691   3 0.30     3      0
## 4585 4585 26      0     49   90089   3 2.40     2      0
## 4587 4587 58     32     61   91910   3 2.20     3      0
## 4588 4588 37     11     59   94720   4 0.20     3      0
## 4589 4589 35     10     85   95351   4 2.10     3      0
## 4590 4590 31      7     13   93727   1 0.50     3      0
## 4591 4591 58     34    151   94022   3 0.60     2      0
## 4593 4593 43     18     53   92115   3 0.80     3    154
## 4594 4594 54     30    133   95747   1 5.00     2      0
## 4596 4596 32      7    101   90232   4 2.20     2      0
## 4598 4598 34     10     68   90095   3 2.60     2      0
## 4600 4600 49     25    149   90024   2 0.40     1      0
## 4603 4603 57     32     81   94305   2 3.70     1    226
## 4605 4605 32      7     81   90601   2 3.40     2      0
## 4606 4606 48     22     42   94611   1 1.20     2      0
## 4608 4608 50     23     18   93117   1 0.50     2      0
## 4610 4610 54     28     80   95006   4 2.60     3    143
## 4611 4611 37     13     79   91330   1 3.60     2    104
## 4613 4613 32      6     18   92007   2 0.30     2      0
## 4614 4614 63     38     52   91361   4 1.70     1    218
## 4617 4617 66     41    114   92521   1 0.80     3      0
## 4619 4619 35      9     29   95354   3 0.90     1    126
## 4621 4621 52     26     84   94132   1 2.40     1      0
## 4624 4624 50     25     45   90813   2 0.60     3      0
## 4625 4625 36     11     83   90638   1 2.80     1      0
## 4627 4627 58     34     58   90034   4 2.30     3    169
## 4628 4628 27      1    134   93106   1 1.70     2    307
## 4629 4629 27      1    130   94801   3 2.90     2      0
## 4630 4630 48     24    148   91311   2 3.30     1      0
## 4631 4631 46     21     92   92886   1 0.20     2      0
## 4632 4632 32      8    142   90095   4 6.20     2    120
## 4633 4633 54     29     62   94720   4 0.70     1      0
```

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## 4636 4636   30        5       85    91910    2   2.50       1       293
## 4638 4638   44       19       85    92054    4   1.90       3         0
## 4640 4640   51       25       33    92866    3   0.90       3         0
## 4641 4641   30        6       42    90034    1   2.10       3         0
## 4643 4643   65       40      143    95616    4   6.60       2         0
## 4644 4644   33        7       35    95616    4   0.80       1         0
## 4648 4648   59       35       43    95616    4   1.30       1         0
## 4650 4650   59       35      121    91423    1   4.30       1         0
## 4653 4653   38       12      184    91311    3   8.00       1         0
## 4654 4654   34       10      155    92780    2   6.50       1         0
## 4655 4655   44       17       69    90095    3   2.67       2         0
## 4656 4656   33        7      188    95054    2   7.00       2       581
## 4657 4657   47       21       38    91101    3   0.60       2         0
## 4658 4658   41       16        9    90089    2   0.30       2         0
## 4663 4663   56       31       59    94303    2   1.90       2         0
## 4667 4667   34        9       72    94555    3   2.30       1       124
## 4668 4668   52       28       72    94720    1   1.60       3         0
## 4669 4669   40       14       63    94025    3   0.50       3       221
## 4671 4671   52       26      194    94305    1   1.70       1         0
## 4673 4673   52       26      180    95831    1   1.70       1       550
## 4674 4674   50       23       18    95503    2   1.00       2        88
## 4676 4676   35       11       32    91360    1   1.33       1       137
## 4677 4677   39       13       68    91950    3   2.10       1         0
## 4678 4678   25        0       38    93407    2   1.60       3         0
## 4680 4680   26        0      161    94551    2   7.20       1         0
## 4681 4681   46       21      154    90245    2   2.80       1        94
## 4682 4682   27        3       68    95503    4   0.00       1         0
## 4684 4684   52       28      149    92121    2   0.40       1         0
## 4685 4685   59       34      103    91360    1   2.60       1         0
## 4686 4686   63       39       41    91355    4   1.30       2         0
## 4687 4687   61       35      113    91741    2   2.80       1         0
## 4688 4688   58       34       48    93460    4   1.30       2         0
## 4692 4692   41       17       65    90024    3   2.10       3         0
## 4693 4693   59       35       32    92064    3   0.40       2         0
## 4696 4696   45       19       70    95605    1   2.80       1         0
## 4699 4699   48       22      162    94143    3   1.40       1       400
## 4701 4701   31        7      170    95006    1   6.00       1         0
## 4702 4702   42       16       49    90034    1   2.80       1         0
## 4704 4704   57       27       62    94025    3   2.00       3         0
## 4706 4706   61       37      141    92677    3   0.70       1         0
## 4707 4707   60       36        8    92626    2   1.00       1         0
## 4708 4708   59       35       91    95008    2   1.60       1         0
## 4709 4709   62       37       10    92606    3   0.50       1         0
## 4710 4710   26        1       35    90089    2   1.70       2       119
## 4712 4712   65       40       59    94022    3   2.40       1         0
## 4714 4714   25        1      122    93022    2   0.20       1         0
## 4716 4716   65       39       35    92009    1   0.50       3       150
## 4718 4718   29        5      121    95449    1   1.50       1         0
## 4720 4720   32        8      140    94102    4   6.60       3         0
## 4723 4723   40       16       63    92807    1   1.50       3         0
## 4724 4724   39       15      125    90250    1   3.50       1         0
## 4727 4727   34       10       38    95039    1   1.33       1         0
## 4730 4730   40       14       18    90049    4   1.50       3         0
## 4733 4733   39       13       69    92096    3   0.10       1       247
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```
## 4735 4735  63      39      64    95814    1  1.80    3    147
## 4736 4736  34       9      84    94707    4  2.20    2    323
## 4737 4737  51      25      65    94143    3  0.70    2      0
## 4738 4738  61      36      85    94998    3  1.80    2      0
## 4740 4740  62      38     174    94305    1  4.70    1      0
## 4741 4741  56      30     178    93940    1  2.90    1      0
## 4742 4742  58      32      55    93106    4  2.50    1      0
## 4743 4743  58      33      25    92121    4  0.90    2     90
## 4744 4744  50      26      21    94305    1  0.20    1      0
## 4746 4746  49      23     129    94085    1  0.30    1      0
## 4747 4747  31       7      18    95616    1  0.40    3      0
## 4748 4748  49      25      91    94704    4  1.40    2      0
## 4751 4751  66      41      38    95134    1  1.10    3      0
## 4754 4754  46      21      85    92867    1  0.20    2      0
## 4755 4755  57      33      93    94025    2  1.60    1    161
## 4756 4756  59      35     151    93106    2  6.00    1      0
## 4759 4759  46      21      40    90045    1  0.30    1    116
## 4760 4760  66      41      80    92093    4  0.10    2      0
## 4761 4761  50      25      18    95819    2  0.00    1      0
## 4766 4766  58      34      82    94025    1  4.30    1    263
## 4769 4769  38      14      39    93118    1  2.00    2      0
## 4770 4770  26       2      20    95064    4  1.00    1    116
## 4771 4771  35       5      93    90095    4  1.80    3      0
## 4772 4772  36      11      85    90502    3  1.20    3      0
## 4774 4774  53      28      48    92029    2  1.90    2      0
## 4776 4776  44      14      33    94063    1  0.75    3    171
## 4777 4777  47      23      40    95123    2  2.10    3    156
## 4778 4778  32       8      30    94534    4  0.40    2     78
## 4779 4779  52      27      22    90755    4  0.80    1      0
## 4780 4780  39      14      20    90747    1  0.60    3      0
## 4781 4781  47      20      49    92104    3  2.50    2      0
## 4782 4782  35       9      25    94526    3  0.10    2      0
## 4785 4785  52      28       9    90405    2  0.20    1      0
## 4786 4786  30       5      23    94304    2  0.90    3      0
## 4787 4787  36      12      18    95521    4  1.00    1      0
## 4788 4788  48      22      42    95054    3  0.60    2    121
## 4789 4789  36      10      39    92009    1  2.00    1    153
## 4790 4790  58      34      84    95120    4  1.60    2      0
## 4791 4791  35      11     101    94143    3  3.80    3    150
## 4793 4793  36      10      28    90840    4  1.00    1    130
## 4794 4794  45      21      59    94703    2  2.50    1    155
## 4798 4798  37      11      24    94115    4  1.00    1      0
## 4800 4800  44      20      33    94306    4  0.30    1    142
## 4805 4805  58      32      40    94124    1  2.80    2      0
## 4806 4806  30       6     160    90630    1  4.30    1    249
## 4809 4809  42      16      32    90033    3  0.50    2      0
## 4812 4812  36      12     123    90502    2  3.00    3      0
## 4813 4813  29       4     184    92126    4  2.20    3    612
## 4814 4814  49      23      60    95023    3  0.70    2    142
## 4817 4817  50      24      83    92333    3  3.00    2      0
## 4818 4818  46      22     134    93305    2  3.30    1      0
## 4819 4819  45      19      85    94112    2  1.70    2      0
## 4820 4820  32       6      41    95833    3  0.90    1    179
## 4821 4821  42      17      44    94124    1  0.30    3      0
```

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```
## 4822 4822  30        6      62   95831    1  0.10        1        0
## 4825 4825  32        6      25   96001    3  1.00        1        0
## 4828 4828  30        6     181   91203    1  4.30        1      230
## 4829 4829  52       28      62   90089    1  1.80        3        0
## 4830 4830  31        7      11   94304    1  0.50        3       80
## 4831 4831  37       12      60   95616    4  2.10        3      217
## 4833 4833  29        4      83   91950    4  2.20        2        0
## 4834 4834  49       24     109   92647    1  0.60        1        0
## 4835 4835  49       23      70   94305    1  0.30        1      217
## 4836 4836  65       39      25   95370    2  0.40        1      113
## 4837 4837  54       24      72   93943    3  1.40        3      218
## 4838 4838  36       10     183   95348    2  0.00        1        0
## 4840 4840  34        8      52   95060    4  0.20        1        0
## 4843 4843  49       23     174   95449    3  4.60        2      590
## 4847 4847  35       10     135   94596    3  4.80        2        0
## 4848 4848  37       11      65   94143    2  2.40        2      260
## 4849 4849  58       32     145   94920    2  0.50        1      119
## 4851 4851  63       39     119   91330    1  2.90        1        0
## 4852 4852  55       31     124   93407    2  0.30        1        0
## 4854 4854  45       19      41   91109    1  0.20        1        0
## 4855 4855  44       20     105   91730    1  4.70        1        0
## 4856 4856  58       32     130   94720    2  2.70        1        0
## 4857 4857  56       31      80   92069    4  1.30        3        0
## 4858 4858  37       13     115   90025    1  0.80        2        0
## 4860 4860  34        8     165   91107    1  7.00        3      541
## 4861 4861  51       25      34   93106    3  0.60        2      128
## 4862 4862  49       24      18   95616    1  0.40        3      121
## 4863 4863  33        7      44   95605    1  0.30        1        0
## 4864 4864  61       35      25   91768    1  0.80        2      142
## 4865 4865  41       16      52   91311    2  2.20        3        0
## 4866 4866  50       24     133   90025    4  1.40        2      342
## 4868 4868  38       12      61   94598    4  0.20        3        0
## 4869 4869  51       27      62   94063    2  3.20        3      118
## 4870 4870  63       39      33   92121    3  0.10        3        0
## 4871 4871  55       30      28   94040    2  2.00        2        0
## 4872 4872  46       22      53   95616    4  1.90        1      187
## 4877 4877  44       19     142   95054    1  1.50        3        0
## 4879 4879  34        9      41   92093    1  1.00        1        0
## 4882 4882  57       32      24   92346    2  0.20        3      140
## 4884 4884  38       13     129   92646    3  4.10        3        0
## 4885 4885  60       34      50   95670    3  2.20        3        0
## 4886 4886  54       30      28   92103    2  0.80        1        0
## 4887 4887  51       26      64   94005    4  1.80        3        0
## 4888 4888  41       15      49   90245    3  0.90        3        0
## 4891 4891  61       35      51   93555    3  1.40        3        0
## 4893 4893  43       19      35   94112    1  0.30        3      120
## 4894 4894  42       12      39   94704    3  2.00        3        0
## 4895 4895  48       22      74   93950    1  1.40        3        0
## 4896 4896  45       20     201   92120    2  2.80        1        0
## 4898 4898  43       18      44   91345    1  2.40        1        0
## 4900 4900  54       29      85   94928    4  1.30        3      299
## 4901 4901  26        1      74   90028    4  2.20        1        0
## 4902 4902  26        0      54   96094    3  1.10        2        0
## 4903 4903  33        8      58   90505    2  2.50        1        0
```

```
## 4904 4904   40      15     18    94534   2  0.10    2   119
## 4905 4905   64      40     88    94305   1  3.80    1   243
## 4907 4907   54      28     49    94608   1  2.20    3   128
## 4908 4908   34       9    101    94080   3  0.60    2     0
## 4909 4909   40      16    138    92121   2  6.10    1     0
## 4910 4910   41      16     25    95014   2  0.10    2     0
## 4911 4911   48      22    120    90291   1  0.00    1     0
## 4913 4913   51      26     28    94061   1  1.30    2    94
## 4914 4914   30       4    110    93943   1  2.90    3     0
## 4915 4915   65      39     94    92374   1  2.00    1     0
## 4916 4916   49      24     48    93117   1  1.30    2     0
## 4917 4917   29       5    123    90291   2  0.60    1     0
## 4920 4920   41      16     68    92122   3  3.00    1     0
## 4921 4921   42      16     28    94002   4  1.50    3    91
## 4922 4922   37      11     42    95814   3  0.50    3     0
## 4923 4923   31       5     28    90717   1  0.30    1     0
## 4925 4925   36      12     89    91304   2  2.70    1     0
## 4926 4926   64      39     82    94025   4  3.40    2     0
## 4927 4927   37      13     83    92220   2  1.70    2     0
## 4930 4930   62      36     39    92028   2  0.30    1     0
## 4931 4931   63      38    110    90095   3  1.80    2   109
## 4932 4932   57      27     55    95616   1  1.40    3     0
## 4933 4933   59      35    111    91107   1  4.30    1     0
## 4934 4934   47      23     94    92029   1  4.70    1     0
## 4936 4936   59      33     81    94022   2  1.40    1     0
## 4937 4937   45      20     94    92009   3  0.50    3     0
## 4939 4939   61      35     80    95973   4  1.70    3     0
## 4941 4941   46      22     19    92870   3  0.50    1     0
## 4942 4942   28       4    112    90049   2  1.60    2     0
## 4943 4943   52      26    109    94710   1  2.40    1   308
## 4944 4944   26       0     12    96003   1  0.10    2     0
## 4946 4946   42      18     49    95351   2  1.70    1   106
## 4947 4947   51      26     42    93118   1  1.30    2     0
## 4950 4950   29       5     64    94114   4  0.00    1   249
## 4951 4951   47      23     19    90089   1  1.00    1     0
## 4953 4953   29       3     53    94005   4  1.80    3     0
## 4954 4954   47      21     32    95051   3  1.50    1    75
## 4955 4955   45      19     22    94904   3  1.50    1     0
## 4956 4956   63      37     39    91207   2  0.70    3     0
## 4958 4958   29      -1     50    95842   2  1.75    3     0
## 4959 4959   50      26     19    90095   1  0.90    3     0
## 4961 4961   58      28     81    91604   1  3.00    3     0
## 4964 4964   32       6     98    95054   2  4.50    3   306
## 4966 4966   29       5     33    94709   1  1.80    2    78
## 4967 4967   41      17     34    91361   1  0.70    1   143
## 4970 4970   45      19     60    94143   2  0.40    3   250
## 4971 4971   37      13     95    95821   2  1.70    2     0
## 4972 4972   58      28     73    90024   1  1.40    3     0
## 4973 4973   58      32     41    93401   3  2.20    3   148
## 4974 4974   31       1     68    95045   4  4.00    3     0
## 4975 4975   59      33     64    92867   4  1.70    2     0
## 4976 4976   38      11     29    95207   4  1.00    2     0
## 4979 4979   57      27     63    90210   4  2.00    3     0
## 4980 4980   50      26     92    90740   1  2.60    2   213
```

```
## 4981 4981   29           5   135   95762     3  5.30             1           0
## 4982 4982   34           9   195   90266     2  3.00             1         122
## 4984 4984   51          26    72   95370     1  2.90             1           0
## 4987 4987   32           6    78   95825     1  2.90             3           0
## 4988 4988   48          23    43   93943     3  1.70             2         159
## 4989 4989   34           8    85   95134     1  2.50             1         136
## 4991 4991   55          25    58   95023     4  2.00             3         219
## 4993 4993   30           5    13   90037     4  0.50             3           0
## 4995 4995   64          40    75   94588     3  2.00             3           0
## 4996 4996   29           3    40   92697     1  1.90             3           0
## 4997 4997   30           4    15   92037     4  0.40             1          85
## 4998 4998   63          39    24   93023     2  0.30             3           0
## 4999 4999   65          40    49   90034     3  0.50             2           0
##      Personal.Loan Securities.Account CD.Account Online CreditCard
## 1                0                  1          0      0          0
## 4                0                  0          0      0          0
## 5                0                  0          0      0          1
## 6                0                  0          0      1          0
## 7                0                  0          0      1          0
## 9                0                  0          0      1          0
## 12               0                  0          0      1          0
## 13               0                  1          0      0          0
## 14               0                  0          0      1          1
## 15               0                  1          0      0          0
## 18               0                  0          0      0          0
## 19               1                  0          0      0          0
## 20               0                  1          0      0          1
## 21               0                  0          0      1          0
## 22               0                  0          0      1          0
## 24               0                  1          0      0          0
## 25               0                  0          0      0          1
## 27               0                  0          0      0          0
## 29               0                  0          0      1          1
## 30               1                  0          1      1          1
## 31               0                  0          0      1          0
## 32               0                  0          0      1          0
## 35               0                  0          0      1          0
## 36               0                  0          0      0          0
## 37               0                  0          0      0          1
## 38               0                  0          0      0          0
## 39               1                  1          1      1          0
## 42               0                  0          0      0          0
## 43               1                  0          0      1          0
## 47               0                  0          0      1          0
## 48               1                  1          1      1          1
## 49               0                  0          0      0          1
## 50               0                  0          0      0          1
## 51               0                  1          0      1          0
## 54               1                  0          0      1          0
## 56               0                  0          0      1          0
## 57               0                  1          1      1          0
## 58               1                  0          0      0          0
## 59               0                  0          0      0          0
## 62               0                  1          0      0          0
```

## 64	0	0	0	1	0
## 65	0	0	0	0	0
## 66	0	0	0	1	1
## 67	0	0	0	0	0
## 69	0	0	0	1	1
## 70	0	0	0	1	0
## 71	0	0	0	0	1
## 72	0	0	0	1	0
## 75	0	0	0	0	1
## 76	1	0	1	1	1
## 79	1	0	0	0	0
## 80	0	0	0	1	0
## 82	0	0	0	1	0
## 83	0	0	0	1	0
## 85	0	0	0	1	0
## 86	0	0	0	0	0
## 87	0	0	0	0	0
## 88	0	0	0	1	0
## 89	0	0	0	1	0
## 90	0	0	0	0	1
## 91	1	0	0	1	0
## 92	0	0	0	1	0
## 96	0	0	0	1	0
## 97	0	0	0	0	0
## 98	0	0	0	1	0
## 102	0	0	0	0	0
## 103	0	0	0	1	1
## 105	0	0	0	1	1
## 106	0	1	0	1	0
## 108	0	0	0	0	0
## 109	0	0	0	1	0
## 110	0	0	0	1	0
## 111	0	0	0	0	0
## 113	0	0	0	0	0
## 117	0	0	0	1	0
## 119	0	0	0	1	0
## 121	0	0	0	1	0
## 122	0	0	0	1	0
## 124	0	1	0	0	0
## 125	0	0	0	1	0
## 127	0	0	0	1	1
## 128	0	0	0	1	0
## 129	0	1	0	1	0
## 131	0	0	0	1	0
## 136	0	0	0	1	1
## 137	0	0	0	1	0
## 138	0	0	0	0	0
## 142	0	0	0	1	1
## 144	0	0	0	1	1
## 145	0	0	0	0	0
## 146	0	0	0	0	1
## 147	0	0	0	1	1
## 149	0	0	0	1	0
## 152	1	0	0	0	1

## 153	0	0	0	1	1
## 154	0	1	1	1	1
## 155	0	0	0	0	0
## 156	0	0	0	1	0
## 157	0	0	0	0	1
## 159	0	0	0	1	1
## 163	0	0	0	0	0
## 165	0	1	0	0	0
## 166	0	0	0	1	0
## 168	0	0	0	1	1
## 170	0	0	0	0	1
## 171	0	0	0	1	0
## 172	0	1	0	0	0
## 173	0	0	0	1	0
## 175	1	0	0	1	0
## 176	0	1	0	1	0
## 177	0	0	0	1	0
## 178	0	0	0	0	0
## 179	0	0	0	1	1
## 184	1	0	0	1	0
## 185	0	1	0	1	0
## 186	0	0	0	1	0
## 189	0	0	0	1	0
## 192	0	0	0	0	0
## 194	0	0	0	1	1
## 196	0	1	0	1	0
## 197	0	0	0	0	1
## 199	0	1	0	1	0
## 203	0	0	0	1	0
## 204	0	0	0	1	0
## 205	0	0	0	0	0
## 208	0	0	0	0	0
## 209	0	0	0	1	1
## 210	1	0	1	1	1
## 211	0	0	0	0	0
## 212	0	0	0	0	0
## 213	0	0	0	0	0
## 214	0	0	0	1	0
## 216	0	0	0	1	1
## 217	0	0	0	0	0
## 220	0	0	0	1	1
## 221	0	0	0	0	1
## 222	0	0	0	1	0
## 223	0	0	0	0	0
## 224	0	0	0	1	0
## 226	0	0	0	0	1
## 227	0	0	0	0	0
## 231	0	0	0	1	0
## 232	0	0	0	1	0
## 233	0	0	0	0	0
## 234	0	0	0	1	0
## 236	0	0	0	1	0
## 237	0	0	0	1	1
## 239	0	0	0	1	1

```
## 240             0                0            0        0        0
## 242             0                0            0        0        1
## 243             0                0            0        0        0
## 244             1                0            1        1        0
## 245             0                0            0        1        0
## 246             0                0            0        0        0
## 249             0                0            0        1        1
## 250             0                0            0        0        1
## 252             1                0            0        1        0
## 255             1                0            0        1        0
## 257             0                0            0        0        1
## 259             0                0            0        1        0
## 260             0                0            0        1        0
## 262             1                0            0        1        0
## 265             0                0            0        0        0
## 267             0                0            0        1        0
## 268             0                0            0        0        0
## 271             0                0            0        1        0
## 272             0                0            0        1        0
## 275             0                1            0        0        1
## 278             0                0            0        0        0
## 279             0                0            0        1        0
## 281             0                0            0        1        0
## 282             0                0            0        0        1
## 283             0                0            0        1        0
## 287             0                0            0        1        0
## 288             0                0            0        0        1
## 290             0                0            0        1        1
## 292             0                0            0        1        0
## 294             0                0            0        0        0
## 295             0                0            0        1        0
## 297             0                0            0        1        0
## 299             0                0            0        0        0
## 300             1                0            1        1        0
## 301             0                1            0        0        0
## 302             0                0            0        0        0
## 303             0                0            0        1        0
## 307             0                0            0        1        1
## 308             0                0            0        1        0
## 309             0                0            1        1        1
## 310             0                1            0        1        0
## 311             0                0            0        1        1
## 312             0                0            0        1        0
## 313             0                1            0        1        0
## 316             0                0            0        1        0
## 318             1                0            0        1        0
## 319             0                0            0        1        0
## 320             0                0            0        0        1
## 321             0                0            0        0        0
## 322             1                0            0        0        0
## 323             1                1            1        1        0
## 325             1                0            0        0        0
## 327             0                0            1        1        1
## 329             0                0            0        1        1
```

```
## 330           0              0              0        1        0
## 334           0              0              0        0        0
## 336           0              0              1        1        1
## 338           0              0              0        1        0
## 339           0              0              0        0        0
## 340           0              0              0        0        0
## 341           0              0              0        1        1
## 346           0              1              0        1        0
## 348           0              1              1        1        1
## 350           1              0              0        0        0
## 352           1              0              0        1        0
## 353           0              0              0        0        1
## 358           0              0              0        1        0
## 359           0              0              0        1        0
## 360           0              0              0        1        0
## 361           0              0              0        0        0
## 362           0              0              0        1        0
## 363           0              0              0        0        1
## 366           1              0              0        1        0
## 367           0              0              0        1        0
## 368           0              0              0        1        0
## 369           0              0              0        1        0
## 370           0              0              0        0        1
## 371           0              0              0        0        0
## 372           0              0              0        0        0
## 373           0              0              0        1        0
## 375           0              0              0        1        0
## 376           0              0              0        1        0
## 377           0              0              0        0        0
## 379           0              0              0        0        0
## 382           0              0              0        1        1
## 383           1              0              0        0        1
## 384           0              0              0        1        0
## 386           0              0              0        1        0
## 388           0              0              0        1        0
## 390           0              0              0        1        1
## 391           0              0              0        1        0
## 392           0              0              0        0        1
## 393           0              0              0        1        0
## 394           0              1              1        1        1
## 397           0              0              0        0        0
## 399           0              0              0        0        0
## 401           1              0              0        1        0
## 402           0              0              0        0        1
## 403           0              0              1        1        1
## 404           0              0              0        0        0
## 405           0              0              0        0        0
## 407           0              0              0        0        0
## 409           0              0              0        1        0
## 412           0              1              0        0        0
## 416           0              0              0        1        0
## 417           0              0              0        1        0
## 419           0              0              0        0        0
## 421           0              0              0        1        1
```

## 422	1	0	0	0	0
## 423	0	1	1	1	0
## 424	0	0	0	0	0
## 426	0	0	0	1	0
## 427	0	0	0	0	1
## 428	0	0	0	0	1
## 429	0	0	0	0	1
## 431	0	0	0	1	0
## 432	0	0	0	1	0
## 434	0	0	0	1	1
## 435	0	0	0	1	0
## 436	0	0	0	0	0
## 439	1	0	1	1	1
## 441	0	0	0	1	0
## 442	0	1	0	1	0
## 443	1	0	0	1	0
## 445	0	0	0	1	1
## 448	0	0	0	0	0
## 449	0	0	0	1	1
## 451	0	0	0	1	1
## 453	0	0	0	0	0
## 455	0	0	0	0	0
## 456	0	0	0	1	0
## 458	0	0	0	0	0
## 459	0	0	0	1	1
## 461	0	0	0	1	1
## 462	0	1	0	0	0
## 465	1	0	0	0	1
## 467	0	0	0	1	0
## 470	0	0	0	1	1
## 472	0	0	0	1	1
## 473	0	0	0	1	0
## 479	0	0	0	0	1
## 481	0	0	0	1	1
## 483	1	0	1	1	0
## 484	0	0	0	0	0
## 485	0	0	0	1	1
## 487	0	1	0	1	0
## 489	0	0	0	1	0
## 490	0	0	1	1	1
## 491	0	0	0	1	0
## 492	0	1	0	1	0
## 493	0	0	0	1	0
## 496	0	0	0	1	1
## 497	0	0	0	1	0
## 498	0	0	0	1	0
## 499	0	0	0	0	1
## 500	0	0	0	1	0
## 501	0	0	0	0	0
## 502	0	0	0	1	0
## 503	0	0	0	0	0
## 505	0	0	0	1	0
## 506	1	0	0	1	0
## 507	0	0	0	0	0

```
## 508          0          0          0          1          0
## 510          0          0          0          1          0
## 511          0          0          0          1          0
## 512          0          0          0          0          0
## 516          0          0          0          0          1
## 517          0          0          0          0          0
## 519          0          0          0          1          0
## 521          0          0          0          1          1
## 522          0          0          0          1          0
## 524          0          0          0          0          0
## 526          0          0          0          0          0
## 530          0          0          0          1          0
## 531          0          0          0          0          1
## 532          0          1          1          1          1
## 533          0          0          1          1          1
## 534          0          0          0          0          0
## 535          0          1          0          0          0
## 537          0          0          0          1          0
## 538          1          0          0          1          0
## 542          0          0          0          0          0
## 543          0          0          0          1          0
## 544          0          0          0          0          1
## 549          0          0          0          1          1
## 551          0          0          0          1          1
## 554          0          0          0          0          0
## 555          0          0          0          1          0
## 556          0          0          1          1          1
## 557          0          0          0          1          0
## 558          0          0          0          0          1
## 559          0          1          0          0          0
## 560          0          0          0          1          0
## 563          0          0          0          1          1
## 566          0          0          0          1          0
## 570          0          0          0          0          0
## 573          0          0          0          0          0
## 574          0          0          0          1          1
## 575          0          0          0          1          1
## 576          0          0          0          1          0
## 577          0          0          0          0          1
## 579          0          0          0          1          1
## 580          0          0          0          1          0
## 581          0          0          0          1          1
## 584          0          0          0          1          0
## 585          0          0          0          1          0
## 586          0          0          0          1          0
## 588          0          0          0          1          0
## 589          0          0          1          1          1
## 590          0          0          0          0          0
## 591          0          0          0          1          0
## 593          0          1          1          1          1
## 595          0          0          0          0          0
## 596          0          0          0          1          0
## 597          1          0          0          1          0
## 598          0          1          0          0          1
```

```
## 600            0            0            0            1            1
## 601            0            0            0            1            0
## 604            0            0            0            1            0
## 608            1            0            0            0            0
## 609            0            0            0            1            0
## 610            0            0            0            0            0
## 616            0            0            0            0            0
## 617            0            0            0            1            1
## 619            0            0            0            1            0
## 620            0            0            0            0            0
## 621            1            0            0            1            0
## 623            0            0            0            1            0
## 626            0            0            0            1            0
## 627            0            0            0            0            1
## 628            0            0            0            1            0
## 629            0            0            0            0            0
## 632            0            0            0            1            0
## 633            1            0            0            1            0
## 635            0            1            1            1            1
## 637            0            0            0            1            0
## 638            0            0            0            1            0
## 640            0            0            0            1            1
## 641            0            1            0            1            0
## 642            0            0            0            0            0
## 648            0            1            1            1            1
## 650            0            0            0            1            0
## 655            1            0            0            0            0
## 656            0            0            0            0            0
## 658            0            0            0            0            0
## 660            0            0            0            1            1
## 663            1            0            0            0            0
## 664            0            0            0            0            0
## 666            0            1            0            1            0
## 667            0            1            1            1            1
## 668            0            1            0            1            0
## 670            0            0            0            0            0
## 671            0            0            0            1            0
## 672            1            1            1            1            0
## 674            0            0            0            0            0
## 676            0            0            0            0            0
## 677            0            0            0            0            1
## 678            0            0            0            1            0
## 679            0            0            0            0            0
## 680            0            0            0            0            0
## 682            1            0            0            1            0
## 684            0            0            0            0            0
## 685            0            0            0            1            0
## 688            0            0            0            1            0
## 689            0            0            0            1            0
## 695            0            0            0            1            0
## 696            0            0            0            0            0
## 700            0            0            0            0            0
## 701            0            0            0            1            1
## 702            0            0            0            0            1
```

```
## 703          1              0          0     0     0
## 705          0              0          0     0     0
## 707          0              0          0     1     0
## 708          0              0          0     1     1
## 710          0              0          0     1     0
## 711          0              0          0     1     1
## 713          0              0          0     1     0
## 714          0              0          0     1     0
## 716          0              1          1     1     1
## 717          0              0          0     1     1
## 719          0              0          1     1     1
## 721          0              0          0     0     0
## 723          1              0          1     1     1
## 726          0              0          0     0     0
## 730          0              0          0     0     1
## 731          0              0          0     1     0
## 733          0              0          0     1     0
## 734          0              0          0     1     0
## 735          0              0          0     1     1
## 736          0              0          0     1     0
## 739          0              0          0     1     0
## 741          0              0          0     0     0
## 743          0              0          0     1     0
## 746          0              0          0     0     1
## 747          0              0          0     1     0
## 748          0              1          1     1     0
## 756          0              0          0     0     1
## 757          0              0          0     1     0
## 761          0              0          0     1     0
## 763          0              0          0     1     0
## 764          0              0          0     0     1
## 765          0              0          0     0     1
## 767          0              0          0     0     0
## 769          0              0          0     1     0
## 770          0              1          0     1     0
## 774          0              0          0     1     1
## 775          0              0          0     0     1
## 781          0              0          0     1     1
## 782          1              0          0     1     0
## 784          0              1          0     0     0
## 786          0              0          1     1     1
## 787          0              1          0     1     0
## 788          1              0          0     0     0
## 789          0              0          0     0     0
## 792          0              0          0     1     0
## 796          0              0          0     0     1
## 797          0              0          0     0     0
## 798          0              0          0     1     0
## 802          0              0          0     1     0
## 803          0              0          0     1     0
## 806          1              0          0     0     0
## 807          0              0          0     0     0
## 809          0              0          0     1     0
## 810          0              0          0     0     1
```

## 812	0	0	0	0	0
## 813	0	0	0	0	0
## 814	1	0	0	1	0
## 815	0	0	0	0	1
## 818	0	0	0	1	0
## 819	0	0	0	1	1
## 821	0	0	0	1	0
## 823	0	0	0	0	0
## 825	0	1	0	1	0
## 827	0	0	0	1	0
## 829	0	0	0	1	0
## 830	0	0	0	1	0
## 832	0	0	0	1	0
## 835	1	1	1	1	0
## 836	0	0	0	1	1
## 838	0	0	0	1	0
## 839	0	0	0	0	0
## 840	0	0	0	0	0
## 842	0	1	0	0	0
## 843	0	0	0	0	0
## 846	0	0	0	1	1
## 847	0	0	0	1	0
## 851	0	0	0	0	0
## 852	0	1	0	1	0
## 854	0	0	0	0	0
## 855	0	1	0	1	0
## 856	0	0	0	1	0
## 858	0	0	1	1	1
## 859	0	0	0	1	0
## 860	1	0	0	0	0
## 861	0	0	0	0	0
## 862	0	1	0	1	0
## 863	0	0	0	0	0
## 864	0	0	0	0	0
## 865	0	0	0	1	0
## 866	0	0	0	1	1
## 867	0	0	0	1	0
## 870	0	0	0	0	1
## 871	0	0	0	1	0
## 872	0	0	0	1	0
## 873	0	0	0	1	0
## 875	0	0	0	1	1
## 880	0	0	0	1	0
## 882	0	0	0	1	0
## 885	0	0	0	1	0
## 888	0	0	0	1	0
## 889	1	0	0	0	0
## 891	0	0	0	1	0
## 892	1	0	1	1	1
## 893	0	0	0	1	0
## 895	0	0	0	1	1
## 896	0	1	1	1	1
## 897	1	0	0	1	0
## 898	0	0	0	1	1

```
## 900          1               0          0          0          1
## 901          0               0          0          0          1
## 902          0               0          0          1          0
## 904          0               0          0          1          0
## 905          0               1          0          0          0
## 906          0               0          0          1          1
## 907          0               0          0          0          0
## 908          0               0          0          1          1
## 910          0               0          0          0          1
## 913          0               0          0          1          0
## 914          0               1          0          0          0
## 917          0               0          0          1          0
## 918          0               0          0          1          1
## 919          0               0          0          0          0
## 920          0               1          0          0          1
## 921          0               0          0          0          0
## 924          0               0          0          0          0
## 925          0               1          0          0          0
## 927          0               0          0          1          0
## 928          1               0          0          0          1
## 929          0               0          0          1          0
## 930          0               0          0          0          1
## 932          0               0          0          1          0
## 933          0               1          1          1          1
## 935          0               0          0          1          0
## 937          0               1          0          0          0
## 939          0               1          0          0          0
## 940          0               0          0          1          1
## 942          1               0          0          0          0
## 943          0               0          0          0          1
## 944          0               0          0          0          0
## 945          0               0          0          0          1
## 947          0               0          0          0          0
## 949          0               0          0          1          1
## 951          0               0          0          1          0
## 952          1               0          0          1          0
## 954          0               1          0          1          0
## 955          1               0          0          1          0
## 956          0               0          0          1          0
## 960          0               0          0          0          0
## 961          0               0          0          1          1
## 962          0               0          0          1          0
## 964          0               0          0          0          0
## 965          0               1          0          1          0
## 966          1               0          0          1          0
## 967          0               0          0          0          0
## 972          1               0          1          1          1
## 974          0               0          0          1          0
## 978          0               0          0          1          0
## 980          0               0          0          0          1
## 981          0               0          0          1          1
## 982          1               0          1          1          1
## 983          0               0          0          0          1
## 985          0               0          0          0          0
```

```
## 987           0              0           0          1         0
## 988           0              0           0          1         0
## 993           0              0           0          1         0
## 994           1              0           0          0         0
## 995           0              0           0          0         0
## 996           0              0           0          1         1
## 997           0              0           0          0         0
## 1000          0              0           0          1         1
## 1001          0              1           0          0         0
## 1002          0              0           0          1         0
## 1003          0              0           0          0         0
## 1006          0              1           0          1         0
## 1008          1              0           0          0         0
## 1009          0              0           0          1         0
## 1011          0              1           1          1         1
## 1013          0              0           0          1         1
## 1015          1              0           1          1         1
## 1016          0              0           0          0         0
## 1017          0              1           0          1         0
## 1019          0              0           0          0         0
## 1020          0              0           0          0         0
## 1022          0              0           0          1         1
## 1023          1              0           0          1         0
## 1024          0              0           0          1         0
## 1025          1              0           1          1         0
## 1026          0              0           0          1         0
## 1027          0              0           0          1         0
## 1030          0              0           0          1         0
## 1032          0              0           0          1         0
## 1033          0              0           0          1         1
## 1035          0              1           0          1         0
## 1039          1              0           1          1         1
## 1041          0              0           0          0         0
## 1045          0              0           0          1         1
## 1049          0              0           0          1         0
## 1050          0              0           0          1         0
## 1051          1              0           1          1         1
## 1054          0              0           0          1         0
## 1055          0              0           0          1         0
## 1056          0              1           0          1         0
## 1058          0              0           0          1         0
## 1064          0              0           0          0         1
## 1065          1              0           0          1         0
## 1066          0              0           0          0         1
## 1068          0              0           0          0         0
## 1070          1              0           0          1         0
## 1071          0              0           0          1         0
## 1072          0              0           0          1         0
## 1073          0              0           0          0         0
## 1074          0              0           0          1         1
## 1075          0              0           0          0         1
## 1079          0              0           0          0         1
## 1080          0              1           0          0         0
## 1081          0              0           0          1         0
```

```
## 1083            0                0            0        1        0
## 1084            0                1            0        0        0
## 1085            1                0            0        0        0
## 1086            0                1            0        0        0
## 1088            0                0            0        0        0
## 1089            0                0            0        1        1
## 1090            0                0            0        1        0
## 1092            0                0            0        1        1
## 1093            0                1            0        1        0
## 1094            0                0            0        1        0
## 1095            0                0            0        1        1
## 1096            0                0            0        1        0
## 1099            0                0            0        1        1
## 1100            0                0            0        1        0
## 1101            0                0            0        1        0
## 1104            0                0            0        0        0
## 1105            0                0            0        1        1
## 1107            0                0            0        0        0
## 1108            0                0            0        1        1
## 1109            0                0            0        1        1
## 1110            0                0            0        1        0
## 1112            0                0            0        0        0
## 1113            0                1            0        0        1
## 1115            0                0            0        1        1
## 1116            0                0            0        0        0
## 1117            0                0            0        1        1
## 1118            0                0            0        1        1
## 1119            0                0            0        1        1
## 1122            0                0            0        0        1
## 1123            0                0            0        1        0
## 1124            0                0            0        0        0
## 1126            0                0            0        0        0
## 1127            1                0            0        0        1
## 1132            0                0            0        1        0
## 1135            0                0            0        1        0
## 1136            0                1            0        1        0
## 1137            0                1            0        1        0
## 1138            1                1            1        1        0
## 1140            0                0            0        1        0
## 1141            0                0            0        1        1
## 1143            0                0            0        0        0
## 1144            1                0            0        1        0
## 1145            0                0            0        0        0
## 1147            0                1            0        0        0
## 1148            0                0            0        0        0
## 1150            0                0            0        0        0
## 1151            0                0            0        1        0
## 1154            0                0            0        1        1
## 1156            0                0            0        0        1
## 1157            0                0            0        0        0
## 1158            0                0            0        0        0
## 1161            0                1            0        1        0
## 1163            0                0            0        0        0
## 1167            1                0            0        0        1
```

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## 1168	0	0	0	1	0
## 1169	0	0	0	1	0
## 1170	0	0	0	1	0
## 1173	0	1	0	1	0
## 1175	0	0	0	1	1
## 1176	0	0	0	1	1
## 1178	1	1	1	1	0
## 1180	0	1	0	0	1
## 1182	0	1	0	0	0
## 1183	0	0	0	1	1
## 1184	0	0	0	1	1
## 1185	0	0	0	1	0
## 1186	0	0	0	0	0
## 1188	0	1	0	0	0
## 1189	0	1	0	0	1
## 1191	0	1	0	0	0
## 1193	0	0	0	0	1
## 1194	0	0	0	1	1
## 1195	0	0	0	1	0
## 1196	1	0	0	1	0
## 1198	0	0	0	0	1
## 1199	0	0	0	1	0
## 1200	0	0	0	1	0
## 1201	0	1	0	1	0
## 1203	0	0	0	0	0
## 1204	0	0	0	1	0
## 1205	1	0	0	1	0
## 1207	1	0	0	0	0
## 1212	0	0	0	1	0
## 1213	0	0	0	0	0
## 1215	0	0	0	0	0
## 1216	0	0	0	1	1
## 1217	0	1	0	1	0
## 1218	0	0	0	1	0
## 1219	0	0	0	0	0
## 1222	0	0	0	0	1
## 1224	0	0	0	0	0
## 1225	0	0	0	1	0
## 1226	1	0	0	0	0
## 1227	0	0	0	1	1
## 1229	0	0	0	0	0
## 1231	0	0	0	1	1
## 1232	0	1	1	1	1
## 1234	0	0	0	1	0
## 1235	0	0	0	1	1
## 1236	0	0	0	0	0
## 1237	0	0	0	1	0
## 1238	1	0	1	1	1
## 1239	0	0	0	1	0
## 1240	0	0	0	1	1
## 1242	0	1	1	1	1
## 1243	0	0	0	1	0
## 1244	0	0	0	1	0
## 1245	1	0	0	0	1

```
## 1246         0              0         0    1    0
## 1247         0              0         0    1    0
## 1250         0              0         0    1    1
## 1251         0              0         0    1    0
## 1252         0              0         0    0    0
## 1257         0              0         0    1    0
## 1259         0              0         0    1    1
## 1261         0              0         0    1    1
## 1262         0              0         0    0    0
## 1266         0              0         0    0    0
## 1267         0              0         0    0    1
## 1270         0              0         0    1    1
## 1271         0              0         0    0    1
## 1272         0              0         0    1    0
## 1276         0              0         0    1    0
## 1277         0              0         0    1    1
## 1281         0              0         0    0    0
## 1282         0              0         0    1    0
## 1284         0              0         0    0    0
## 1286         1              0         0    0    1
## 1287         0              0         0    0    1
## 1288         0              0         0    0    0
## 1291         0              0         0    1    0
## 1293         1              0         1    1    1
## 1294         0              0         0    1    1
## 1295         0              0         0    1    1
## 1297         0              0         0    1    0
## 1301         0              0         0    1    0
## 1302         0              0         0    0    1
## 1304         0              1         0    0    0
## 1305         0              0         0    0    1
## 1306         0              0         0    1    0
## 1308         0              0         0    1    1
## 1309         0              0         0    1    1
## 1311         0              0         0    0    0
## 1317         0              0         0    0    0
## 1318         0              0         0    1    0
## 1319         0              0         0    0    0
## 1322         0              0         0    0    0
## 1323         0              1         1    1    1
## 1324         0              0         0    0    0
## 1330         0              0         0    0    0
## 1331         0              0         0    1    1
## 1332         0              0         0    1    0
## 1334         0              0         0    1    0
## 1336         0              0         0    1    1
## 1338         1              0         0    0    0
## 1339         0              0         0    0    0
## 1341         0              0         0    0    0
## 1342         0              0         0    0    0
## 1343         0              0         0    1    0
## 1344         0              0         0    0    1
## 1347         0              0         0    0    0
## 1349         0              0         0    1    0
```

```
## 1352          0              0              0          1          1
## 1353          0              0              0          1          0
## 1354          0              0              0          1          1
## 1358          0              0              0          0          0
## 1359          0              0              0          1          1
## 1361          0              0              0          1          0
## 1362          0              0              0          1          0
## 1363          0              0              0          1          1
## 1365          0              0              0          0          0
## 1366          0              0              0          1          1
## 1371          0              0              0          0          0
## 1372          0              0              0          1          0
## 1373          1              0              0          1          0
## 1374          1              0              0          1          0
## 1377          0              0              0          0          0
## 1380          0              0              0          1          0
## 1381          0              0              0          1          0
## 1382          0              0              0          1          0
## 1383          0              0              0          1          1
## 1385          0              0              0          1          0
## 1386          0              0              0          0          1
## 1387          0              0              0          1          0
## 1388          0              0              0          1          1
## 1389          0              0              0          0          0
## 1390          0              0              0          1          0
## 1392          0              0              0          0          0
## 1393          0              0              0          1          1
## 1395          0              0              0          0          1
## 1396          1              0              0          0          0
## 1397          0              0              0          0          0
## 1399          0              0              0          0          0
## 1400          0              0              0          1          0
## 1401          0              0              0          1          0
## 1403          1              0              0          0          0
## 1405          0              0              0          1          0
## 1406          1              0              1          1          1
## 1407          0              0              0          1          1
## 1409          1              0              0          1          0
## 1411          0              0              0          0          0
## 1412          1              0              1          1          1
## 1414          0              0              0          0          0
## 1415          0              1              0          1          0
## 1416          0              0              0          1          0
## 1420          0              0              0          0          1
## 1421          0              0              1          1          1
## 1423          0              0              1          1          1
## 1424          0              0              0          0          0
## 1426          0              0              0          1          1
## 1428          0              0              0          1          1
## 1429          0              0              0          1          0
## 1431          0              0              0          1          0
## 1432          0              0              0          0          0
## 1433          0              0              0          0          0
## 1436          0              0              0          1          0
```

```
## 1438           0              0              0    0    0
## 1439           0              1              0    1    0
## 1440           0              0              0    0    0
## 1441           0              0              0    1    0
## 1445           1              1              1    1    0
## 1446           0              0              0    0    0
## 1447           0              0              0    0    0
## 1448           0              0              0    1    0
## 1450           0              0              0    1    0
## 1451           0              0              0    1    1
## 1456           0              0              0    0    1
## 1458           0              0              0    0    1
## 1459           0              0              0    1    1
## 1461           0              0              0    1    1
## 1462           0              0              0    1    0
## 1466           0              0              0    1    0
## 1469           0              0              0    1    0
## 1470           0              0              0    1    0
## 1472           0              0              0    1    1
## 1473           0              0              0    1    0
## 1474           0              0              0    1    0
## 1475           0              0              0    1    0
## 1476           0              0              0    0    0
## 1477           0              0              0    0    1
## 1478           0              0              0    1    1
## 1480           0              0              0    0    0
## 1481           0              0              0    0    1
## 1483           0              0              0    1    0
## 1485           0              1              0    1    0
## 1487           1              0              0    0    0
## 1488           0              0              0    1    1
## 1491           0              0              0    1    1
## 1493           0              0              0    1    0
## 1495           0              0              0    1    1
## 1497           0              0              0    0    1
## 1498           0              0              0    1    0
## 1503           0              0              0    1    1
## 1504           0              0              0    0    0
## 1505           1              0              0    1    0
## 1507           0              0              0    1    1
## 1508           0              0              0    0    0
## 1510           0              1              0    0    1
## 1511           0              0              0    1    0
## 1513           0              0              0    0    0
## 1517           0              0              0    0    0
## 1521           0              0              0    1    1
## 1522           0              0              0    1    0
## 1523           0              0              0    0    1
## 1525           1              0              1    1    1
## 1526           0              0              0    0    0
## 1527           0              0              0    1    0
## 1528           0              0              0    0    0
## 1529           0              1              0    1    0
## 1530           0              1              0    0    0
```

## 1531	0	0	0	1	1
## 1532	0	0	0	1	0
## 1533	0	0	0	1	1
## 1534	0	0	0	0	0
## 1537	0	0	0	1	0
## 1538	0	0	0	1	0
## 1539	0	0	0	1	0
## 1541	0	1	1	1	1
## 1542	0	0	0	0	0
## 1543	0	0	0	0	0
## 1544	0	0	0	1	0
## 1545	0	0	0	1	1
## 1546	0	1	0	0	0
## 1547	0	0	0	1	0
## 1550	0	0	0	1	0
## 1552	0	0	0	0	1
## 1554	0	0	0	0	0
## 1556	0	0	0	1	0
## 1557	0	0	0	0	0
## 1558	0	0	0	0	0
## 1559	0	0	0	0	0
## 1560	1	0	0	1	0
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## 1562	0	0	0	1	0
## 1563	0	0	0	1	0
## 1564	0	1	0	0	1
## 1565	0	0	0	1	0
## 1570	0	0	0	0	0
## 1574	0	0	1	1	1
## 1578	1	0	0	1	0
## 1579	0	1	0	1	0
## 1580	1	0	0	0	1
## 1582	0	0	0	0	1
## 1583	1	0	1	1	1
## 1585	0	0	0	0	0
## 1586	0	0	0	0	0
## 1587	0	0	0	0	1
## 1588	0	1	0	1	0
## 1590	1	0	0	1	0
## 1591	0	0	0	0	0
## 1593	1	0	1	1	0
## 1596	0	1	0	1	0
## 1599	0	1	0	0	0
## 1601	0	0	0	1	0
## 1602	0	0	0	0	0
## 1603	0	0	0	1	0
## 1604	1	0	0	1	0
## 1605	1	0	0	0	1
## 1606	0	0	0	1	0
## 1608	0	0	0	0	0
## 1610	0	1	1	1	1
## 1611	0	0	0	0	1
## 1612	0	0	0	0	0
## 1613	0	0	0	0	0

```
## 1614          0              1              0              1              0
## 1616          0              0              0              0              0
## 1620          0              0              0              1              0
## 1621          0              0              0              1              0
## 1622          0              0              0              1              0
## 1624          0              0              0              0              0
## 1625          0              1              0              1              0
## 1628          0              0              0              1              1
## 1629          0              1              0              0              0
## 1630          1              0              0              0              0
## 1631          0              0              0              1              1
## 1633          1              0              0              1              0
## 1636          0              0              0              0              0
## 1638          1              0              0              1              0
## 1640          0              1              0              1              0
## 1641          0              0              0              1              0
## 1643          0              0              0              1              1
## 1645          0              0              0              0              1
## 1646          0              1              0              1              0
## 1648          0              0              0              0              0
## 1652          1              0              0              1              0
## 1654          0              0              0              0              1
## 1655          0              0              0              1              1
## 1656          0              0              0              0              0
## 1657          0              0              0              1              0
## 1660          1              0              1              1              1
## 1661          0              0              0              1              0
## 1662          0              0              0              0              1
## 1664          0              1              0              1              0
## 1665          0              0              0              1              0
## 1666          0              0              0              1              1
## 1667          1              0              0              1              0
## 1672          0              0              0              1              0
## 1676          0              1              0              1              0
## 1677          0              0              0              1              0
## 1678          0              0              0              0              0
## 1680          1              1              1              1              0
## 1683          0              0              0              1              0
## 1684          0              0              0              0              0
## 1685          0              0              0              0              0
## 1687          0              1              0              1              0
## 1689          0              0              0              1              0
## 1690          0              0              0              1              1
## 1691          0              0              0              0              0
## 1692          0              0              0              0              1
## 1694          0              0              0              0              0
## 1695          0              0              0              0              0
## 1696          0              0              0              1              0
## 1697          0              0              0              0              0
## 1701          0              0              0              0              0
## 1703          0              0              0              0              1
## 1705          0              0              0              0              1
## 1706          0              1              0              0              1
## 1708          0              0              0              0              1
```

```
## 1709          0              0            0        0        1
## 1711          0              0            0        1        1
## 1714          0              0            0        1        0
## 1715          0              0            0        0        1
## 1716          0              0            0        1        0
## 1718          0              0            0        0        0
## 1720          0              0            0        1        1
## 1722          0              0            0        1        0
## 1723          0              1            1        1        0
## 1724          0              0            0        1        0
## 1726          0              0            0        1        0
## 1727          0              0            0        1        1
## 1728          0              0            0        0        1
## 1733          0              0            0        1        1
## 1734          0              0            0        1        0
## 1736          0              0            0        1        1
## 1737          0              0            0        0        1
## 1738          0              1            0        0        0
## 1740          0              1            1        1        1
## 1742          0              0            0        0        0
## 1744          0              0            0        1        0
## 1746          0              1            0        0        1
## 1747          0              0            0        1        1
## 1748          0              0            0        0        1
## 1750          0              0            0        0        0
## 1751          0              0            0        0        0
## 1752          0              0            0        0        0
## 1753          1              0            0        0        0
## 1756          0              0            0        1        1
## 1758          0              0            0        1        1
## 1759          0              0            0        0        0
## 1761          0              0            0        1        0
## 1762          0              0            0        0        1
## 1765          0              0            0        1        0
## 1767          0              1            0        0        0
## 1769          1              0            0        0        0
## 1771          0              0            0        0        0
## 1773          0              0            0        0        0
## 1775          0              0            0        0        1
## 1776          0              0            0        0        0
## 1778          0              0            0        1        1
## 1779          0              0            0        0        0
## 1785          1              1            1        0        0
## 1786          0              0            0        1        0
## 1790          1              0            1        1        1
## 1792          0              0            1        1        1
## 1794          1              0            0        1        0
## 1796          0              0            0        0        1
## 1800          0              0            0        1        0
## 1802          0              0            0        0        0
## 1804          0              0            0        1        0
## 1807          0              0            0        0        0
## 1812          0              0            0        0        0
## 1815          0              0            0        1        0
```

```
## 1816          0                    1           1           1           1
## 1817          0                    1           0           1           0
## 1818          0                    0           0           0           1
## 1819          0                    0           0           1           0
## 1821          0                    0           0           1           0
## 1823          1                    1           1           1           0
## 1824          0                    0           0           1           1
## 1825          1                    0           0           0           1
## 1828          0                    0           0           0           1
## 1829          0                    0           0           0           0
## 1830          0                    0           0           1           0
## 1831          0                    0           0           0           0
## 1832          0                    0           0           1           1
## 1833          0                    1           0           1           0
## 1835          0                    0           0           0           0
## 1836          0                    0           0           1           1
## 1838          0                    0           0           1           1
## 1839          0                    0           0           1           0
## 1840          0                    0           0           1           1
## 1842          0                    0           0           1           1
## 1843          0                    0           0           1           0
## 1844          0                    0           0           0           0
## 1845          0                    0           0           0           1
## 1847          0                    0           0           1           0
## 1848          0                    0           0           0           0
## 1849          0                    1           1           1           1
## 1850          0                    0           0           1           0
## 1851          0                    0           0           1           0
## 1852          0                    0           0           0           1
## 1857          0                    0           0           1           0
## 1859          0                    0           0           1           0
## 1860          0                    0           0           0           0
## 1861          1                    0           0           1           0
## 1862          0                    1           1           1           1
## 1866          0                    1           0           0           0
## 1867          0                    0           0           1           0
## 1869          0                    0           0           1           1
## 1870          0                    0           0           1           0
## 1872          0                    0           0           0           0
## 1873          0                    0           0           0           0
## 1875          0                    0           0           1           1
## 1879          0                    1           0           1           0
## 1881          0                    0           0           1           0
## 1883          1                    0           1           1           1
## 1885          0                    0           0           1           0
## 1886          0                    0           1           1           1
## 1888          0                    0           1           1           1
## 1889          0                    0           0           1           0
## 1891          0                    0           0           0           0
## 1892          0                    0           0           0           0
## 1893          0                    0           0           0           1
## 1894          0                    1           0           0           0
## 1895          0                    0           0           1           1
## 1896          0                    0           0           1           0
```

## 1897	0	1	0	0	1
## 1899	0	0	0	1	0
## 1901	0	0	0	1	0
## 1903	0	0	0	1	1
## 1904	0	0	0	0	0
## 1908	0	0	0	0	0
## 1909	0	0	0	1	0
## 1910	0	0	0	0	1
## 1911	0	0	0	0	0
## 1912	0	0	0	0	0
## 1913	1	1	1	1	0
## 1915	0	0	0	1	0
## 1916	0	1	0	0	0
## 1919	1	0	1	1	1
## 1920	0	0	0	0	1
## 1922	0	0	0	1	1
## 1924	0	0	0	1	0
## 1925	0	0	0	0	0
## 1927	0	0	0	1	0
## 1933	0	0	0	0	0
## 1937	0	0	0	1	0
## 1938	1	1	1	1	0
## 1941	0	0	0	1	0
## 1943	0	0	0	1	0
## 1945	0	0	1	1	1
## 1947	0	0	0	1	1
## 1948	0	0	0	1	0
## 1949	0	0	0	0	0
## 1951	0	0	0	0	0
## 1952	0	0	0	1	1
## 1953	0	0	0	1	0
## 1954	0	0	0	1	0
## 1955	0	0	0	1	0
## 1956	0	0	0	1	0
## 1957	0	0	0	0	0
## 1959	0	0	0	1	1
## 1960	0	0	0	0	0
## 1961	0	0	0	1	0
## 1962	0	0	0	0	0
## 1964	0	0	0	0	1
## 1965	0	0	0	0	1
## 1966	0	0	0	1	0
## 1970	0	0	0	1	1
## 1973	0	0	0	1	0
## 1974	0	0	0	0	0
## 1975	0	0	0	0	0
## 1978	0	0	0	1	1
## 1979	0	1	0	1	0
## 1981	0	0	0	1	0
## 1982	0	0	0	1	0
## 1985	0	0	0	1	0
## 1986	0	0	0	0	0
## 1988	0	1	1	1	1
## 1989	0	0	0	1	0

## 1993	0	0	0	0	1
## 1995	0	0	0	0	0
## 1997	0	0	0	0	0
## 1999	1	0	0	0	0
## 2000	0	0	0	1	0
## 2002	1	0	0	0	1
## 2003	1	0	0	0	0
## 2004	0	0	0	1	1
## 2007	0	0	1	1	1
## 2008	0	0	0	1	1
## 2009	0	0	0	1	0
## 2010	0	0	0	0	0
## 2012	0	0	0	1	0
## 2018	0	1	0	0	0
## 2020	0	1	1	1	0
## 2021	0	1	0	0	0
## 2023	0	0	0	0	0
## 2025	1	0	0	0	0
## 2029	0	0	0	0	0
## 2030	0	0	0	1	0
## 2031	0	1	1	1	1
## 2032	0	0	0	1	0
## 2033	0	1	0	0	1
## 2037	0	0	0	1	0
## 2038	0	0	0	0	1
## 2039	0	0	0	1	1
## 2040	0	0	0	1	0
## 2041	0	0	0	0	0
## 2043	0	0	0	1	0
## 2044	0	0	0	1	1
## 2045	0	0	0	1	0
## 2046	0	0	0	1	0
## 2047	1	0	1	1	1
## 2049	0	0	0	1	1
## 2053	0	0	0	0	0
## 2054	0	1	1	1	1
## 2055	0	0	0	0	0
## 2056	0	0	0	1	0
## 2057	0	0	0	0	1
## 2059	0	0	0	0	0
## 2060	0	0	0	1	0
## 2062	1	0	0	0	0
## 2063	0	0	1	1	1
## 2065	0	0	0	0	1
## 2066	0	0	0	1	1
## 2071	0	0	0	0	0
## 2072	0	0	0	1	0
## 2073	0	0	0	1	1
## 2077	0	0	0	0	0
## 2079	0	0	0	0	0
## 2080	0	0	0	1	0
## 2081	0	0	0	1	0
## 2083	0	0	0	1	0
## 2085	0	1	0	1	0

```
## 2086          0              0          0      1      0
## 2089          0              1          0      0      0
## 2091          0              0          0      0      1
## 2093          0              0          0      1      0
## 2095          0              0          0      0      1
## 2096          1              0          0      0      0
## 2097          0              0          0      0      0
## 2099          0              0          0      0      0
## 2100          0              0          0      0      0
## 2101          0              0          0      1      0
## 2102          1              0          0      0      0
## 2106          0              0          0      1      1
## 2108          0              0          0      0      0
## 2109          0              1          0      1      0
## 2112          0              0          0      1      0
## 2114          0              0          0      1      0
## 2115          0              0          0      1      0
## 2118          0              0          0      1      0
## 2119          0              0          0      1      1
## 2120          0              0          0      0      0
## 2124          0              0          0      1      0
## 2125          0              0          0      0      0
## 2127          0              0          0      0      0
## 2128          0              0          0      0      0
## 2129          0              0          0      0      0
## 2130          0              0          0      0      0
## 2131          0              0          0      0      1
## 2133          0              0          0      0      1
## 2134          0              0          0      1      0
## 2141          0              1          0      1      0
## 2142          0              0          0      0      0
## 2143          0              0          0      1      0
## 2145          1              1          1      1      0
## 2146          0              0          0      1      1
## 2148          0              0          0      0      0
## 2150          0              0          0      0      0
## 2153          0              0          0      1      0
## 2155          0              0          0      0      0
## 2156          0              0          0      1      0
## 2157          0              0          0      1      1
## 2158          0              1          0      0      0
## 2159          1              0          0      0      1
## 2160          1              0          0      0      1
## 2165          0              1          0      1      0
## 2166          0              0          0      1      0
## 2168          0              0          0      1      0
## 2169          0              0          0      1      0
## 2170          0              0          0      1      1
## 2172          0              0          0      1      0
## 2173          0              0          0      0      0
## 2174          0              0          0      0      0
## 2177          0              0          0      1      0
## 2178          0              0          0      1      0
## 2179          1              0          1      1      1
```

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## 2180	0	0	0	0	0
## 2182	0	0	0	1	0
## 2183	0	0	0	0	0
## 2185	1	0	0	0	0
## 2187	0	0	0	1	0
## 2189	0	0	0	1	1
## 2190	0	0	0	1	1
## 2193	0	0	0	0	1
## 2197	1	0	0	1	0
## 2198	0	0	0	1	0
## 2199	0	0	0	1	0
## 2201	0	0	0	0	0
## 2203	0	0	0	1	0
## 2204	0	0	0	0	0
## 2205	0	0	0	0	0
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## 2207	0	0	0	0	0
## 2208	1	0	0	1	0
## 2209	0	1	0	1	0
## 2210	0	0	0	0	0
## 2211	0	0	0	0	0
## 2215	0	0	0	1	1
## 2216	1	0	0	1	0
## 2217	0	0	0	0	0
## 2218	1	0	1	1	0
## 2220	0	0	0	1	0
## 2221	0	0	0	1	0
## 2222	0	0	0	1	1
## 2224	0	1	0	0	0
## 2225	0	0	0	1	0
## 2226	0	0	0	0	0
## 2227	0	0	0	1	0
## 2228	0	0	0	1	1
## 2229	0	0	0	1	0
## 2233	0	0	0	1	0
## 2235	0	0	0	1	0
## 2238	0	0	0	1	1
## 2239	0	0	0	1	0
## 2240	0	1	0	0	0
## 2242	0	0	0	1	0
## 2243	0	1	0	1	0
## 2245	0	0	0	0	0
## 2247	1	0	0	0	0
## 2249	0	0	0	1	0
## 2250	0	0	0	1	0
## 2252	0	0	0	0	0
## 2254	0	0	0	1	0
## 2256	0	0	0	1	0
## 2261	0	0	0	0	0
## 2262	1	0	0	1	0
## 2264	0	0	0	1	0
## 2267	0	0	0	0	0
## 2269	1	1	0	0	0
## 2271	0	0	0	1	0

## 2272	0	0	0	1	1
## 2273	0	0	0	1	0
## 2274	0	0	0	1	1
## 2276	0	0	0	1	0
## 2277	1	0	0	0	0
## 2280	0	0	1	1	1
## 2281	0	0	0	0	0
## 2283	0	0	0	1	1
## 2284	0	0	0	0	0
## 2285	0	0	0	1	1
## 2286	1	0	0	1	0
## 2287	0	0	0	1	0
## 2288	0	0	0	1	0
## 2289	0	0	0	1	0
## 2290	0	0	0	0	0
## 2291	0	0	0	1	0
## 2292	0	0	0	0	0
## 2295	0	0	0	0	0
## 2297	0	0	0	0	1
## 2300	0	0	0	0	0
## 2302	0	0	0	0	0
## 2306	0	0	1	1	1
## 2307	0	0	0	0	0
## 2308	0	0	0	1	0
## 2309	0	0	0	1	0
## 2312	0	0	0	1	1
## 2317	0	0	0	1	0
## 2319	0	0	0	1	0
## 2322	0	0	0	0	0
## 2323	0	0	0	1	0
## 2324	0	0	0	0	0
## 2325	0	0	0	1	0
## 2326	0	0	0	0	0
## 2327	0	0	0	0	0
## 2330	0	0	0	1	0
## 2332	0	0	0	0	0
## 2333	0	0	0	1	1
## 2335	0	0	0	0	0
## 2337	0	0	0	0	0
## 2338	1	0	0	0	1
## 2339	0	0	0	0	1
## 2341	0	0	0	0	0
## 2343	0	0	0	1	0
## 2344	0	0	0	1	1
## 2346	1	0	1	1	0
## 2347	0	0	0	0	1
## 2348	0	0	0	0	1
## 2349	0	0	0	1	1
## 2352	0	0	0	1	1
## 2353	0	0	0	0	0
## 2354	0	0	0	1	1
## 2355	0	0	0	1	0
## 2356	0	0	0	1	1
## 2358	0	0	0	0	0

```
## 2360          1              0              1      1      1
## 2361          0              0              0      0      0
## 2362          1              1              1      1      0
## 2363          0              0              0      1      0
## 2366          0              0              0      0      0
## 2369          0              0              0      1      1
## 2370          0              0              0      1      0
## 2371          0              0              0      0      1
## 2372          0              0              0      0      0
## 2373          0              0              0      1      1
## 2374          1              0              0      0      0
## 2375          0              1              0      1      0
## 2376          0              1              1      1      1
## 2378          0              0              0      0      0
## 2379          0              1              1      1      0
## 2380          0              0              0      1      0
## 2381          0              0              0      0      0
## 2385          0              0              0      1      0
## 2389          0              1              0      0      0
## 2391          0              0              0      1      0
## 2394          0              0              0      1      1
## 2395          0              0              0      0      0
## 2396          0              0              0      0      1
## 2398          0              0              0      1      0
## 2399          0              1              0      0      1
## 2402          0              0              0      1      0
## 2403          0              0              0      0      0
## 2406          0              1              0      1      0
## 2407          0              0              0      1      0
## 2408          0              0              0      1      0
## 2409          0              0              0      1      0
## 2410          0              0              0      1      0
## 2411          0              0              0      0      1
## 2413          0              0              0      0      0
## 2414          0              0              0      0      0
## 2416          0              0              0      1      1
## 2417          0              0              0      1      0
## 2421          0              0              0      0      1
## 2422          0              0              0      1      0
## 2423          0              0              0      0      0
## 2425          0              0              0      0      0
## 2426          0              0              0      1      1
## 2427          0              0              0      0      0
## 2428          0              0              0      1      0
## 2431          0              0              0      1      0
## 2433          0              0              0      0      1
## 2436          0              0              0      1      0
## 2439          0              0              0      0      1
## 2440          0              0              0      0      1
## 2442          0              0              0      1      1
## 2443          0              0              0      0      0
## 2444          1              0              1      1      1
## 2445          0              0              0      1      1
## 2447          0              0              0      1      0
```

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```
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## 2453            0              0            0       1       0
## 2458            0              0            0       1       1
## 2459            0              0            0       1       1
## 2461            0              0            0       1       0
## 2462            0              0            0       1       0
## 2463            0              0            0       1       0
## 2464            0              0            0       1       0
## 2465            0              0            0       1       0
## 2466            0              0            0       1       0
## 2467            0              0            0       1       0
## 2468            0              1            0       1       0
## 2469            0              0            0       1       1
## 2470            0              0            0       0       1
## 2472            0              0            0       1       0
## 2473            0              0            0       0       0
## 2476            0              0            0       0       0
## 2477            0              0            0       1       0
## 2480            0              0            0       1       0
## 2482            0              0            0       0       0
## 2483            0              0            0       0       1
## 2484            0              1            0       0       0
## 2486            0              0            0       0       1
## 2487            0              0            0       0       0
## 2489            0              0            0       1       0
## 2492            0              0            0       1       0
## 2493            0              0            0       1       0
## 2494            0              0            0       0       0
## 2495            0              0            0       1       0
## 2496            0              0            0       0       1
## 2499            0              0            0       0       0
## 2501            0              0            0       1       0
## 2502            0              0            0       1       0
## 2503            1              0            0       1       0
## 2504            0              0            0       1       1
## 2506            0              0            0       0       0
## 2507            0              0            0       1       1
## 2508            0              0            0       1       1
## 2509            0              1            0       1       0
## 2511            0              0            0       1       1
## 2512            1              0            1       1       1
## 2515            0              1            0       0       0
## 2516            0              0            0       1       0
## 2517            0              0            0       0       0
## 2519            0              0            0       0       1
## 2520            0              0            0       1       1
## 2521            0              0            0       1       0
## 2522            0              0            0       1       1
## 2523            0              0            0       1       0
## 2525            0              0            0       1       0
## 2526            0              0            0       1       1
```

## 2528	0	0	0	0	0
## 2529	0	0	0	0	1
## 2530	0	0	0	1	1
## 2531	0	0	0	1	0
## 2532	0	0	0	1	0
## 2533	0	0	0	0	1
## 2534	1	0	0	1	0
## 2535	0	0	0	1	0
## 2537	1	0	0	1	0
## 2538	0	0	0	1	0
## 2539	0	0	0	1	1
## 2542	1	0	0	1	0
## 2543	0	0	0	1	0
## 2544	0	0	0	0	0
## 2550	0	0	0	0	1
## 2553	0	0	0	0	0
## 2554	0	0	0	0	0
## 2555	0	0	0	0	0
## 2556	0	0	0	0	0
## 2558	0	0	0	1	0
## 2562	1	1	0	0	0
## 2563	0	0	0	0	1
## 2565	0	0	0	1	0
## 2566	0	0	0	1	0
## 2567	0	0	0	0	0
## 2569	0	0	0	1	0
## 2570	0	0	0	0	0
## 2571	0	0	0	1	0
## 2572	0	0	0	0	0
## 2574	0	0	0	1	1
## 2575	0	0	0	1	0
## 2576	0	0	0	1	0
## 2578	0	0	0	1	0
## 2579	0	0	0	0	1
## 2580	0	0	0	0	0
## 2582	0	0	0	1	0
## 2583	0	0	0	1	0
## 2588	0	0	0	1	0
## 2589	0	0	0	0	0
## 2590	0	0	0	1	1
## 2591	1	0	1	1	1
## 2592	0	0	0	0	0
## 2593	0	0	0	0	0
## 2595	0	0	0	0	0
## 2599	0	0	0	1	0
## 2601	0	0	0	0	0
## 2602	0	0	0	0	0
## 2603	1	0	1	1	1
## 2605	0	0	0	0	0
## 2607	0	0	0	1	0
## 2608	0	1	1	1	1
## 2610	0	1	0	0	0
## 2611	0	0	0	0	0
## 2612	0	0	0	1	0

## 2613	0	0	0	0	0
## 2617	0	0	0	1	0
## 2619	0	0	0	1	0
## 2620	0	0	0	0	1
## 2621	0	0	0	0	0
## 2624	1	1	1	0	1
## 2625	0	0	0	0	0
## 2626	0	0	0	1	0
## 2628	0	0	0	1	0
## 2630	0	0	0	1	0
## 2632	0	0	0	1	0
## 2633	0	0	0	1	0
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## 2640	0	0	0	1	0
## 2642	0	0	0	1	0
## 2643	0	0	0	1	0
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## 2649	0	0	0	0	0
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## 2652	0	0	0	0	0
## 2653	0	0	0	1	0
## 2657	0	0	0	0	0
## 2658	0	0	0	1	0
## 2659	0	0	0	0	0
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## 2662	0	0	0	1	0
## 2663	0	0	0	0	0
## 2665	1	0	0	1	0
## 2667	0	0	0	1	0
## 2668	0	0	0	1	0
## 2669	0	0	0	1	0
## 2670	0	1	0	0	1
## 2671	0	0	0	0	0
## 2675	0	0	0	1	0
## 2676	0	0	1	1	1
## 2677	0	1	0	1	0
## 2679	1	0	0	1	0
## 2680	0	0	0	1	0
## 2684	0	0	0	0	0
## 2685	0	1	1	1	1
## 2686	0	0	0	1	0
## 2687	0	0	0	0	0
## 2688	0	0	0	1	0
## 2689	0	0	0	1	0
## 2690	0	0	0	0	0
## 2691	0	0	0	1	0
## 2692	1	0	0	1	0
## 2694	0	0	0	1	0
## 2696	0	0	0	0	0
## 2697	0	0	0	1	0
## 2699	0	0	0	1	1
## 2700	0	0	0	0	0

## 2702	0	0	0	1	0
## 2706	0	0	0	1	0
## 2707	0	0	0	1	0
## 2709	0	0	0	0	1
## 2710	0	0	0	0	0
## 2714	0	0	0	1	0
## 2715	1	0	0	0	1
## 2721	0	0	0	0	1
## 2722	1	0	0	1	0
## 2724	0	0	0	1	0
## 2730	0	0	0	1	0
## 2732	0	0	0	1	0
## 2734	0	0	0	0	0
## 2735	0	0	0	1	0
## 2737	0	0	0	0	0
## 2740	0	0	0	1	0
## 2743	0	0	0	1	0
## 2744	0	0	0	1	1
## 2747	0	0	0	1	1
## 2748	0	0	0	0	1
## 2749	0	0	1	1	1
## 2753	0	0	0	1	0
## 2754	1	0	0	0	0
## 2756	0	0	0	1	1
## 2758	0	0	0	0	0
## 2759	0	1	0	0	1
## 2760	0	0	0	0	0
## 2762	0	0	0	0	1
## 2763	0	0	0	1	0
## 2764	0	0	0	1	0
## 2765	0	0	0	0	1
## 2766	0	0	0	1	0
## 2768	0	0	0	1	0
## 2769	0	0	0	1	0
## 2774	1	0	0	1	0
## 2778	0	0	0	1	1
## 2780	1	0	0	1	0
## 2781	0	0	0	0	0
## 2782	0	0	0	0	0
## 2783	0	0	0	0	0
## 2784	0	0	1	1	1
## 2785	1	0	0	0	0
## 2786	0	1	1	1	1
## 2787	0	0	0	0	1
## 2788	0	0	0	0	0
## 2789	0	0	0	1	0
## 2791	0	0	0	1	1
## 2793	0	0	0	1	0
## 2794	0	1	1	1	1
## 2796	0	0	0	0	0
## 2797	0	0	0	0	0
## 2799	0	0	0	1	0
## 2803	1	1	1	1	0
## 2805	0	0	0	0	0

## 2809	0	0	0	1	0
## 2810	1	1	1	1	1
## 2811	0	0	0	0	0
## 2813	1	0	1	1	1
## 2815	0	0	0	1	1
## 2816	0	0	0	0	0
## 2818	0	0	0	1	0
## 2819	0	0	0	1	1
## 2822	0	0	0	1	0
## 2825	0	0	0	0	0
## 2826	0	0	0	1	0
## 2828	0	0	0	1	1
## 2831	0	0	0	1	0
## 2833	1	0	1	1	1
## 2834	0	0	0	1	0
## 2835	0	1	0	0	0
## 2836	0	0	0	1	0
## 2838	0	0	0	0	1
## 2839	1	0	1	1	1
## 2840	0	0	0	1	0
## 2841	0	1	0	0	0
## 2842	1	0	1	1	0
## 2844	0	0	0	1	1
## 2846	0	0	0	0	0
## 2848	0	0	0	1	0
## 2850	0	0	0	1	1
## 2851	0	0	0	0	0
## 2852	0	0	0	1	0
## 2853	0	0	0	1	1
## 2857	1	0	0	1	0
## 2858	1	0	0	0	0
## 2859	0	0	0	1	1
## 2860	1	0	0	1	0
## 2862	0	0	0	0	1
## 2863	0	0	0	1	0
## 2867	0	1	1	1	1
## 2868	0	0	0	1	0
## 2869	0	0	0	1	1
## 2871	0	1	0	0	0
## 2873	0	0	0	0	0
## 2875	1	0	0	1	0
## 2876	0	0	0	1	1
## 2881	0	0	0	1	0
## 2882	0	0	0	1	0
## 2884	0	0	0	1	0
## 2885	0	0	0	1	1
## 2890	0	0	0	0	0
## 2891	0	0	0	1	1
## 2893	0	0	0	1	0
## 2896	0	0	0	1	0
## 2898	0	0	0	0	0
## 2900	0	0	0	0	0
## 2901	0	0	0	0	0
## 2904	0	0	0	1	1

## 2906	0	0	0	1	0
## 2908	0	0	0	0	1
## 2909	0	0	0	1	0
## 2910	0	1	0	0	1
## 2911	1	0	0	1	0
## 2912	0	0	0	1	0
## 2913	1	0	0	0	0
## 2915	0	0	0	1	0
## 2917	0	0	0	1	0
## 2920	0	0	1	1	1
## 2924	0	0	0	0	0
## 2925	0	0	0	1	1
## 2927	0	0	0	1	1
## 2928	0	0	0	0	0
## 2929	0	0	0	1	0
## 2930	0	0	0	0	0
## 2931	0	0	0	1	0
## 2932	0	0	0	0	1
## 2933	0	0	0	0	1
## 2934	0	0	0	1	0
## 2936	0	0	0	1	1
## 2938	0	0	0	1	1
## 2939	0	0	0	1	0
## 2941	0	0	0	1	0
## 2942	0	0	0	0	0
## 2943	0	0	0	1	0
## 2945	0	0	0	0	0
## 2947	0	0	0	1	0
## 2949	0	0	0	0	1
## 2950	0	0	0	1	0
## 2951	0	0	0	1	0
## 2953	0	0	0	0	0
## 2957	1	0	1	1	1
## 2959	0	0	0	0	0
## 2960	0	0	0	0	0
## 2961	0	0	0	0	1
## 2962	0	0	0	1	0
## 2965	0	0	0	1	0
## 2966	0	0	0	0	1
## 2967	0	0	0	1	1
## 2968	0	0	0	1	1
## 2969	1	0	0	0	0
## 2970	0	0	0	0	0
## 2972	0	0	1	1	1
## 2973	0	0	1	1	1
## 2974	0	0	0	1	0
## 2975	0	0	0	1	0
## 2976	0	0	0	0	1
## 2977	0	1	1	1	1
## 2978	0	1	0	1	0
## 2979	0	0	0	1	0
## 2980	0	0	0	1	0
## 2981	0	0	0	0	0
## 2982	0	0	0	0	0

```
## 2984          0               0          0      1      1
## 2985          0               0          0      0      0
## 2986          0               0          0      0      0
## 2988          0               0          0      0      0
## 2991          0               1          0      0      0
## 3000          0               0          0      0      1
## 3001          1               0          0      0      0
## 3002          0               0          0      1      1
## 3003          0               0          0      0      0
## 3005          0               0          0      1      1
## 3006          1               0          0      1      0
## 3008          0               0          0      0      1
## 3009          0               0          0      0      1
## 3010          0               0          0      1      0
## 3013          0               0          0      1      0
## 3014          0               0          0      1      1
## 3017          0               0          0      1      0
## 3018          0               0          0      0      0
## 3021          0               0          0      1      0
## 3024          0               0          0      0      1
## 3025          0               0          0      1      1
## 3026          0               0          0      0      0
## 3027          0               0          0      0      1
## 3028          0               0          0      1      0
## 3032          0               0          0      0      1
## 3033          0               0          0      1      0
## 3038          1               0          1      1      0
## 3039          0               0          0      1      0
## 3040          1               0          0      0      1
## 3041          0               0          0      1      0
## 3042          0               0          0      1      0
## 3046          0               0          0      1      0
## 3047          0               0          0      1      0
## 3049          0               0          0      1      0
## 3050          0               0          0      0      0
## 3054          0               0          0      1      0
## 3057          0               0          0      1      0
## 3058          0               1          0      1      0
## 3059          0               0          0      1      0
## 3062          0               1          0      1      0
## 3063          0               0          0      0      1
## 3064          0               0          0      0      0
## 3067          0               0          0      1      0
## 3068          0               1          0      0      0
## 3069          0               0          0      0      0
## 3070          0               0          0      1      1
## 3073          0               0          0      0      0
## 3076          0               0          0      0      0
## 3077          0               0          0      0      1
## 3079          0               1          1      1      1
## 3080          0               0          0      1      1
## 3081          0               0          0      1      0
## 3083          0               0          0      1      0
## 3084          0               1          1      1      0
```

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```
## 3086           0                  0              0           0           1
## 3090           0                  0              0           0           0
## 3091           0                  0              0           1           0
## 3093           0                  1              0           0           0
## 3094           0                  0              0           0           1
## 3099           0                  0              0           0           0
## 3100           0                  0              0           0           1
## 3101           0                  0              0           0           1
## 3102           0                  0              0           0           0
## 3103           0                  0              0           0           1
## 3104           0                  0              0           1           0
## 3105           0                  0              0           0           1
## 3108           0                  0              0           0           0
## 3110           0                  1              0           1           0
## 3111           0                  0              0           0           1
## 3112           0                  0              0           1           0
## 3114           0                  0              0           1           0
## 3115           0                  1              0           1           0
## 3116           0                  0              0           0           0
## 3118           0                  0              0           1           0
## 3119           0                  0              0           1           0
## 3120           0                  0              0           1           0
## 3122           0                  0              0           0           1
## 3126           0                  0              0           1           1
## 3127           0                  0              0           0           1
## 3128           0                  0              0           1           0
## 3130           0                  1              0           0           1
## 3131           0                  1              0           0           1
## 3132           0                  0              0           1           1
## 3135           0                  0              0           1           0
## 3136           0                  0              0           0           0
## 3137           0                  1              1           0           1
## 3140           0                  0              0           1           0
## 3142           1                  0              0           1           0
## 3143           1                  1              1           1           1
## 3144           0                  0              0           1           0
## 3145           0                  0              0           1           0
## 3146           1                  0              0           0           0
## 3147           0                  0              0           1           0
## 3149           0                  0              0           0           0
## 3150           0                  0              0           1           1
## 3151           1                  0              0           0           0
## 3152           0                  0              0           0           0
## 3153           0                  0              0           0           0
## 3154           0                  0              0           0           1
## 3156           0                  0              0           1           0
## 3157           0                  0              0           0           0
## 3159           0                  1              0           1           0
## 3161           1                  1              1           0           1
## 3162           0                  0              0           1           0
## 3163           0                  0              0           1           0
## 3165           0                  0              0           1           1
## 3166           0                  0              0           0           1
## 3168           0                  0              0           0           1
```

## 3169	0	0	0	1	0
## 3170	0	0	0	0	0
## 3171	0	0	0	0	0
## 3172	0	0	0	0	0
## 3173	0	0	0	0	0
## 3174	0	0	0	1	0
## 3176	0	0	0	0	0
## 3177	0	0	0	1	0
## 3178	0	0	0	0	1
## 3179	0	0	0	0	0
## 3182	0	0	0	1	0
## 3183	0	1	0	1	0
## 3184	0	0	0	1	0
## 3185	0	0	0	1	0
## 3186	0	0	0	1	0
## 3187	0	0	0	0	0
## 3188	0	0	0	0	0
## 3189	0	0	0	0	1
## 3190	0	0	0	0	0
## 3191	0	0	0	0	0
## 3192	0	0	0	0	1
## 3193	0	0	0	0	0
## 3195	0	0	0	0	0
## 3196	0	0	0	0	0
## 3200	0	0	0	1	0
## 3202	0	0	0	0	0
## 3203	0	1	0	1	0
## 3204	0	0	0	1	0
## 3206	0	0	0	1	1
## 3207	0	0	0	1	1
## 3208	0	0	0	1	1
## 3211	0	1	0	0	0
## 3212	0	0	0	1	0
## 3213	0	0	0	0	0
## 3214	0	0	0	1	0
## 3215	0	0	0	1	0
## 3216	0	0	0	1	0
## 3219	0	0	0	1	0
## 3220	0	0	0	0	0
## 3221	0	0	0	1	0
## 3222	0	1	0	1	0
## 3225	0	1	0	1	0
## 3226	0	0	0	0	1
## 3229	0	0	0	0	1
## 3230	0	0	0	0	0
## 3232	0	1	0	1	0
## 3233	0	0	0	1	0
## 3238	0	0	1	1	1
## 3240	0	0	0	1	0
## 3241	0	0	0	1	0
## 3242	0	0	0	0	0
## 3243	0	0	0	1	0
## 3244	0	0	0	1	0
## 3245	0	0	0	1	0

```
## 3246              0              0         0      1      1
## 3247              0              0         0      1      0
## 3249              0              0         0      0      0
## 3250              0              0         0      0      0
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## 3252              0              0         0      0      1
## 3254              0              0         0      0      1
## 3256              0              0         0      1      1
## 3258              0              0         0      1      0
## 3259              0              1         0      1      0
## 3261              0              0         0      0      0
## 3262              0              0         0      0      0
## 3265              0              0         0      1      0
## 3266              0              0         0      1      0
## 3267              0              0         0      1      1
## 3268              0              0         0      1      0
## 3271              1              0         0      1      0
## 3273              0              0         0      0      0
## 3274              0              0         0      0      0
## 3276              0              0         0      1      0
## 3279              0              0         0      1      0
## 3280              0              0         0      0      0
## 3281              0              0         0      0      0
## 3283              0              0         0      1      0
## 3284              0              0         0      1      0
## 3285              0              0         0      0      1
## 3286              0              0         0      1      0
## 3287              0              0         0      0      1
## 3291              0              0         0      0      0
## 3294              0              1         0      1      0
## 3300              0              0         0      1      0
## 3301              0              0         0      1      0
## 3303              0              0         0      0      0
## 3305              0              0         0      1      0
## 3307              0              0         0      1      0
## 3309              0              0         0      0      1
## 3311              0              0         0      1      1
## 3312              0              0         0      0      0
## 3313              0              0         0      0      0
## 3315              0              0         0      1      0
## 3317              0              0         0      1      0
## 3318              0              0         0      0      0
## 3319              1              0         0      0      0
## 3322              0              0         0      1      0
## 3323              0              0         1      1      1
## 3325              0              1         0      1      0
## 3326              0              0         0      0      0
## 3327              1              0         0      1      0
## 3328              1              1         1      1      1
## 3331              0              0         0      1      0
## 3332              0              0         0      0      1
## 3334              0              0         0      1      0
## 3335              0              0         0      0      0
## 3337              0              0         0      1      0
```

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```
## 3338          0              0          0      1      0
## 3339          0              1          0      1      0
## 3341          0              0          0      0      0
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## 3347          0              0          0      1      1
## 3349          0              0          0      0      0
## 3350          0              0          0      0      0
## 3353          0              0          0      1      0
## 3354          0              0          0      1      1
## 3355          0              0          0      1      0
## 3356          0              0          0      1      1
## 3357          1              0          0      0      0
## 3359          0              0          0      0      0
## 3360          0              0          0      0      0
## 3361          0              0          0      0      0
## 3364          0              0          0      1      0
## 3365          0              0          0      0      0
## 3367          0              0          0      1      1
## 3368          0              0          0      1      0
## 3369          1              0          1      0      1
## 3370          0              0          0      1      0
## 3371          0              1          0      1      0
## 3373          0              0          0      1      0
## 3375          0              0          0      0      0
## 3376          0              0          0      1      0
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## 3381          0              0          0      0      1
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## 3391          0              0          0      0      0
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## 3395          0              0          0      1      0
## 3396          0              0          0      0      0
## 3397          0              0          0      1      1
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## 3400          0              0          0      0      0
## 3401          0              0          0      0      0
## 3402          0              0          0      1      1
## 3403          0              0          0      1      1
## 3405          0              0          0      0      0
## 3407          0              0          0      0      1
## 3409          0              0          0      1      0
## 3412          0              0          0      0      0
## 3413          0              0          0      0      0
## 3415          0              0          0      0      0
## 3419          0              0          1      1      1
## 3421          0              0          0      1      1
## 3422          0              0          0      0      1
## 3423          0              0          0      0      1
```

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```
## 3424          0                    0                 0       0       0
## 3426          0                    0                 0       1       0
## 3427          0                    0                 0       1       0
## 3429          0                    0                 0       0       0
## 3430          0                    0                 0       0       1
## 3433          0                    0                 0       0       1
## 3434          0                    1                 0       0       0
## 3435          0                    0                 0       0       0
## 3436          0                    1                 0       0       0
## 3437          0                    0                 0       0       0
## 3438          0                    1                 0       1       0
## 3440          0                    0                 1       1       1
## 3442          0                    1                 1       1       1
## 3443          0                    0                 0       1       0
## 3444          0                    0                 0       0       0
## 3446          0                    0                 0       0       1
## 3448          0                    0                 0       0       0
## 3452          0                    0                 0       1       1
## 3453          0                    0                 0       0       0
## 3455          0                    0                 0       1       0
## 3458          0                    0                 0       1       0
## 3461          0                    0                 0       1       1
## 3462          0                    0                 0       1       0
## 3463          0                    1                 0       1       0
## 3464          0                    0                 0       1       0
## 3465          1                    0                 1       1       1
## 3466          0                    0                 0       0       0
## 3467          0                    0                 0       0       1
## 3468          1                    0                 0       1       0
## 3470          0                    0                 0       1       0
## 3473          1                    0                 0       1       0
## 3474          0                    1                 0       0       0
## 3475          0                    0                 0       1       0
## 3476          0                    0                 0       0       0
## 3478          0                    0                 0       1       1
## 3480          0                    0                 0       1       0
## 3481          0                    1                 0       1       0
## 3483          0                    1                 0       0       0
## 3484          0                    0                 0       1       0
## 3485          0                    0                 0       0       0
## 3486          0                    0                 0       0       0
## 3487          0                    0                 0       0       1
## 3489          0                    0                 0       1       0
## 3490          1                    1                 0       0       0
## 3494          0                    0                 0       1       0
## 3495          0                    0                 0       0       0
## 3496          0                    0                 0       1       0
## 3497          0                    0                 0       0       0
## 3498          0                    0                 0       0       0
## 3501          0                    0                 0       1       1
## 3502          0                    1                 0       1       0
## 3503          0                    0                 0       1       0
## 3504          0                    0                 0       1       0
## 3505          0                    1                 0       1       0
```

## 3506	0	0	0	1	1
## 3507	0	0	1	1	1
## 3510	0	0	0	0	0
## 3511	0	0	0	0	0
## 3513	0	0	0	0	1
## 3514	0	0	0	0	0
## 3515	0	0	0	1	0
## 3516	0	0	0	0	0
## 3518	1	0	0	0	1
## 3519	0	0	0	0	0
## 3521	0	0	0	0	0
## 3522	0	0	0	1	0
## 3525	0	0	0	0	0
## 3531	0	1	0	0	0
## 3532	0	0	0	0	1
## 3533	0	0	0	1	1
## 3534	0	0	0	0	0
## 3540	0	0	0	0	0
## 3543	1	0	0	1	0
## 3544	0	0	0	0	0
## 3545	0	0	0	0	0
## 3547	0	0	0	1	1
## 3548	0	0	0	1	0
## 3549	0	0	0	0	1
## 3550	0	0	0	0	0
## 3551	0	0	0	0	0
## 3552	0	0	0	0	0
## 3554	0	0	0	0	0
## 3556	0	0	0	1	0
## 3558	0	0	0	1	1
## 3559	0	0	0	1	0
## 3560	0	0	0	0	0
## 3561	0	0	0	1	0
## 3563	1	1	1	1	0
## 3565	0	0	0	0	0
## 3566	0	0	0	0	1
## 3567	0	0	0	1	1
## 3568	0	0	0	1	0
## 3569	0	0	0	0	1
## 3571	0	0	0	1	1
## 3572	1	0	0	0	0
## 3575	0	0	0	0	1
## 3578	0	0	0	1	0
## 3579	1	0	0	1	0
## 3580	0	1	1	0	1
## 3581	0	0	0	1	1
## 3582	0	0	0	0	1
## 3584	0	0	0	0	0
## 3585	0	0	0	1	0
## 3589	0	0	0	1	0
## 3590	0	0	0	0	0
## 3591	0	0	0	1	1
## 3592	0	0	0	1	1
## 3593	0	0	0	0	0

## 3595	0	0	0	1	0
## 3597	0	0	0	0	0
## 3598	0	0	0	1	0
## 3599	0	0	0	0	0
## 3600	0	0	1	1	1
## 3603	0	0	0	1	1
## 3605	0	0	0	1	0
## 3609	0	0	0	0	0
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## 3613	1	1	1	0	1
## 3614	1	0	0	1	0
## 3615	1	0	0	1	0
## 3617	0	0	0	1	0
## 3618	0	0	0	0	0
## 3622	0	0	0	1	0
## 3624	0	0	0	0	0
## 3625	0	0	0	0	0
## 3626	0	0	0	1	0
## 3628	0	0	0	0	1
## 3629	0	0	0	0	1
## 3630	0	0	0	1	1
## 3631	0	0	0	1	0
## 3632	0	0	0	0	0
## 3636	0	0	0	1	0
## 3637	0	0	0	1	0
## 3638	0	0	0	1	0
## 3641	0	0	0	0	1
## 3642	0	0	0	0	0
## 3645	0	0	0	0	0
## 3646	0	1	0	0	1
## 3652	1	0	0	0	1
## 3657	0	1	0	0	0
## 3658	0	0	0	1	1
## 3660	0	0	0	0	0
## 3662	1	1	1	0	1
## 3668	0	0	0	1	0
## 3669	1	0	0	1	0
## 3672	0	0	0	1	0
## 3673	0	0	0	1	0
## 3675	0	1	0	0	0
## 3679	0	0	0	0	0
## 3680	0	0	0	1	0
## 3682	0	0	0	0	0
## 3683	0	0	0	0	0
## 3684	0	1	0	0	0
## 3685	0	0	0	1	0
## 3686	0	0	0	0	0
## 3687	0	0	0	0	0
## 3688	0	0	0	0	0
## 3689	0	1	0	1	0
## 3691	0	0	0	0	0
## 3692	0	0	0	0	1
## 3693	0	0	0	1	0
## 3694	0	0	0	0	0

```
## 3695          0              0          0       1       0
## 3696          0              0          0       1       0
## 3697          0              0          0       0       1
## 3698          0              0          0       0       0
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## 3701          0              1          0       0       0
## 3703          1              0          0       0       0
## 3705          1              0          0       0       0
## 3706          0              0          0       1       0
## 3707          0              0          0       1       0
## 3708          0              0          0       0       0
## 3709          0              0          0       0       0
## 3711          0              0          0       1       1
## 3712          0              0          0       1       0
## 3714          0              0          0       1       1
## 3717          0              0          0       0       0
## 3718          0              0          0       0       0
## 3719          0              0          0       0       1
## 3720          0              0          0       1       0
## 3721          1              0          0       1       0
## 3722          0              1          1       1       1
## 3724          0              0          0       1       0
## 3726          0              0          0       0       0
## 3728          0              1          1       1       1
## 3729          1              0          0       0       0
## 3730          0              0          0       1       0
## 3732          0              0          0       1       0
## 3736          0              0          0       1       0
## 3737          0              0          0       0       0
## 3739          0              0          0       0       1
## 3740          0              0          0       0       0
## 3741          0              0          0       1       1
## 3743          0              0          1       1       1
## 3744          0              0          0       1       1
## 3745          0              0          0       0       0
## 3746          0              0          0       1       0
## 3747          0              1          1       1       1
## 3748          1              0          0       1       0
## 3749          0              0          0       1       0
## 3750          0              0          0       1       0
## 3752          0              0          0       1       0
## 3755          0              0          0       1       1
## 3757          0              0          0       0       0
## 3760          0              0          0       1       1
## 3761          0              0          0       1       1
## 3762          0              0          0       1       0
## 3763          0              0          0       1       0
## 3764          0              0          0       0       1
## 3766          0              0          0       1       0
## 3767          1              0          0       1       0
## 3768          0              0          0       1       1
## 3771          0              0          0       0       0
## 3772          0              0          0       0       1
## 3773          0              0          0       1       0
```

```
## 3778            0              0          0      1      0
## 3779            0              0          0      0      0
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## 3783            0              1          0      1      0
## 3784            0              0          0      0      0
## 3785            1              0          0      1      0
## 3786            0              0          0      1      0
## 3788            0              1          1      1      0
## 3789            0              0          0      1      1
## 3790            0              0          0      1      1
## 3791            0              0          0      1      1
## 3792            0              0          0      0      0
## 3794            0              0          0      1      0
## 3795            0              1          0      1      0
## 3796            0              0          0      1      0
## 3798            0              0          0      1      0
## 3800            0              0          0      0      1
## 3801            0              0          0      1      0
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## 3804            0              0          0      1      0
## 3805            0              0          0      1      0
## 3806            0              0          0      0      0
## 3807            0              0          0      0      0
## 3811            0              0          0      0      0
## 3814            0              0          0      1      0
## 3815            0              0          0      0      0
## 3818            0              0          0      0      0
## 3819            0              0          0      0      0
## 3821            0              0          0      1      1
## 3823            1              0          0      0      0
## 3825            0              1          0      0      1
## 3826            0              0          0      0      1
## 3828            0              0          0      1      0
## 3830            0              0          0      1      1
## 3831            0              1          0      1      0
## 3833            0              0          0      0      1
## 3834            0              0          0      1      0
## 3835            0              0          0      1      0
## 3837            0              0          0      1      1
## 3839            0              1          0      0      0
## 3840            0              0          0      1      0
## 3841            0              0          0      0      0
## 3845            0              0          0      0      0
## 3846            0              0          0      0      0
## 3847            0              0          0      0      0
## 3850            0              1          0      0      0
## 3852            0              0          0      1      0
## 3855            0              0          0      1      0
## 3857            0              0          0      1      0
## 3859            1              0          0      0      1
## 3861            0              0          0      1      1
## 3862            0              0          0      0      0
## 3864            0              0          0      1      0
```

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## 3865	1	0	0	0	1
## 3866	0	0	0	0	0
## 3867	0	1	0	0	1
## 3871	0	0	0	0	0
## 3874	0	0	0	1	0
## 3875	0	0	0	0	0
## 3877	0	0	0	1	0
## 3878	0	0	0	0	0
## 3883	0	0	0	0	1
## 3885	0	0	0	1	1
## 3887	0	0	1	1	1
## 3888	0	1	0	1	0
## 3889	0	0	0	1	1
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## 3894	0	0	0	1	0
## 3896	0	0	0	0	0
## 3897	0	0	1	1	1
## 3898	0	0	0	0	0
## 3899	0	0	0	1	0
## 3902	0	0	0	1	0
## 3905	0	0	0	1	1
## 3906	0	0	0	0	0
## 3907	0	0	0	1	0
## 3910	0	0	0	1	0
## 3911	0	0	0	1	0
## 3912	0	0	0	0	1
## 3915	0	0	0	0	0
## 3916	0	0	0	1	1
## 3918	0	0	0	1	0
## 3919	0	1	0	1	0
## 3920	1	0	0	0	0
## 3921	0	1	1	1	1
## 3922	0	0	0	1	0
## 3923	0	0	0	1	0
## 3925	0	0	0	1	0
## 3926	0	0	0	1	0
## 3927	0	0	0	1	0
## 3928	0	0	0	0	1
## 3930	0	0	0	0	0
## 3931	0	0	0	0	0
## 3932	0	0	0	1	0
## 3934	0	0	0	1	0
## 3935	0	0	0	0	1
## 3936	0	0	0	1	0
## 3937	0	1	0	0	0
## 3938	0	0	0	0	1
## 3939	0	0	0	1	0
## 3940	0	0	0	0	1
## 3942	0	0	0	1	1
## 3943	0	0	0	1	0
## 3945	0	0	0	1	0
## 3947	0	0	0	1	0
## 3948	1	0	0	1	0

## 3951	0	0	0	1	0
## 3953	0	1	0	0	1
## 3954	0	0	0	0	0
## 3956	0	0	0	0	0
## 3957	0	0	0	1	1
## 3960	1	0	0	1	0
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## 3964	0	0	0	1	0
## 3965	0	0	0	0	0
## 3966	0	0	0	1	0
## 3967	0	0	0	1	0
## 3968	0	0	0	1	0
## 3970	0	0	0	1	0
## 3971	0	0	0	0	1
## 3972	0	0	0	1	1
## 3974	0	0	0	1	0
## 3975	0	0	0	0	0
## 3977	0	0	0	1	0
## 3978	0	1	1	1	1
## 3979	0	0	0	1	0
## 3980	0	1	1	1	1
## 3981	0	0	0	1	0
## 3982	0	1	1	1	1
## 3983	0	0	0	1	0
## 3986	0	0	0	1	0
## 3987	1	0	1	1	1
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## 3991	0	0	0	1	0
## 3995	0	0	0	1	1
## 3996	0	0	0	1	1
## 3998	0	0	0	0	0
## 3999	0	0	0	0	1
## 4003	0	0	0	1	0
## 4006	0	1	0	1	0
## 4009	1	0	1	1	1
## 4011	0	0	0	0	0
## 4013	0	0	0	1	0
## 4014	0	0	0	0	0
## 4015	0	0	0	1	1
## 4016	0	0	0	0	1
## 4018	0	0	0	1	0
## 4020	0	0	0	1	0
## 4021	1	0	0	0	1
## 4022	0	0	0	0	1
## 4023	0	0	0	1	0
## 4025	0	0	0	1	0
## 4026	0	0	0	0	1
## 4027	1	0	0	0	0
## 4028	0	0	0	1	0
## 4033	0	0	0	0	1
## 4035	0	0	0	1	1
## 4037	0	0	0	1	0
## 4039	0	0	0	1	0

```
## 4044           0              0           0       1       1
## 4045           0              1           0       0       0
## 4046           0              0           0       1       0
## 4047           0              0           0       1       0
## 4048           0              0           0       1       0
## 4049           0              1           0       1       0
## 4050           0              0           0       0       0
## 4052           0              0           0       1       1
## 4053           0              0           0       1       0
## 4054           0              0           0       0       0
## 4062           0              0           0       1       0
## 4063           0              0           0       1       0
## 4065           0              0           0       0       0
## 4068           0              0           0       1       0
## 4069           0              0           0       1       0
## 4070           0              0           0       0       0
## 4071           0              1           0       0       0
## 4072           0              0           0       0       1
## 4073           0              0           0       1       0
## 4074           0              0           0       0       0
## 4075           0              0           0       1       0
## 4077           0              0           0       0       0
## 4078           0              1           0       1       0
## 4079           0              0           0       0       0
## 4082           1              0           0       0       1
## 4086           0              0           0       1       0
## 4088           1              0           0       0       0
## 4091           0              1           0       1       0
## 4093           0              0           0       1       0
## 4094           1              0           0       1       0
## 4097           0              0           0       0       0
## 4098           0              0           0       0       0
## 4101           0              0           0       1       0
## 4102           0              0           0       1       1
## 4105           0              0           0       0       0
## 4106           0              0           0       1       0
## 4107           0              0           0       0       0
## 4108           0              0           0       0       1
## 4111           0              0           0       0       0
## 4115           0              0           0       0       0
## 4116           0              0           0       1       0
## 4118           0              1           0       0       0
## 4120           0              0           0       1       0
## 4121           0              0           0       0       0
## 4123           0              0           0       0       0
## 4125           1              0           0       0       0
## 4126           0              0           0       1       1
## 4127           0              0           0       0       0
## 4129           0              0           0       0       0
## 4130           0              0           0       1       1
## 4132           0              0           0       0       0
## 4134           0              0           0       0       1
## 4137           0              0           0       1       0
## 4138           0              0           0       1       0
```

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## 4139              0                 1              1        1        1
## 4141              0                 0              0        0        0
## 4142              0                 0              0        0        0
## 4144              0                 0              0        1        0
## 4145              0                 0              0        1        1
## 4146              0                 0              0        0        0
## 4148              1                 1              1        1        1
## 4149              0                 0              0        1        0
## 4151              0                 0              0        1        0
## 4152              1                 0              1        1        1
## 4153              0                 0              0        1        0
## 4155              1                 0              0        1        0
## 4158              0                 0              0        1        0
## 4160              0                 0              0        1        1
## 4161              0                 0              0        1        1
## 4163              0                 0              0        1        1
## 4164              1                 0              0        1        0
## 4165              0                 0              0        0        1
## 4166              1                 0              0        0        0
## 4168              1                 0              0        0        0
## 4170              1                 0              0        1        0
## 4171              0                 0              0        1        1
## 4172              0                 0              0        1        0
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## 4178              0                 0              0        0        1
## 4179              0                 0              0        0        0
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## 4183              0                 0              0        0        1
## 4184              0                 0              0        0        0
## 4185              0                 0              0        0        0
## 4186              0                 0              0        0        0
## 4187              0                 0              0        0        1
## 4188              0                 0              0        0        1
## 4189              0                 0              0        0        0
## 4190              0                 0              0        0        0
## 4191              1                 1              1        1        0
## 4192              0                 0              0        0        0
## 4193              0                 0              0        1        0
## 4194              0                 0              0        1        0
## 4199              0                 0              0        1        0
## 4200              0                 0              0        0        1
## 4201              0                 0              0        0        1
## 4203              0                 0              0        1        0
## 4205              0                 0              0        0        0
## 4209              0                 0              0        1        0
## 4210              0                 0              0        1        0
## 4211              0                 0              0        0        0
## 4212              0                 0              0        0        0
## 4214              0                 0              0        0        0
## 4216              0                 0              0        0        0
## 4219              0                 0              0        0        1
## 4221              0                 1              0        1        0
## 4222              0                 0              0        1        0
## 4223              0                 0              0        0        0
```

```
## 4224          0              0          0      0      1
## 4225          0              1          0      0      1
## 4226          0              0          0      1      0
## 4227          0              0          0      0      0
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## 4229          0              0          0      0      0
## 4231          0              0          0      1      1
## 4233          0              0          0      0      0
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## 4235          0              0          0      1      0
## 4236          0              0          0      1      0
## 4237          0              0          0      1      1
## 4238          0              1          0      0      0
## 4241          0              1          0      0      0
## 4242          0              0          0      1      1
## 4243          0              0          0      1      0
## 4247          0              0          0      0      0
## 4249          0              1          0      1      0
## 4252          0              0          0      1      0
## 4253          0              0          0      0      0
## 4254          0              0          0      1      1
## 4256          0              0          0      1      0
## 4258          0              0          0      0      1
## 4260          1              0          0      0      1
## 4263          0              0          0      0      0
## 4264          0              0          0      0      0
## 4267          0              0          0      0      1
## 4270          0              0          0      0      0
## 4271          0              0          0      1      1
## 4273          0              0          0      1      0
## 4274          0              1          0      0      1
## 4276          0              0          0      0      0
## 4277          0              0          0      1      1
## 4278          0              0          0      1      0
## 4279          0              0          0      1      1
## 4281          0              1          1      1      1
## 4283          1              1          1      1      0
## 4285          0              0          0      0      0
## 4286          0              0          0      1      0
## 4287          0              0          0      1      1
## 4289          0              0          0      0      1
## 4291          0              0          0      1      0
## 4293          1              0          0      0      0
## 4295          0              0          0      1      0
## 4296          0              0          0      0      0
## 4299          0              0          0      1      0
## 4302          1              0          1      1      0
## 4303          1              0          0      0      0
## 4304          0              0          0      1      1
## 4308          1              0          0      1      0
## 4311          1              0          1      1      1
## 4312          0              0          0      0      0
## 4313          0              0          0      1      0
## 4314          0              0          0      1      1
```

```
## 4317                0                    1                0                1                0
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## 4323                0                    0                0                0                0
## 4324                0                    1                0                1                0
## 4325                0                    0                0                1                0
## 4326                0                    0                0                1                1
## 4329                1                    1                1                1                0
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## 4334                0                    0                0                1                0
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## 4338                1                    0                0                0                0
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## 4341                0                    1                1                0                1
## 4342                0                    0                0                0                0
## 4343                0                    1                0                1                0
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## 4351                0                    0                0                0                1
## 4352                0                    0                0                1                1
## 4353                0                    0                0                1                0
## 4354                0                    0                0                1                1
## 4357                0                    0                0                0                0
## 4358                1                    1                1                1                1
## 4361                0                    0                0                0                0
## 4362                0                    0                0                0                1
## 4364                0                    0                0                1                0
## 4365                0                    1                0                0                0
## 4366                0                    0                0                0                0
## 4367                0                    0                0                0                0
## 4370                0                    0                0                1                1
## 4371                0                    0                0                0                0
## 4372                0                    0                0                1                0
## 4376                0                    0                0                0                0
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## 4379                0                    0                0                1                0
## 4381                0                    0                0                1                0
## 4382                0                    0                0                1                0
## 4383                0                    1                0                0                0
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## 4388                0                    0                0                0                0
## 4389                0                    0                0                0                0
## 4392                0                    0                0                0                1
## 4394                0                    0                0                0                0
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## 4397                0                    0                0                1                0
## 4398                0                    0                0                1                0
## 4401                0                    0                0                1                0
## 4402                0                    0                0                0                1
## 4404                0                    0                0                0                0
## 4407                0                    0                0                1                0
## 4408                0                    0                0                1                1
## 4409                1                    0                1                1                1
```

```
## 4411          0              0          0      0          0
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## 4416          0              0          0      0          1
## 4417          0              0          0      0          0
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## 4424          0              1          0      0          0
## 4426          1              0          0      1          0
## 4427          0              0          0      1          0
## 4429          0              1          0      1          0
## 4431          0              0          0      1          1
## 4432          0              0          0      1          0
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## 4437          0              0          0      1          0
## 4438          0              0          0      1          0
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## 4442          0              0          0      0          0
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## 4445          0              0          0      1          1
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## 4455          0              0          0      1          0
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## 4457          0              0          1      1          1
## 4459          0              0          0      0          0
## 4461          0              0          0      1          0
## 4463          0              0          0      1          1
## 4470          0              1          1      1          1
## 4472          0              0          0      0          0
## 4475          0              0          0      0          0
## 4476          0              0          0      1          0
## 4477          0              0          0      0          0
## 4479          0              0          0      0          0
## 4480          0              0          0      1          0
## 4481          1              0          0      1          0
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## 4483          0              0          0      0          0
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## 4486          0              0          0      0          0
## 4487          0              0          0      0          1
## 4488          0              0          0      1          1
## 4489          0              0          0      0          0
## 4490          0              0          0      1          0
## 4491          0              1          0      1          0
## 4492          0              0          0      1          0
## 4494          0              0          0      1          1
## 4495          1              0          0      1          0
## 4496          0              0          0      0          0
## 4498          0              1          0      1          0
## 4503          0              0          0      0          0
## 4504          0              0          0      1          0
## 4505          0              0          0      0          0
```

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## 4512           0              0              0              1              1
## 4513           0              0              0              1              1
## 4514           0              0              0              1              0
## 4515           0              0              0              1              0
## 4516           0              0              0              0              0
## 4517           0              0              0              1              0
## 4518           0              0              0              1              0
## 4519           0              0              0              1              0
## 4520           0              0              0              0              1
## 4521           0              0              0              0              0
## 4523           0              0              0              0              0
## 4524           0              0              0              1              0
## 4526           0              0              0              1              1
## 4528           0              0              0              0              1
## 4530           0              0              0              0              0
## 4531           0              0              0              1              0
## 4532           0              0              0              0              1
## 4535           0              0              0              1              0
## 4536           0              0              0              0              0
## 4537           0              0              0              0              0
## 4538           0              0              0              1              1
## 4541           0              0              0              1              0
## 4542           0              0              0              1              0
## 4543           0              1              1              1              1
## 4544           0              0              0              1              0
## 4545           0              0              0              1              0
## 4546           0              0              0              1              0
## 4547           0              1              0              1              0
## 4548           0              0              0              1              0
## 4549           0              0              0              0              0
## 4553           0              0              0              0              0
## 4555           0              1              0              1              0
## 4556           0              0              0              0              0
## 4559           0              0              0              1              1
## 4560           0              0              0              1              0
## 4561           0              0              1              1              1
## 4562           0              0              0              0              0
## 4563           0              0              0              0              1
## 4564           0              1              0              1              0
## 4565           0              0              0              0              0
## 4567           0              0              0              1              0
## 4569           0              1              0              0              0
## 4570           0              1              0              0              0
## 4574           0              0              1              1              1
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## 4578           0              0              0              1              1
## 4579           0              0              0              1              1
## 4580           0              0              0              1              0
## 4581           0              0              0              1              0
## 4582           0              0              0              0              1
## 4583           0              0              0              1              0
```

```
## 4585          0              0          0       0       0
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## 4588          0              0          0       0       0
## 4589          0              0          0       0       1
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## 4591          1              0          0       0       0
## 4593          0              0          0       0       0
## 4594          1              0          0       0       1
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## 4611          0              0          0       1       0
## 4613          0              0          0       1       0
## 4614          0              0          0       1       1
## 4617          0              0          0       1       1
## 4619          0              0          0       1       0
## 4621          0              0          0       1       0
## 4624          0              0          0       0       0
## 4625          0              0          0       0       0
## 4627          0              0          0       1       0
## 4628          1              0          0       1       0
## 4629          1              0          0       0       0
## 4630          0              0          1       1       1
## 4631          0              0          0       0       0
## 4632          1              0          1       1       1
## 4633          0              0          0       0       1
## 4636          0              1          1       1       1
## 4638          0              0          0       1       1
## 4640          0              0          0       1       1
## 4641          0              0          0       1       0
## 4643          1              0          0       1       0
## 4644          0              0          0       1       0
## 4648          0              0          0       1       0
## 4650          0              0          0       1       0
## 4653          1              0          0       1       0
## 4654          0              0          0       1       1
## 4655          0              0          0       0       0
## 4656          1              0          0       0       0
## 4657          0              1          0       0       0
## 4658          0              0          0       0       1
## 4663          0              0          0       1       0
## 4667          0              0          0       0       0
## 4668          0              0          0       1       0
## 4669          0              0          0       1       0
## 4671          0              0          0       1       0
## 4673          0              0          0       1       0
## 4674          0              0          0       1       1
## 4676          0              0          0       1       1
## 4677          0              1          0       1       0
```

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## 4678	0	0	0	0	0
## 4680	0	0	0	0	0
## 4681	0	0	0	0	0
## 4682	0	0	0	0	1
## 4684	0	0	0	0	0
## 4685	0	0	0	1	0
## 4686	0	0	0	1	0
## 4687	0	0	0	0	0
## 4688	0	0	0	1	1
## 4692	0	0	0	1	0
## 4693	0	0	0	0	1
## 4696	0	0	0	0	1
## 4699	1	0	0	0	0
## 4701	0	0	0	1	0
## 4702	0	0	0	0	0
## 4704	0	0	0	1	0
## 4706	1	0	1	1	1
## 4707	0	0	0	0	0
## 4708	0	1	0	0	1
## 4709	0	0	0	1	0
## 4710	0	0	0	0	1
## 4712	0	0	0	0	0
## 4714	0	0	0	1	0
## 4716	0	0	0	1	0
## 4718	0	0	0	1	0
## 4720	1	0	1	0	1
## 4723	0	0	0	0	0
## 4724	0	0	0	1	1
## 4727	0	1	0	1	0
## 4730	0	0	0	0	0
## 4733	0	0	0	0	0
## 4735	0	0	0	1	1
## 4736	0	0	0	1	0
## 4737	0	0	0	0	0
## 4738	0	0	0	0	0
## 4740	0	0	0	1	1
## 4741	0	0	0	1	0
## 4742	0	0	0	1	0
## 4743	0	0	0	1	1
## 4744	0	0	0	1	0
## 4746	0	0	0	1	1
## 4747	0	0	0	1	0
## 4748	0	0	0	1	0
## 4751	0	0	0	0	1
## 4754	0	1	1	1	1
## 4755	0	0	0	0	0
## 4756	0	0	0	1	0
## 4759	0	0	0	0	0
## 4760	0	0	0	1	0
## 4761	0	0	0	0	1
## 4766	0	0	0	0	0
## 4769	0	0	0	1	0
## 4770	0	0	0	0	0
## 4771	0	0	0	0	1

## 4772	0	0	0	1	0
## 4774	0	0	0	1	0
## 4776	0	0	0	0	0
## 4777	0	0	0	1	0
## 4778	0	0	0	1	0
## 4779	0	0	0	1	1
## 4780	0	0	0	1	0
## 4781	0	0	0	1	0
## 4782	0	1	0	1	0
## 4785	0	0	0	0	0
## 4786	0	1	0	1	0
## 4787	0	0	0	1	1
## 4788	0	0	0	1	0
## 4789	0	0	0	0	0
## 4790	0	0	0	1	0
## 4791	1	0	0	1	0
## 4793	0	0	0	1	0
## 4794	0	0	0	1	0
## 4798	0	0	0	0	0
## 4800	0	0	0	0	1
## 4805	0	0	0	0	0
## 4806	0	0	0	1	0
## 4809	0	0	0	0	1
## 4812	1	0	0	0	0
## 4813	1	0	0	1	0
## 4814	0	0	0	1	1
## 4817	0	0	0	0	1
## 4818	0	0	0	0	0
## 4819	0	0	0	1	0
## 4820	0	0	0	0	0
## 4821	0	1	1	1	1
## 4822	0	0	0	1	1
## 4825	0	0	0	1	0
## 4828	0	0	0	1	0
## 4829	0	0	0	1	0
## 4830	0	0	0	1	1
## 4831	0	0	0	1	0
## 4833	0	0	0	1	1
## 4834	0	0	0	0	0
## 4835	0	0	0	0	0
## 4836	0	0	0	1	0
## 4837	0	0	0	0	1
## 4838	0	0	0	0	0
## 4840	0	0	0	1	0
## 4843	1	0	0	0	0
## 4847	1	0	0	1	0
## 4848	0	0	0	1	0
## 4849	0	0	0	1	0
## 4851	0	1	0	1	0
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## 4854	0	0	0	1	0
## 4855	0	0	0	0	1
## 4856	0	0	0	1	0
## 4857	0	0	0	1	0

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## 4858       0              0              0       1       1
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## 4862       0              0              0       1       0
## 4863       0              0              0       0       0
## 4864       0              0              0       1       0
## 4865       0              0              0       1       0
## 4866       1              0              0       0       1
## 4868       0              0              0       1       0
## 4869       0              0              0       0       1
## 4870       0              0              0       0       1
## 4871       0              0              0       1       1
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## 4877       1              0              0       0       0
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## 4882       0              0              0       1       0
## 4884       1              0              1       1       1
## 4885       0              0              0       1       1
## 4886       0              0              0       1       0
## 4887       0              0              0       0       0
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## 4891       0              0              0       1       0
## 4893       0              1              0       1       0
## 4894       0              1              1       1       1
## 4895       0              1              0       0       0
## 4896       0              0              0       1       1
## 4898       0              0              0       0       0
## 4900       0              0              0       1       0
## 4901       0              0              0       1       0
## 4902       0              0              0       1       0
## 4903       0              0              0       1       0
## 4904       0              0              0       1       1
## 4905       0              0              0       1       1
## 4907       0              0              0       0       0
## 4908       0              0              0       0       0
## 4909       0              0              0       1       0
## 4910       0              0              0       0       1
## 4911       0              0              0       1       0
## 4913       0              1              0       1       0
## 4914       0              0              0       1       0
## 4915       0              0              0       0       1
## 4916       0              0              0       0       1
## 4917       0              0              0       1       0
## 4920       0              0              0       1       1
## 4921       0              0              0       1       1
## 4922       0              0              0       1       1
## 4923       0              0              0       1       1
## 4925       0              0              0       0       0
## 4926       0              0              0       1       0
## 4927       0              0              0       0       1
## 4930       0              0              0       1       0
## 4931       0              0              0       1       0
## 4932       0              0              0       1       0
## 4933       0              0              0       1       0
```

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## 4934                0             0            0       1        1
## 4936                0             0            0       1        0
## 4937                0             0            0       0        0
## 4939                0             0            0       1        0
## 4941                0             0            0       1        0
## 4942                1             0            0       1        0
## 4943                0             0            1       1        1
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## 4946                0             0            0       0        1
## 4947                0             0            0       1        0
## 4950                0             0            0       0        1
## 4951                0             0            0       0        1
## 4953                0             0            0       1        0
## 4954                0             0            0       1        0
## 4955                0             0            0       1        1
## 4956                0             0            0       1        1
## 4958                0             0            0       0        1
## 4959                0             0            0       0        0
## 4961                0             0            0       1        0
## 4964                0             0            0       0        0
## 4966                0             0            0       1        0
## 4967                0             0            0       0        0
## 4970                0             0            0       1        0
## 4971                0             0            0       0        1
## 4972                0             1            0       0        0
## 4973                0             0            0       1        1
## 4974                0             0            0       1        0
## 4975                0             0            0       0        1
## 4976                0             0            0       1        0
## 4979                0             0            0       1        0
## 4980                0             0            0       0        1
## 4981                1             0            1       1        1
## 4982                0             0            0       1        0
## 4984                0             0            0       0        0
## 4987                0             0            0       0        0
## 4988                0             0            0       1        0
## 4989                0             0            0       0        1
## 4991                0             0            0       0        1
## 4993                0             0            0       0        0
## 4995                0             0            0       1        0
## 4996                0             0            0       1        0
## 4997                0             0            0       1        0
## 4998                0             0            0       0        0
## 4999                0             0            0       1        0
```

```
mytable <- xtabs(~ CreditCard + Online + Personal.Loan, data = train.df)
ftable(mytable)
```

```
##                     Personal.Loan    0    1
## CreditCard Online
## 0          0                       798   77
##            1                      1107  127
## 1          0                       318   35
##            1                       489   49
```

```r
#B. probability of loan acceptance (Loan = 1) conditional on
#having a bank credit card (CC = 1) and being an active user of online banking services
#(Online = 1)]
Probability = (51/(51+480))
Probability
```

```
## [1] 0.0960452
```

```r
#C. Creating two separate pivot tables for the training data
table(Personal.Loan= train.df$Personal.Loan, Online = train.df$Online)
```

```
##             Online
## Personal.Loan    0    1
##           0 1116 1596
##           1  112  176
```

```r
table(Personal.Loan= train.df$Personal.Loan, CreditCard = train.df$CreditCard)
```

```
##             CreditCard
## Personal.Loan    0    1
##           0 1905  807
##           1  204   84
```

```r
table(Personal.Loan = train.df$Personal.Loan)
```

```
## Personal.Loan
##    0    1
## 2712  288
```

```r
#D.[P(A | B) means "the probability ofA given B"]
#Probability_1
Probability1 = (87/(87+201))
Probability1
```

```
## [1] 0.3020833
```

```r
#probability_2
Probability2 = (166/(166+122))
Probability2
```

```
## [1] 0.5763889
```

```r
#Probability_3
Probability3 = (288/(288+2712))
Probability3
```

```
## [1] 0.096
```

```r
#Probability_4
Probability4 = (790/(790+1922))
Probability4
```

```
## [1] 0.2912979
```

```r
#Probability_5
Probability5 = (1616/(1616+1096))
Probability5
```

```
## [1] 0.5958702
```

```r
#Probability_6
Probability6 = (2712/(2712+288))
Probability6
```

[1] 0.904

```r
#E naive Bayes probability P(Loan = 1 | CC = 1,online = 1)

naivebayesprobab <-(0.30*0.57*0.09)/(0.30*0.57*0.09 + 0.29*0.59*0.09)
naivebayesprobab
```

[1] 0.4998538

```r
#F. compare the value one obtained from the pivot table in (B)

#Pivot table probability = 0.09
#Naive bayes probability = 0.49
#The key assumption we make while using naive bayes is that all variables are independent and have equa

#G. Run naive Bayes on the data. Examine the model output on training data,
#find the entry that corresponds to P(Loan = 1 | CC = 1, Online = 1)
nb.model<-naiveBayes(Personal.Loan~ Online+CreditCard, data = train.df)
To_Predict=data.frame(Online=1, CreditCard=1)
predict(nb.model, To_Predict,type = 'raw')
```

Warning in predict.naiveBayes(nb.model, To_Predict, type = "raw"): Type mismatch
between training and new data for variable 'Online'. Did you use factors with
numeric labels for training, and numeric values for new data?

Warning in predict.naiveBayes(nb.model, To_Predict, type = "raw"): Type mismatch
between training and new data for variable 'CreditCard'. Did you use factors
with numeric labels for training, and numeric values for new data?

```
##                0          1
## [1,] 0.9055237 0.09447626
```