Untitled

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10.5

1. Tibbles are data frames, but they tweak some older behaviours to make life a little easier. Tibble will only print a limited number of rows and show the class on top of each column.

```
library(tidyverse)
## -- Attaching packages -----
                                                  ----- tidyverse 1.2.1 --
## √ ggplot2 2.2.1
                  √ purrr
                           0.2.4
## √ tibble 1.4.2
                   √ dplyr
                           0.7.4
## √ tidyr 0.8.0
                   √ stringr 1.3.0
## √ readr
                  √ forcats 0.3.0
         1.1.1
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                 masks stats::lag()
library(foreign)
library(stringr)
library(plyr)
## -----
## You have loaded plyr after dplyr - this is likely to cause problems.
## If you need functions from both plyr and dplyr, please load plyr first, then dplyr:
## library(plyr); library(dplyr)
## -----
## Attaching package: 'plyr'
## The following objects are masked from 'package:dplyr':
##
##
     arrange, count, desc, failwith, id, mutate, rename, summarise,
##
     summarize
## The following object is masked from 'package:purrr':
##
     compact
library(reshape2)
##
## Attaching package: 'reshape2'
## The following object is masked from 'package:tidyr':
##
##
     smiths
```

mtcars

```
mpg cyl
                                   disp hp drat
##
                                                     wt
                                                         qsec vs am gear carb
                                6 160.0 110 3.90 2.620 16.46
## Mazda RX4
                        21.0
                                                                         4
                                                                              4
## Mazda RX4 Wag
                        21.0
                                6 160.0 110 3.90 2.875 17.02
                                                                0
                                                                         4
                                                                              4
                                4 108.0 93 3.85 2.320 18.61
## Datsun 710
                        22.8
                                                                         4
                                                                              1
                                                                1
                                                                   1
## Hornet 4 Drive
                                6 258.0 110 3.08 3.215 19.44
                                                                         3
                                                                              1
                        21.4
                        18.7
## Hornet Sportabout
                                8 360.0 175 3.15 3.440 17.02
                                                                         3
                                                                              2
                                                                0
                                                                   0
## Valiant
                        18.1
                                6 225.0 105 2.76 3.460 20.22
                                                                1
                                                                   0
                                                                         3
                                                                              1
## Duster 360
                        14.3
                                8 360.0 245 3.21 3.570 15.84
                                                                0
                                                                         3
                                                                              4
                                                                   \cap
## Merc 240D
                        24.4
                                4 146.7
                                         62 3.69 3.190 20.00
                                                                         4
                                                                              2
                                         95 3.92 3.150 22.90
                                                                              2
## Merc 230
                        22.8
                                4 140.8
                                                                   0
                                                                         4
                                                                1
                                                                         4
## Merc 280
                        19.2
                                6 167.6 123 3.92 3.440 18.30
                                                                1
                                                                   0
                                                                              4
                                                                         4
## Merc 280C
                        17.8
                                6 167.6 123 3.92 3.440 18.90
                                                                              4
                                                                1
                                                                   0
## Merc 450SE
                        16.4
                                8 275.8 180 3.07 4.070 17.40
                                                                0
                                                                   0
                                                                         3
                                                                              3
## Merc 450SL
                        17.3
                                8 275.8 180 3.07 3.730 17.60
                                                                0
                                                                   0
                                                                         3
                                                                              3
## Merc 450SLC
                        15.2
                                8 275.8 180 3.07 3.780 18.00
                                                                0
                                                                   0
                                                                         3
                                                                              3
                                                                         3
                                8 472.0 205 2.93 5.250 17.98
                                                                              4
## Cadillac Fleetwood
                        10.4
                                                                   0
## Lincoln Continental 10.4
                                8 460.0 215 3.00 5.424 17.82
                                                                0
                                                                   0
                                                                         3
                                                                              4
## Chrysler Imperial
                        14.7
                                8 440.0 230 3.23 5.345 17.42
                                                                0
                                                                   0
                                                                         3
                                                                              4
## Fiat 128
                        32.4
                                   78.7
                                         66 4.08 2.200 19.47
                                                                1
                                                                   1
                                                                         4
                                                                              1
## Honda Civic
                        30.4
                                   75.7
                                         52 4.93 1.615 18.52
                                                                         4
                                                                              2
                        33.9
## Toyota Corolla
                                   71.1
                                         65 4.22 1.835 19.90
                                                                         4
                                                                              1
                                                                1
                                                                   1
## Toyota Corona
                        21.5
                                4 120.1
                                         97 3.70 2.465 20.01
                                                                   0
                                                                         3
                                                                              1
  Dodge Challenger
                        15.5
                                8 318.0 150 2.76 3.520 16.87
                                                                0
                                                                         3
                                                                              2
                                                                   0
## AMC Javelin
                        15.2
                                8 304.0 150 3.15 3.435 17.30
                                                                         3
                                                                              2
## Camaro Z28
                        13.3
                                8 350.0 245 3.73 3.840 15.41
                                                                0
                                                                   0
                                                                         3
                                                                              4
## Pontiac Firebird
                        19.2
                                8 400.0 175 3.08 3.845 17.05
                                                                         3
                                                                              2
                                                                0
## Fiat X1-9
                                  79.0 66 4.08 1.935 18.90
                                                                         4
                        27.3
                                                                1
                                                                              1
                                                                   1
                                                                         5
                                                                              2
## Porsche 914-2
                        26.0
                                4 120.3
                                         91 4.43 2.140 16.70
## Lotus Europa
                        30.4
                                4 95.1 113 3.77 1.513 16.90
                                                                1
                                                                   1
                                                                         5
                                                                              2
## Ford Pantera L
                        15.8
                                8 351.0 264 4.22 3.170 14.50
                                                                \cap
                                                                   1
                                                                         5
                                                                              4
                                6 145.0 175 3.62 2.770 15.50
                                                                         5
                                                                              6
## Ferrari Dino
                        19.7
                                                                   1
## Maserati Bora
                        15.0
                                8 301.0 335 3.54 3.570 14.60
                                                                         5
                                                                              8
                                                                0
                                                                   1
## Volvo 142E
                                4 121.0 109 4.11 2.780 18.60
                                                                              2
                        21.4
```

2.

Using dollar sign a data.frame will partially complete the column. This saves a few keystrokes, but can result in accidentally using a different variable than you thought you were using. With data.frames, with [the type of object that is returned differs on the number of columns. If it is one column, it won't return a data.frame, but instead will return a vector. With more than one column, then it will return a data.frame. This is fine if you know what you are passing in, but suppose you did df[, vars] where vars was a variable. Then you what that code does depends on length(vars) and you'd have to write code to account for those situations or risk bugs.

```
#df <- data.frame(abc = 1, xyz = "a")
#df$x
#df[, "xyz"]
#df[, c("abc", "xyz")]

#tbl <- as_tibble(df)
#tbl$x
```

```
#tbl[, "xyz"]
#tbl[, c("abc", "xyz")]
```

3.

You can use the double bracket, like df[[var]]. You cannot use the dollar sign, because df\$var would look for a column named var.

4.

```
#annoying <- tibble(
# `1` = 1:10,
# `2` = `1` * 2 + rnorm(length(`1`))
#)

#annoying[["1"]]
#annoying$`1`
#ggplot(annoying, aes(x = `1`, y = `2`)) +
# geom_point()
#annoying[["3"]] <- annoying$`2` / annoying$`1`
#annoying <- rename(annoying, one = `1`, two = `2`, three = `3`))
#glimpse(annoying)</pre>
```

5.It converts named vectors to a data frame with names and values

```
#enframe(c(a = 1, b = 2, c = 3))
```

6. The print function for tibbles is in print.tbl_df

The option n_extra determines the number of extra columns to print information for.

12.6.1

```
#who1 <- who %>%
# gather(new_sp_m014:newrel_f65, key = "key", value = "cases", na.rm = TRUE)
#glimpse(who1)

#who2 <- who1 %>%
# mutate(key = stringr::str_replace(key, "newrel", "new_rel"))

#who3 <- who2 %>%
# separate(key, c("new", "type", "sexage"), sep = "_")
#who3
#who3 %>%
# count(new)
#count(who$new)
```

```
#who4 <- who3 %>%
# select(-new, -iso2, -iso3)

#who5 <- who4 %>%
# separate(sexage, c("sex", "age"), sep = 1)
#who5
```

1

So it appears that either a country has all its values in a year as non-missing if the WHO collected data for that country, or all its values are non-missing. So it is okay to treat explicitly and implicitly missing values the same, and we don't lose any information by dropping them.

```
#who1 %>%
# filter(cases == 0) %>%
# nrow()

#gather(who, new_sp_m014:newrel_f65, key = "key", value = "cases") %>%
# group_by(country, year) %>%
# mutate(missing = is.na(cases)) %>%
# select(country, year, missing) %>%
# distinct() %>%
# group_by(country, year) %>%
# filter(n() > 1)
```

$\mathbf{2}$

separate emits the warning "too few values", and if we check the rows for keys beginning with "newrel_", we see that sexage is messing, and type = m014

```
#who3a <- who1 %>%
# separate(key, c("new", "type", "sexage"), sep = "_")
#filter(who3a, new == "newrel") %>% head()
```

3

```
#select(who3, country, iso2, iso3) %>%
# distinct() %>%
# group_by(country) %>%
# filter(n() > 1)

#who5 %>%
# group_by(country, year, sex) %>%
# filter(year > 1995) %>%
# summarise(cases = sum(cases)) %>%
# unite(country_sex, country, sex, remove = FALSE) %>%
# ggplot(aes(x = year, y = cases, group = country_sex, colour = sex)) +
# geom_line()
```

second part

1.

```
pew <- read.spss("pew.sav")</pre>
## re-encoding from CP1252
## Warning in read.spss("pew.sav"): Undeclared level(s) 2, 3, 4, 9 added in
## variable: density3
## Warning in read.spss("pew.sav"): Duplicated levels in factor denom:
## Electronic ministries
## Warning in read.spss("pew.sav"): Undeclared level(s) 1, 2, 3, 4, 5, 6, 7,
## 8, 9, 10, 11, 12, 14, 16, 23, 33 added in variable: children
## Warning in read.spss("pew.sav"): Undeclared level(s) 18, 19, 20, 21, 22,
## 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41,
## 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60,
## 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79,
## 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96 added in
## variable: age
pew <- as.data.frame(pew)</pre>
religion <- pew[c("q16", "reltrad", "income")]</pre>
religion$reltrad <- as.character(religion$reltrad)</pre>
religion$reltrad <- str_replace(religion$reltrad, " Churches", "")</pre>
religion$reltrad <- str_replace(religion$reltrad, " Protestant", " Prot")</pre>
religion$reltrad[religion$q16 == " Atheist (do not believe in God) "] <- "Atheist"
religion$reltrad[religion$q16 == " Agnostic (not sure if there is a God) "] <- "Agnostic"
religion$reltrad <- str_trim(religion$reltrad)</pre>
religion$reltrad <- str_replace_all(religion$reltrad, " \\(.*?\\)", "")
religion$income <- c("Less than $10,000" = "<$10k",
  "10 to under 20,000" = "10-20k",
  "20 to under $30,000" = "$20-30k",
  "30 to under $40,000" = "$30-40k",
  "40 to under $50,000" = "$40-50k",
  "50 to under $75,000" = "$50-75k",
  "75 to under $100,000" = "$75-100k",
  "100 to under $150,000" = "$100-150k",
  "$150,000 or more" = ">150k",
  "Don't know/Refused (VOL)" = "Don't know/refused")[religion$income]
religion$income <- factor(religion$income, levels = c("<$10k", "$10-20k", "$20-30k", "$30-40k", "$40-50
  "$75-100k", "$100-150k", ">150k", "Don't know/refused"))
counts <- count(religion, c("reltrad", "income"))</pre>
names(counts)[1] <- "religion"</pre>
raw <- dcast(counts, religion ~ income)</pre>
```

Using freq as value column: use value.var to override.

```
table4 <- raw[1:10, 1:11]
a <- gather(data = table4, key = income, value = freq, -religion)
a <- a[order(a$religion),]
##
                       religion
                                              income freq
## 1
                                               <$10k
                       Agnostic
                                                       27
## 11
                       Agnostic
                                             $10-20k
                                                       34
## 21
                       Agnostic
                                             $20-30k
                                                       60
## 31
                                             $30-40k
                       Agnostic
                                                       81
## 41
                       Agnostic
                                             $40-50k
                                                       76
## 51
                       Agnostic
                                             $50-75k
                                                      137
## 61
                                                       122
                       Agnostic
                                            $75-100k
## 71
                                           $100-150k
                       Agnostic
                                                       109
## 81
                       Agnostic
                                               >150k
                                                       84
## 91
                       Agnostic Don't know/refused
                                                       96
## 2
                        Atheist
                                               <$10k
                                                        12
## 12
                        Atheist
                                             $10-20k
                                                       27
## 22
                        Atheist
                                             $20-30k
                                                       37
## 32
                        Atheist
                                             $30-40k
                                                       52
## 42
                        Atheist
                                             $40-50k
                                                       35
## 52
                        Atheist
                                             $50-75k
                                                       70
## 62
                        Atheist
                                            $75-100k
                                                       73
## 72
                        Atheist
                                           $100-150k
                                                       59
## 82
                        Atheist
                                               >150k
                                                       74
## 92
                        Atheist Don't know/refused
                                                       76
## 3
                       Buddhist
                                               <$10k
                                                       27
## 13
                       Buddhist
                                             $10-20k
                                                       21
## 23
                       Buddhist
                                             $20-30k
                                                       30
## 33
                       Buddhist
                                             $30-40k
                                                       34
## 43
                       Buddhist
                                             $40-50k
                                                       33
## 53
                       Buddhist
                                             $50-75k
                                                       58
##
  63
                       Buddhist
                                            $75-100k
                                                       62
## 73
                                           $100-150k
                       Buddhist
                                                       39
## 83
                       Buddhist
                                               >150k
                                                       53
## 93
                       Buddhist Don't know/refused
                                                       54
                       Catholic
## 4
                                               <$10k
                                                      418
## 14
                       Catholic
                                             $10-20k
                                                      617
## 24
                       Catholic
                                             $20-30k
                                                      732
## 34
                       Catholic
                                             $30-40k
                                                      670
## 44
                       Catholic
                                             $40-50k 638
## 54
                       Catholic
                                             $50-75k 1116
## 64
                       Catholic
                                            $75-100k 949
## 74
                       Catholic
                                           $100-150k
                                                      792
## 84
                       Catholic
                                               >150k 633
## 94
                       Catholic Don't know/refused 1489
## 5
            Don't know/refused
                                               <$10k
                                                       15
            Don't know/refused
                                             $10-20k
## 15
                                                       14
## 25
            Don't know/refused
                                             $20-30k
                                                       15
## 35
            Don't know/refused
                                             $30-40k
                                                       11
## 45
            Don't know/refused
                                             $40-50k
                                                        10
## 55
            Don't know/refused
                                             $50-75k
                                                       35
```

```
## 65
            Don't know/refused
                                           $75-100k
                                                       21
## 75
            Don't know/refused
                                          $100-150k
                                                       17
## 85
            Don't know/refused
                                              >150k
                                                       18
## 95
            Don't know/refused Don't know/refused
                                                     116
## 6
              Evangelical Prot
                                              <$10k
                                                      575
## 16
              Evangelical Prot
                                            $10-20k 869
## 26
              Evangelical Prot
                                            $20-30k 1064
## 36
              Evangelical Prot
                                            $30-40k
                                                     982
                                            $40-50k
## 46
              Evangelical Prot
                                                     881
## 56
              Evangelical Prot
                                            $50-75k 1486
## 66
              Evangelical Prot
                                           $75-100k
                                                     949
## 76
              Evangelical Prot
                                          $100-150k
                                                      723
##
  86
              Evangelical Prot
                                              >150k
                                                     414
## 96
              Evangelical Prot Don't know/refused 1529
## 7
                          Hindu
                                              <$10k
## 17
                          Hindu
                                            $10-20k
                                                        9
## 27
                                                        7
                          Hindu
                                            $20-30k
## 37
                          Hindu
                                            $30-40k
## 47
                          Hindu
                                            $40-50k
                                                       11
## 57
                          Hindu
                                            $50-75k
                                                       34
## 67
                          Hindu
                                           $75-100k
                                                       47
## 77
                          Hindu
                                          $100-150k
## 87
                          Hindu
                                              >150k
                                                       54
## 97
                          Hindu Don't know/refused
                                                       37
## 8
       Historically Black Prot
                                              <$10k
                                                      228
## 18
      Historically Black Prot
                                            $10-20k
                                                      244
##
  28
       Historically Black Prot
                                            $20-30k
                                                      236
       Historically Black Prot
##
   38
                                            $30-40k
                                                      238
##
   48
      Historically Black Prot
                                            $40-50k
                                                      197
  58
      Historically Black Prot
                                            $50-75k
                                                      223
## 68
       Historically Black Prot
                                           $75-100k
                                                      131
##
  78
       Historically Black Prot
                                          $100-150k
                                                       81
       Historically Black Prot
                                              >150k
                                                       78
## 98
       Historically Black Prot Don't know/refused
                                                      339
## 9
              Jehovah's Witness
                                              <$10k
                                                       20
                                            $10-20k
## 19
              Jehovah's Witness
                                                       27
## 29
              Jehovah's Witness
                                            $20-30k
                                                       24
## 39
             Jehovah's Witness
                                            $30-40k
                                                       24
## 49
             Jehovah's Witness
                                            $40-50k
## 59
             Jehovah's Witness
                                                       30
                                            $50-75k
## 69
             Jehovah's Witness
                                           $75-100k
                                                       15
## 79
             Jehovah's Witness
                                          $100-150k
                                                       11
             Jehovah's Witness
## 89
                                              >150k
                                                        6
## 99
             Jehovah's Witness Don't know/refused
                                                       37
## 10
                         Jewish
                                              <$10k
                                                       19
## 20
                                            $10-20k
                                                       19
                         Jewish
## 30
                         Jewish
                                            $20-30k
                                                       25
## 40
                         Jewish
                                            $30-40k
                                                       25
## 50
                         Jewish
                                            $40-50k
                                                       30
## 60
                         Jewish
                                            $50-75k
                                                       95
## 70
                                           $75-100k
                         Jewish
                                                       69
## 80
                         Jewish
                                          $100-150k
                                                       87
## 90
                         Jewish
                                              >150k
                                                      151
## 100
                         Jewish Don't know/refused 162
```

2.

```
raw <- read.csv("billboard.csv")</pre>
raw <- raw[, c("year", "artist.inverted", "track", "time", "date.entered", "x1st.week", "x2nd.week", "x
names(raw)[2] <- "artist"</pre>
raw$artist <- iconv(raw$artist, "MAC", "ASCII//translit")</pre>
raw$track <- str_replace(raw$track, " \\(.*?\\)", "")</pre>
names(raw)[-(1:5)] <- str_c("wk", 1:76)
raw <- arrange(raw, year, artist, track)</pre>
long_name <- nchar(raw$track) > 20
raw$track[long_name] <- paste0(substr(raw$track[long_name], 0, 20), "...")</pre>
table7 <- raw[c(1:3, 6:10), ]
b <- table7%>%gather(key = 'week', value = 'rank', -year, -artist, -time, -track, -date.entered, na.rm = TRUE)
b$week <- as.integer(str_replace_all(b$week, "[^0-9]+", ""))</pre>
b <- rename(b,c('date.entered' = 'date'))</pre>
b <- b[order(b$artist),]</pre>
                    artist
                                              track time
                                                                date week rank
       year
                     2 Pac
## 1
       2000
                                     Baby Don't Cry 4:22 2000-02-26
                                                                             87
## 9
                                     Baby Don't Cry 4:22 2000-02-26
                                                                             82
       2000
                     2 Pac
## 17 2000
                                     Baby Don't Cry 4:22 2000-02-26
                                                                            72
                     2 Pac
## 25 2000
                     2 Pac
                                     Baby Don't Cry 4:22 2000-02-26
                                                                             77
## 33 2000
                     2 Pac
                                     Baby Don't Cry 4:22 2000-02-26
                                                                             87
## 41 2000
                     2 Pac
                                     Baby Don't Cry 4:22 2000-02-26
                                                                             94
                                                                        6
## 49 2000
                     2 Pac
                                     Baby Don't Cry 4:22 2000-02-26
                                                                        7
                                                                             99
## 2
       2000
                   2Ge+her The Hardest Part Of ... 3:15 2000-09-02
                                                                             91
                   2Ge+her The Hardest Part Of ... 3:15 2000-09-02
## 10 2000
                                                                             87
## 18 2000
                   2Ge+her The Hardest Part Of ... 3:15 2000-09-02
                                                                            92
## 3
              3 Doors Down
       2000
                                         Kryptonite 3:53 2000-04-08
                                                                            81
## 11 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                            70
## 19
       2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                             68
## 27 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                             67
                                         Kryptonite 3:53 2000-04-08
## 35 2000
              3 Doors Down
                                                                             66
## 43 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                        6
                                                                             57
## 51 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                        7
                                                                             54
## 59 2000
            3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                        8
                                                                             53
## 67 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                             51
## 75 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       10
                                                                             51
## 83 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       11
                                                                             51
## 91 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       12
                                                                             51
## 99 2000
              3 Doors Down
                                                                             47
                                         Kryptonite 3:53 2000-04-08
                                                                       13
## 107 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       14
                                                                             44
## 115 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       15
                                                                             38
## 123 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       16
                                                                             28
## 131 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       17
                                                                             22
## 139 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
                                                                       18
                                                                             18
## 147 2000
              3 Doors Down
                                         Kryptonite 3:53 2000-04-08
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## 155 2000
               3 Doors Down
                                            Kryptonite 3:53 2000-04-08
                                                                            20
                                                                                  14
## 163 2000
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               3 Doors Down
                                            Kryptonite 3:53 2000-04-08
                                                                            21
                                            Kryptonite 3:53 2000-04-08
## 171 2000
               3 Doors Down
                                                                            22
                                                                                  7
               3 Doors Down
## 179 2000
                                            Kryptonite 3:53 2000-04-08
                                                                            23
                                                                                  6
## 187 2000
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                                            Kryptonite 3:53 2000-04-08
                                                                                  6
## 195 2000
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                                            Kryptonite 3:53 2000-04-08
## 203 2000
               3 Doors Down
                                            Kryptonite 3:53 2000-04-08
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## 211 2000
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                                            Kryptonite 3:53 2000-04-08
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                                                                                  5
## 219 2000
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                                            Kryptonite 3:53 2000-04-08
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## 227 2000
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## 235 2000
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## 243 2000
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                                            Kryptonite 3:53 2000-04-08
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## 251 2000
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## 259 2000
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## 267 2000
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               3 Doors Down
                                            Kryptonite 3:53 2000-04-08
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## 275 2000
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                                            Kryptonite 3:53 2000-04-08
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## 283 2000
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                                            Kryptonite 3:53 2000-04-08
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## 291 2000
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                                            Kryptonite 3:53 2000-04-08
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## 299 2000
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## 307 2000
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               3 Doors Down
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## 379 2000
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## 387 2000
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## 395 2000
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                                            Kryptonite 3:53 2000-04-08
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## 403 2000
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                                            Kryptonite 3:53 2000-04-08
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## 411 2000
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                                            Kryptonite 3:53 2000-04-08
                                                                                  42
## 419 2000
               3 Doors Down
                                            Kryptonite 3:53 2000-04-08
                                                                            53
                                                                                  49
## 4
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  51
## 12
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                             2
                                                                                  39
## 20
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
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## 28
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  26
## 36
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  26
## 44
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  19
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
## 52
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                        98^0 Give Me Just One Nig... 3:24 2000-08-19
## 60
       2000
                                                                             8
                                                                                  2
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  3
##
  68
       2000
                                                                             9
                                                                                  6
## 76
       2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                            10
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  7
## 84
       2000
                                                                            11
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
## 92
       2000
                                                                                  22
                                                                            12
## 100 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
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## 108 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  36
## 116 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
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                                                                                  47
                        98^0 Give Me Just One Nig... 3:24 2000-08-19
## 124 2000
                                                                            16
                                                                                  67
## 132 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                            17
                                                                                  66
## 140 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                                  84
## 148 2000
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
                                                                            19
                                                                                  93
                        98<sup>0</sup> Give Me Just One Nig... 3:24 2000-08-19
## 156 2000
                                                                                  94
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##		2000	A*Teens	_			2000-07-08	1	97
##		2000	A*Teens	_			2000-07-08	2	97
	21	2000	A*Teens	•			2000-07-08	3	96
	29	2000	A*Teens	•			2000-07-08	4	95
##	37	2000	A*Teens	•			2000-07-08	5	100
##	6	2000	Aaliyah				2000-01-29	1	84
	7	2000	Aaliyah	•	_		2000-03-18	1	59
##	14	2000	Aaliyah				2000-01-29	2	62
	15	2000	Aaliyah	•	_		2000-03-18	2	53
##	22	2000	Aaliyah				2000-01-29	3	51
##	23	2000	Aaliyah	-	_		2000-03-18	3	38
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##	39	2000	Aaliyah				2000-03-18	5	21
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##	47	2000	Aaliyah	Try	Again	4:03	2000-03-18	6	18
##	54	2000	Aaliyah				2000-01-29	7	35
##	55	2000	Aaliyah	Try	Again	4:03	2000-03-18	7	16
##	62	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	8	38
##		2000	Aaliyah	Try	Again	4:03	2000-03-18	8	14
##	70	2000	Aaliyah				2000-01-29	9	38
##	71	2000	Aaliyah	Try	Again	4:03	2000-03-18	9	12
##	78	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	10	36
##	79	2000	Aaliyah	Try	Again	4:03	2000-03-18	10	10
##	86	2000	Aaliyah				2000-01-29	11	37
##	87	2000	Aaliyah	Try	Again	4:03	2000-03-18	11	9
##	94	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	12	37
##	95	2000	Aaliyah	Try	Again	4:03	2000-03-18	12	8
##	102	2000	Aaliyah				2000-01-29	13	38
##	103	2000	Aaliyah	Try	Again	4:03	2000-03-18	13	6
##	110	2000	Aaliyah				2000-01-29	14	49
##	111	2000	Aaliyah	Try	Again	4:03	2000-03-18	14	1
##	118	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	15	61
##	119	2000	Aaliyah	Try	Again	4:03	2000-03-18	15	2
##	126	2000	Aaliyah				2000-01-29	16	63
##	127	2000	Aaliyah	Try	Again	4:03	2000-03-18	16	2
##	134	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	17	62
##	135	2000	Aaliyah	Try	Again	4:03	2000-03-18	17	2
##	142	2000	Aaliyah	I Don't	Wanna	4:15	2000-01-29	18	67
##	143	2000	Aaliyah				2000-03-18	18	2
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##		2000	Aaliyah	•	_		2000-03-18	19	3
##	158	2000	Aaliyah				2000-01-29	20	86
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##	175	2000	Aaliyah	Try	Again	4:03	2000-03-18	22	5
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##	199	2000	Aaliyah	•	_		2000-03-18	25	13
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##		2000	Aaliyah	-	_		2000-03-18	27	16
##	223	2000	Aaliyah	-	_		2000-03-18	28	23
##	231	2000	Aaliyah	Try	${\tt Again}$	4:03	2000-03-18	29	22

##	239	2000		Aaliyah	7	Гry	Again	4:03	2000-03-18	30	33
##	247	2000		Aaliyah	7	Гry	Again	4:03	2000-03-18	31	36
##	255	2000		Aaliyah	7	Гry	Again	4:03	2000-03-18	32	43
##	8	2000	Adams,	Yolanda	Open	Му	Heart	5:30	2000-08-26	1	76
##	16	2000	Adams,	Yolanda	Open	Му	Heart	5:30	2000-08-26	2	76
##	24	2000	Adams,	Yolanda	Open	Му	Heart	5:30	2000-08-26	3	74
##	32	2000	Adams,	Yolanda	Open	Му	Heart	5:30	2000-08-26	4	69
##	40	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	5	68
##	48	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	6	67
##	56	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	7	61
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##	72	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	9	57
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##	88	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	11	66
##	96	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	12	68
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##	136	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	17	67
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##	152	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	19	79
##	160	2000	Adams,	Yolanda	Open	Му	${\tt Heart}$	5:30	2000-08-26	20	89