Homework 7 Group

Gabe Gress   Minyue Hu   Tina Dantono   Kristin West

Due: Thursday October 29

```r
library(RSQLite)
```

```
## Warning: package 'RSQLite' was built under R version 4.0.3
```

```r
setwd("E:/R Data")
headers <- read.csv(file="./arxiv-dataset.csv")
names(headers) <- c("X", "ID", "Submitter", "Authors", "Title", "Comments", "JournalRef", "DOI", "Repor
yearsarx <- sapply(headers$id,strsplit,split="[[:punct:]]{1}")
yearsarx = aperm(array(as.character(unlist(yearsarx)),c(2,length(yearsarx)/2)))
datesarx <- as.Date(paste(yearsarx[,1],"01",sep=""), "%y%m%d")

seconddata <- read.csv(file="./Colleges_and_Universities.csv")
```

```r
arxivtable <- dbConnect(SQLite(), dbname = "arXivMetadata.sqlite")
if (!dbExistsTable(arxivtable, "arXiv")){
dbSendQuery(conn = arxivtable, "
CREATE TABLE arXiv (
X int NOT NULL,
ID text NOT NULL,
Submitter text,
Authors text,
Title text,
Comments text,
JournalRef text,
DOI text,
ReportNo text,
Categories text,
License text,
Abstract text,
Versions text,
UpdateDate text,
AuthorsParsed text,
PRIMARY KEY (X)
);
")

dbWriteTable(conn = arxivtable, name = "arXiv", headers, append = TRUE, row.names = FALSE)
}
```

```r
query <- "
SELECT Authors, Title, Categories
FROM arXiv
WHERE Authors BETWEEN 'A' and 'M'
ORDER BY Categories, Authors"
```

```r
res <- dbSendQuery(arxivtable, query)
dbFetch(res, -1)
```

```
## # A tibble: 951,522 x 3
##    Authors                      Title                     Categories
##    <chr>                        <chr>                     <chr>
##  1 "D.H. Brown, D.H. Orlov, G.S.~ "A Scintillating Fiber Hodos~ acc-phys hep-ex~
##  2 "A. Amatuni"                 "Approximate Analytical Desc~ acc-phys physic~
##  3 "A. Amatuni"                 "Selfacceleration of Electro~ acc-phys physic~
##  4 "A. Garren (LBNL and Center f~ "Design of the Muon Collider~ acc-phys physic~
##  5 "A.N.Aleshaev, I.V.Pinayev, V~ "A Study of Influence of Syn~ acc-phys physic~
##  6 "A.R.Tumanyan, Kh.A.Simonyan,~ "Coaxial Ring Cyclotron as a~ acc-phys physic~
##  7 "B. Norum and R. Rossmanith"  "Polarized Beams in a Muon C~ acc-phys physic~
##  8 "C. Pagani, G. Bellomo, P. Pi~ "A High Current Proton Linac~ acc-phys physic~
##  9 "C. Travier"                 "High-Brightness Photocathod~ acc-phys physic~
## 10 "C. Travier, L. Boy, J.N. Cay~ "Candela Photo-Injector Expe~ acc-phys physic~
## # ... with 951,512 more rows
```

```r
dbClearResult(res)
dbDisconnect(arxivtable)
```