Reading from other sources

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There is a package for that

- Roger has a nice video on how there are R packages for most things that you will want to access.

- Here I'm going to briefly review a few useful packages

- In general the best way to find out if the R package exists is to Google "data storage mechanism R package"

  - For example: "MySQL R package"

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Interacting more directly with files

- file - open a connection to a text file

- url - open a connection to a url

- gzfile - open a connection to a .gz file

- bzfile - open a connection to a .bz2 file

- *?connections* for more information

- Remember to close connections

foreign package

- Loads data from Minitab, S, SAS, SPSS, Stata,Systat

- Basic functions *read.foo*

    - read.arff (Weka)

    - read.dta (Stata)

    - read.mtp (Minitab)

    - read.octave (Octave)

    - read.spss (SPSS)

    - read.xport (SAS)

- See the help page for more details http://cran.r-project.org/web/packages/foreign/foreign.pdf

Examples of other database packages

- RPostresSQL provides a DBI-compliant database connection from R. Tutorial- https://code.google.com/p/rpostgresql/, help file-http://cran.r-project.org/web/packages /RPostgreSQL/RPostgreSQL.pdf

- RODBC provides interfaces to multiple databases including PostgreQL, MySQL, Microsoft Access and SQLite. Tutorial - http://cran.r-project.org/web/packages/RODBC/vignettes /RODBC.pdf, help file - http://cran.r-project.org/web/packages/RODBC/RODBC.pdf

- RMongo http://cran.r-project.org/web/packages/RMongo/RMongo.pdf (example of Rmongo http://www.r-bloggers.com/r-and-mongodb/) and rmongodb provide interfaces to MongoDb.

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Reading images

- jpeg - http://cran.r-project.org/web/packages/jpeg/index.html

- readbitmap - http://cran.r-project.org/web/packages/readbitmap/index.html

- png - http://cran.r-project.org/web/packages/png/index.html

- EBImage (Bioconductor) - http://www.bioconductor.org/packages/2.13/bioc/html/EBImage.html

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Reading GIS data

- rdgal - http://cran.r-project.org/web/packages/rgdal/index.html

- rgeos - http://cran.r-project.org/web/packages/rgeos/index.html

- raster - http://cran.r-project.org/web/packages/raster/index.html

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Reading music data

- tuneR - http://cran.r-project.org/web/packages/tuneR/

- seewave - http://rug.mnhn.fr/seewave/