The web is full of data, these exercises are geared toward developing skills to access this data using R.

1.) Irish Hospital Waiting List Data

Import the following csv file hospital data and store it in a data frame.

write out the data for University of Limerick Hospital Group to a tab-delimited txt file e.g. UHL.txt

Import this file back into R.

2.) Facebook Data

Download the zip located at the following url fb data and import the csv file to R. Save the data frame as a .rds file e.g. FBData.rds

Import this file back into R.

3.) Stock Data

Download the following xlsx file portfolio data , query the names of the sheets and import one, save the data frame as a text file, with the semi-colon ; as the delimiter.

Import this file back into R.

4.) Sports Data

Download and import the following Olympics dataset detailing the results of the Summer and Winter games from 1896 - 2016.

5.) Chinese Cities Data

Grab the following rar file, import each of the five .csv files and save the result as a single excel workbook, with one sheet for the data in each of the .csv files.

Import one of the sheets in this file back into R.

6.) EU Data

Import the following file into R and store it in a data frame.

isoc_ec_ibuy.tsv.gz

write out the first 1000 rows to a csv file e.g. EUData.csv

Import this file back into R.

7.) Twitter Data

Download the following zip. Import the file training.1600000.processed.noemoticon.csv. Rename the columns as follows: 'polarity','id','date','query','user','tweet'. Create 3 separate data frames, one for

each vaue of polarity e.g. called negative (0), neutral (2), positive (4). Save these dataframes in an RData file e.g. Twitter.RData

Remove the data frame object from the global environment.

Import Twitter.RData back into R

8.) Scraping Table Data:

Go to the following url and scrape the table for **refined products**. Convert the prices to Euros using data from the following table.

9.) Your Turn

Sign up with data.world, look for some data that interests you and try get it into R…

10.) API Rental Bike Data

Join JCDecaux developer to receive an API key.

Import real-time data on all the bicycle stations in a city of your choice (Dublin is fine).

Note: this is different from the API mechanism covered in the lecture where a dedicated package was used. Instead, for this task, you should use the generic package httr package.