Welcome to Software Carpentry Etherpad!

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Class Website: <https://github.com/remi-daigle/2017-10-16-YorkU>

**Class Etherpad** (this page): <http://pad.software-carpentry.org/2017-10-16-YorkU>

Please follow the instructions on the class website to **install the necessary software**, you should have

 - a bash compatible **terminal**window (Git Bash for windows, the built-in terminal for Mac/Linux)

 - **R**(a newish version, if you haven't updated in over a year, please do so now)

 - **RStudio**

 - **Git**

 - **Github Desktop**app

 - Create a **github account** at <https://github.com/>  (Researchers/Students/Educators can get unlimited free private repos here: <https://education.github.com/discount_requests/new)>

 Also, before we begin, please **download data** for the Shell lesson

<https://swcarpentry.github.io/shell-novice/data/shell-novice-data.zip>

 Twitter: #SWCYorkCan150

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**#################################################### Notes for Shell lesson ##################################################**

The material: <http://swcarpentry.github.io/shell-novice/>

 - type things here!

inputs

math - doing calcuations

display output

Read evaluate print loop

Commands:

    whoami (prints username)

 pwd  (prints working directory)

 ls (list)

 cd (change to home directory)

 cd path/to/my/file/ (change directory to filepath)

 use the up button to cycle through previously entered commands

 mkdir directorytomake (makes a directory)

 create a .txt file:

nano draft.txt

notepad draft.txt

start notepad++ draft.txt  (in Windows)

rm (remove)

rm -r (remove folder recursively)

rm -r -i (descend through folder, decide on each file to delete)

wc (word count)

sort -n (sort)

**#################################################### Notes for R lesson ####################################################**

The material: <http://swcarpentry.github.io/r-novice-gapminder/>

a <- c(1,2,3,4,5,6)

a <- c(1,2,3,4,5,"six")

ls()

"1"+"2" # gives error

as.numeric("1") + as.numeric("2")

rm(a)

rm(list=ls())

?rm

# Command to download the data:

* download.file("<https://raw.githubusercontent.com/swcarpentry/r-novice-gapminder/gh-pages/_episodes_rmd/data/gapminder-FiveYearData.csv>", destfile = "data/gapminder-FiveYearData.csv")
* # read the data into R

gapminder <- read.csv("data/gapminder-FiveYearData.csv")

# alternative 'one-liner'

# Command to install packages

install.packages("tidyverse")

website for plot catalogue

<http://shinyapps.stat.ubc.ca/r-graph-catalog/>

Example of reproducible workflow:

<https://remi-daigle.github.io/LTRANS_connectivity/>