R- Assignment 1

1. When trying to find a solution to a programming problem, it is often helpful to create a reproducible example of your code to share with others. This bit of code should focus on and reproduce the problem you are encountering. Describe three (3) ways to make sure that your example code is easy for others to read.

3 ways to make sure that code is easy for others to read is proper spacing to group things together, comments to tell whoever is looking at the code what everything does, and also starting your code with a small read-me comment letting whoever is reading the code see who wrote it, what it was for, and when it was written.

1. Tweak the following R statements so that they will work correctly:
   1. install.package**s**(“gapminder”)
   2. setwd(**“**C:/Users/phil/My Documents/**”**)
   3. Library(“tidyverse”)
2. List three (3) types of files that should be stored together to make your analysis portable and begin exactly where you left off.

Rproj – Project files so that everything is grouped together.

R – any R script files

csv – any kind of data set input/output file that would be needed to run the script.

1. List three (3) elements of an R script that should be included at the top of the script?

Who wrote it, When it was written, What it was written for and what it does.

1. Scripts are good for saving code that will be reused later. When and why might you want to write code directly into the console?

Any kind of command that you only need to run once. Such as importing a Library.

1. Go to twitter.com/rstudiotips and find a tip that is interesting to you. What is the tip and why do you think it will be useful?

Under Help>Cheat Sheets there is a big list of cheat sheets that can help you when trying to write something. I think this will be useful so that if I am stuck trying to do something that I don’t know too much about, I can go and check a cheat sheet.

1. Write pseudo-code (instructions for a computer, using human language instead of code) to instruct a humanoid robot to take out the garbage from your kitchen. Try to write instructions that are Atomic, Literal, Explicit, Complete, and Correct. Please limit your instructions to a single page.

#@author:Xander

#@Use:To take out kitchen garbage

#@Libraries: locationEditor ezMove

power-on

unplug

walk-to-location(kitchen.garbageCan)

open(kitchen.garbageCan)

tie(kitchen,garbageBag)

grab(kitchen,garbageBag)

place(new.garbageBag)(kitchen.garbageCan)

close(kitchen,garbageCan)

walk-to-location(outside.garbageCan)

open(outside.garbageCan)

place(kitchen.garbageBag)(outside.garbageCan)

close(outside.garbageCan)

walk-to-location(chargingStation)

plug-in

power-off