Homework5

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March 11, 2019

## Question 1

Stan code that is relevant to my research: <https://discourse.mc-stan.org/t/indexing-approach-to-predictors/7898>

This program looks at model where the intercepts of the binomial regression depends on the value of corresponding index value of the same observation. This could be useful for me if trying to determine if cheatgrass is present or not in a specific plot and having my bionimal regression dependant on my current observationa and my remote sensing data.

## Question 2

Choice 2: “The Garden of Forking Paths” Why has the phrase “Garden of the Forking Paths” become so important and widespread in modern statistics?

The garden of forking paths has become such a common phrase because it consideres all possible paths or outcomes with previous outcomes included. The “paths” are giant decision trees where each layer has a probability. While only one path is chosen the likelyhood of that path can determine what the most likely hypothesis is for the data. So while we may have a conjecture about the data the paths

## Question 3

#Question 3  
p\_earth <- 0.3 #30% land   
p\_mars <- 1.0 #100% land   
  
post\_prob <- (p\_earth)/(p\_earth+p\_mars)   
  
print(post\_prob)

## [1] 0.2307692

## Including Plots

You can also embed plots, for example:

## [1] 36

## [1] 0.6956522

## [1] 0.2504348

Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.