 Problem Statement

1. How many vowels are there in the names of USA States?

> library(MASS)

> data(USArrests)

> States = rownames(USArrests)

> View(States)

> library(magrittr)

> characters = state.name %>% strsplit(split = "") %>% unlist

> #filter out vowels

> vowels = characters[grepl (pattern = 'a|e|i|o|u' ,x = characters,

+ ignore.case = TRUE)] %>% tolower

> table(vowels)

vowels

a e I o u

61 28 44 36 8

1. Visualize the vowels distribution.

> library(ggplot2)

> #from the base plot using the ggplot function

> ggp <- ggplot(data.frame(vowels), aes(x=vowels))

> #call gemo\_histogram and pass the stat as "count" to plot a histogram

> ggp + geom\_histogram(fill="lightgreen", stat="count")

Warning: Ignoring unknown parameters: binwidth, bins, pad

>

