Assignment: ASSIGNMENT 3

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Date: 2022-12-16

Load the ggplot2 package

library(ggplot2) theme_set(theme_minimal())

Set the working directory to the root of your DSC 520 directory

setwd("C:\Users\headc\Documents\GitHub\dsc520")

Load the `data/r4ds/heights.csv` to

heights_df <- read.csv("data/r4ds/heights.csv")

https://ggplot2.tidyverse.org/reference/geom_point.html (https://ggplot2.tidyverse.org/reference/geom_point.html)

Using `geom_point()` create three scatterplots for

`height` vs. `earn`

ggplot(heights_df, aes(x= height, y= earn)) + geom_point() ## `age` vs. `earn` ggplot(heights_df, aes(x= age, y= earn)) + geom_point() ## `ed` vs. `earn` ggplot(heights_df, aes(x= ed, y= earn)) + geom_point()

Re-create the three scatterplots and add a regression trend line using

the `geom_smooth()` function

`height` vs. `earn`

ggplot(heights_df, aes(x= height, y= earn)) + geom_point() + geom_smooth(method=lm) ## `age` vs. `earn` ggplot(heights_df, aes(x= age, y= earn)) + geom_point() + geom_smooth(method=lm) ## `ed` vs. `earn` ggplot(heights_df, aes(x= ed, y= earn)) + geom_point() + geom_smooth(method=lm)

Create a scatterplot of `height`` vs. earn. Use `sex` as the `col` (color) attribute

ggplot(heights_df, aes(x= height, y= earn, col= sex)) + geom_point()

Using `ggtitle()`, `xlab()`, and `ylab()` to add a title, x label, and y label to the previous plot

Title: Height vs. Earnings

X label: Height (Inches)

Y Label: Earnings (Dollars)

ggplot(heights_df, aes(x=height, y=earn, col=sex)) + geom_point() + ggtitle('Height vs. Earnings') + labs(y="Earnings (Dollars)", x="Height (Inches)")

https://ggplot2.tidyverse.org/reference/geom_histogram.html (https://ggplot2.tidyverse.org/reference/geom_histogram.html)

Create a histogram of the `earn` variable using `geom_histogram()`

ggplot(heights_df, aes(earn)) + geom_histogram()

Create a histogram of the `earn` variable using `geom_histogram()`

Use 10 bins

ggplot(heights_df, aes(earn)) + geom_histogram(bins=10)

https://ggplot2.tidyverse.org/reference/geom_density.html (https://ggplot2.tidyverse.org/reference/geom_density.html)

Create a kernel density plot of `earn` using `geom_density()`

ggplot(heights_df, aes(earn)) + geom_density()