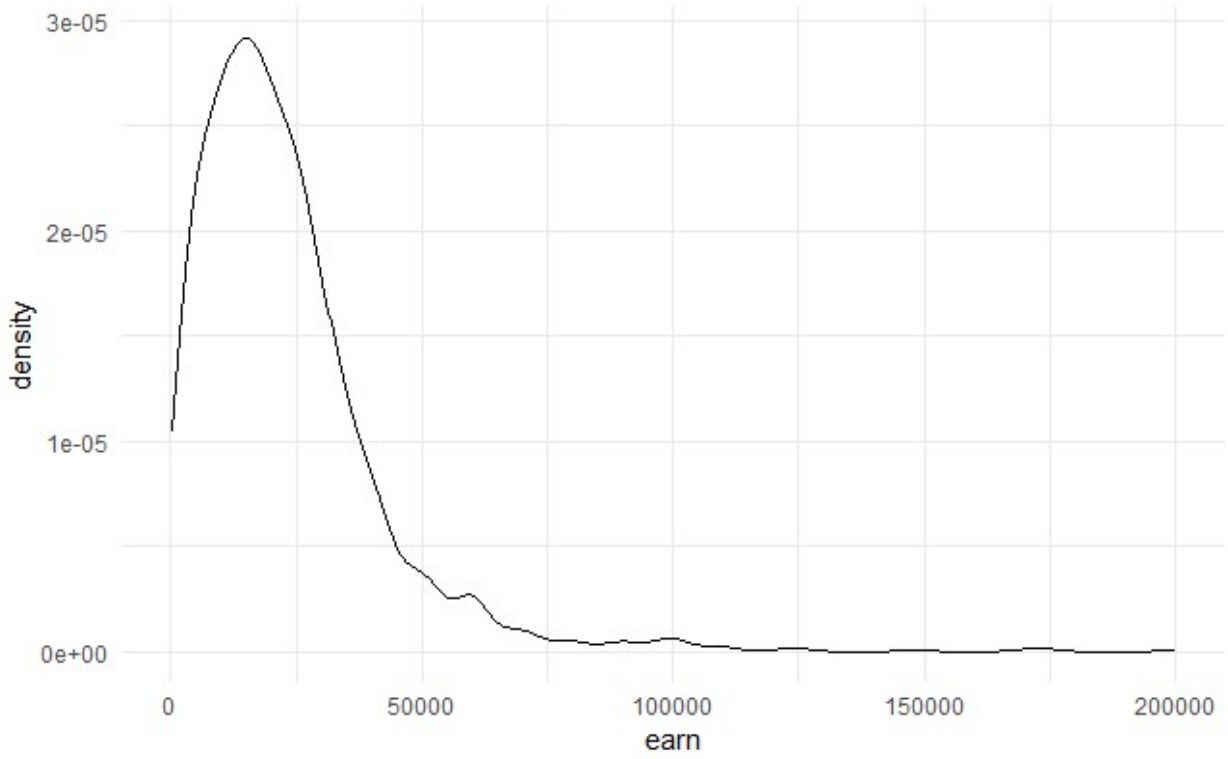
```
> # Assignment: ASSIGNMENT 3-1
> # Name: Salgado-Gouker, Kyle
> # Date: 2022-12-14
>
> ## Load the ggplot2 package
> library(ggplot2)
> theme_set(theme_minimal())
>
> ## Set the working directory to the root of your DSC 520 directory
> setwd("C:/Users/kyles/OneDrive/Documents/GitHub/dsc520")
>
> ## Load the `data/r4ds/heights.csv` to
> heights_df <- read.csv("data/r4ds/heights.csv")
>
> # https://ggplot2.tidyverse.org/reference/geom_point.html
> ## 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()
`geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
> ## `age` vs. `earn`
> ggplot(heights_df, aes(x=age, y=earn)) + geom_point() + geom_smooth()
`geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
> ## `ed` vs. `earn`
> ggplot(heights_df, aes(x=ed, y=earn)) + geom_point() + geom_smooth()
`geom_smooth()` using method = 'gam' and formula = 'y ~ s(x, bs = "cs")'
>
> ## Create a scatterplot of `height`` vs. `earn`.  Use `sex` as the `col` (c
olor) 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") + xlab("Height (Inches)") + ylab("Earnings (Dollars)"
)
>
> # 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()
`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
>
> ## Create a histogram of the `earn` variable using `geom_histogram()`
> ## Use 10 bins
> ggplot(heights_df, aes(earn)) + geom_histogram(binwidth=10)
>
> # 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()
```


3e-05
2e-05
1e-05
0e+00
density
0
50000
100000
150000
200000
earn