Professional Development Task

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(ggplot2)
x <- read.csv("~/desktop/FinalCountyData.csv", stringsAsFactors = FALSE)
x <- na.omit(x)
```

Including Plots

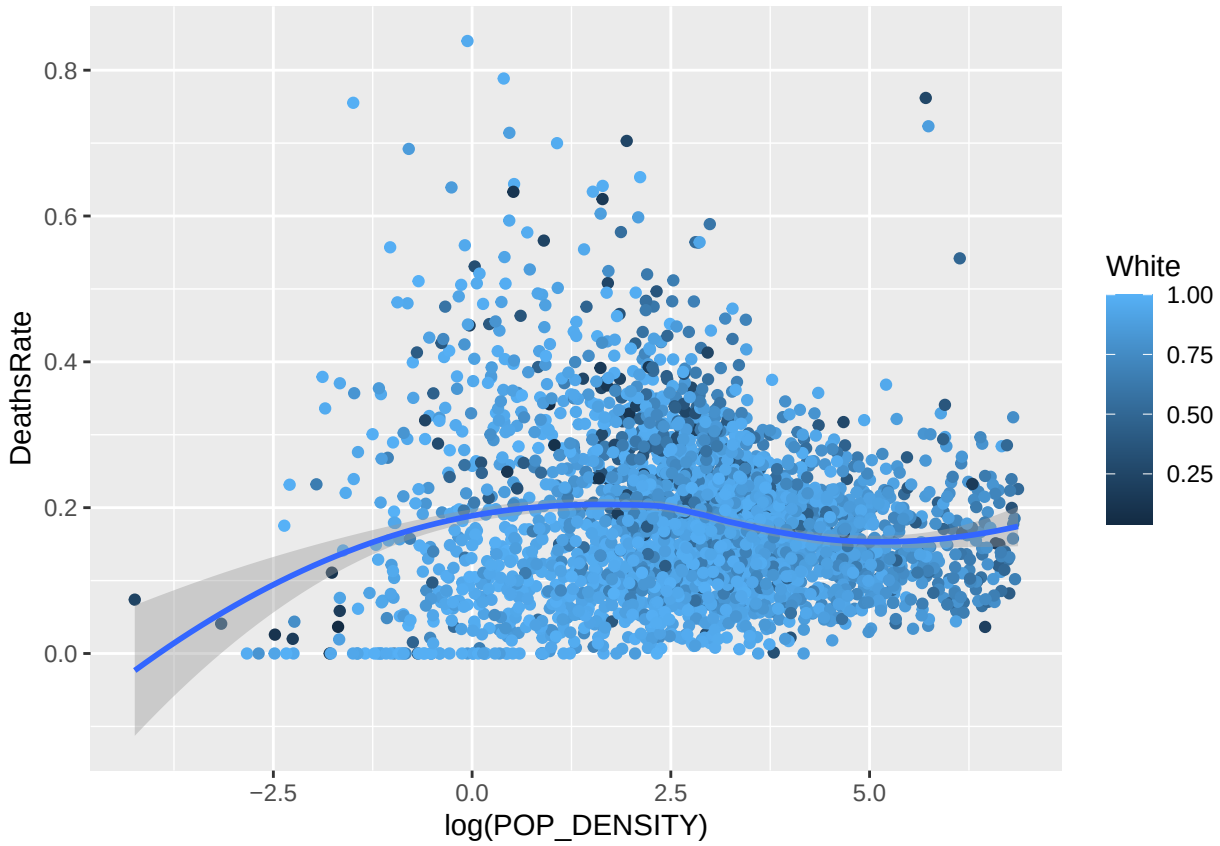
You can also embed plots, for example:

```
# White
summary(x$White)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.03891 0.76841 0.89660 0.83154 0.95071 1.00000
```

```
pd_1000 <- x[x$POP_DENSITY < 1000, ]
qplot(log(POP_DENSITY), DeathsRate, data = pd_1000, colour = White) +
  stat_smooth(method="loess")
```

```
## `geom_smooth()` using formula 'y ~ x'
```

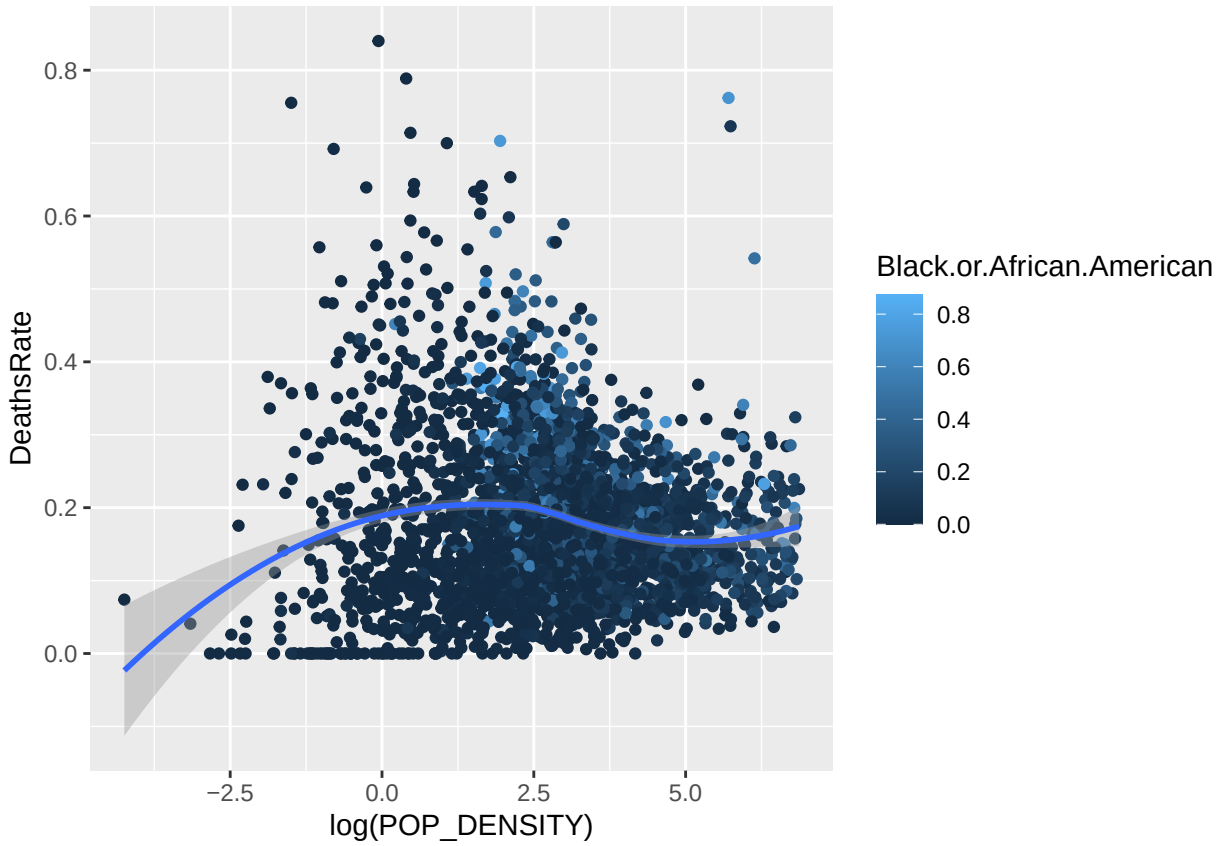



```
# Black
summary(x$Black.or.African.American)
```

```
##     Min.  1st Qu.   Median     Mean  3rd Qu.     Max.
## 0.000000 0.006755 0.022608 0.090623 0.101193 0.874123
```

```
pd_1000 <- x[x$POP_DENSITY < 1000, ]
qplot(log(POP_DENSITY), DeathsRate, data = pd_1000,
      colour = Black.or.African.American) + stat_smooth(method="loess")
```

```
## `geom_smooth()` using formula 'y ~ x'
```

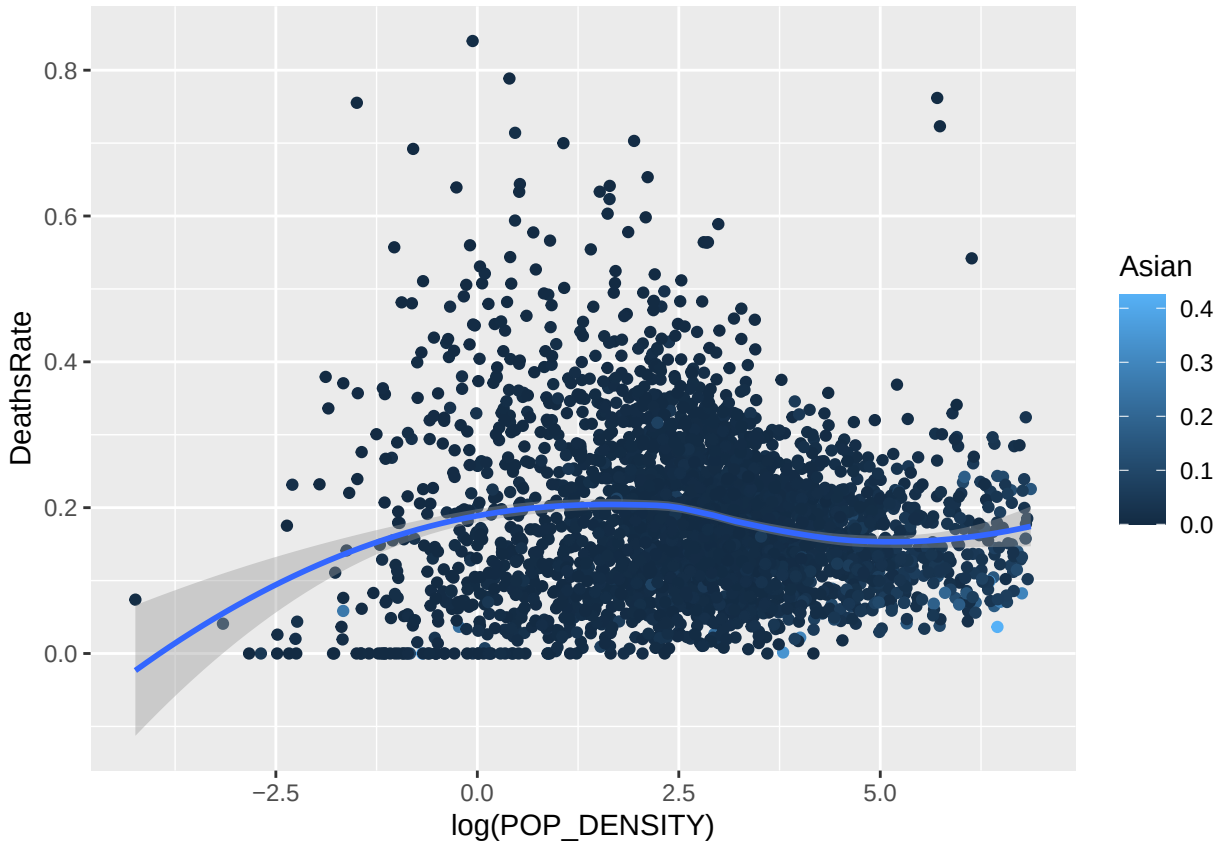



```
# Asian
summary(x$Asian)
```

```
##     Min.  1st Qu.   Median     Mean  3rd Qu.     Max.
## 0.000000 0.002904 0.006029 0.013546 0.012996 0.425107
```

```
pd_1000 <- x[x$POP_DENSITY < 1000, ]
qplot(log(POP_DENSITY), DeathsRate, data = pd_1000,
      colour=Asian) + stat_smooth(method="loess")
```

```
## `geom_smooth()` using formula 'y ~ x'
```

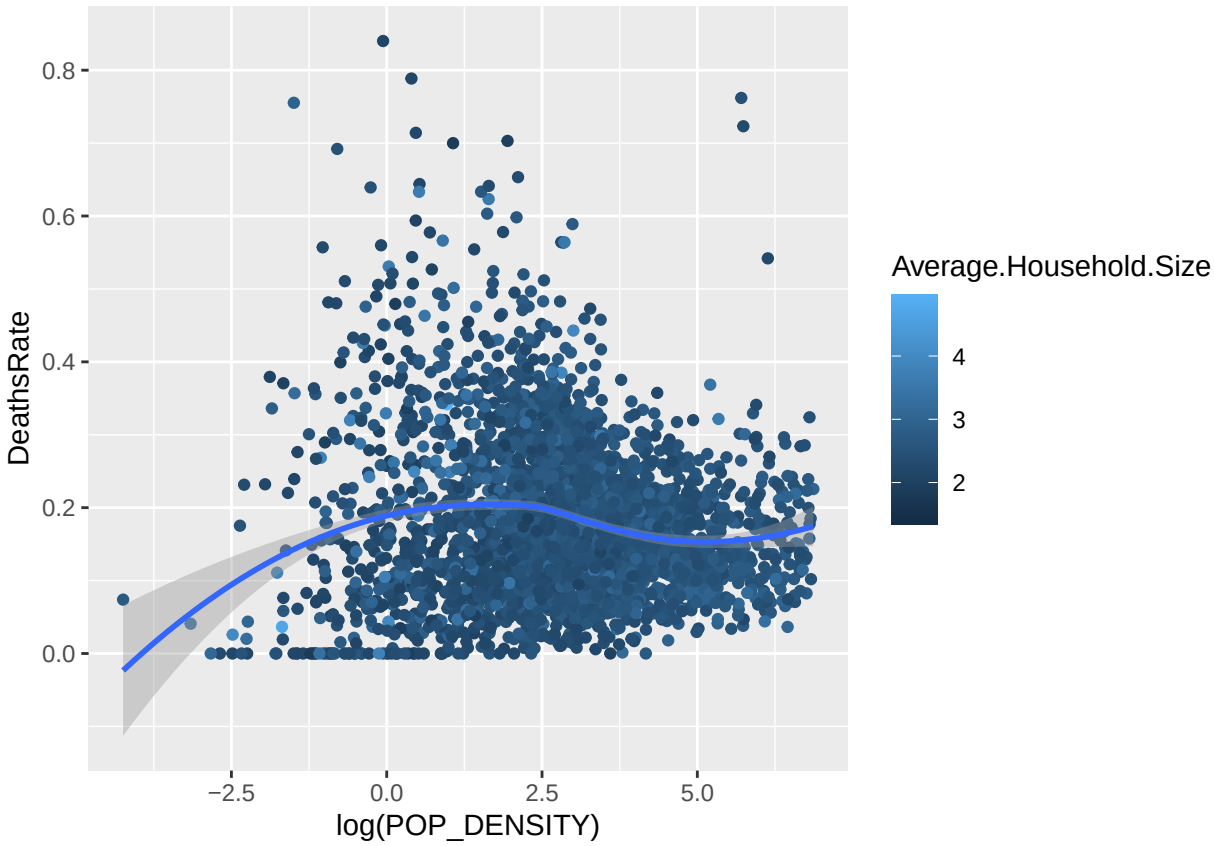



```
# Average Household Size
summary(x$Average.Household.Size)
```

```
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   1.340   2.350   2.480   2.519   2.630   4.970
```

```
pd_1000 <- x[x$POP_DENSITY < 1000, ]
qplot(log(POP_DENSITY), DeathsRate, data = pd_1000,
      colour=Average.Household.Size) + stat_smooth(method="loess")
```

```
## `geom_smooth()` using formula 'y ~ x'
```


0.8
0.6
0.4
0.2
0.0
DeathsRate
−2.5
0.0
2.5
5.0
log(POP_DENSITY)
Average.Household.Size
4
3
2