Untitled

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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:

Including Plots

You can also embed plots, for example:

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

```
#(1) List of Visualizations:
#Time Series Plots:


#Purpose: To visualize trends, patterns, and changes over time, answering questions about how the main
#Why: Time series plots are effective in showcasing temporal patterns, making it easier to identify tre
#Scatter Plots:


#Purpose: To explore the relationship between two variables, identifying potential correlations, cluste
#Why: Scatter plots are useful for visualizing the relationship between two continuous variables, allow
#Histograms:

#Variables: Distribution of a single variable
#Purpose: To visualize the distribution of a variable and understand its shape, central tendency, and v
#Why: Histograms provide insights into the distributional characteristics of a variable, helping to ide
#Box Plots:

#Variables: One categorical variable and one continuous variable
#Purpose: To compare the distribution of a continuous variable across different categories and identify
#Why: Box plots provide a visual summary of the distribution of a variable, highlighting variations acr
#Heatmaps:

#Variables: Two categorical variables and one continuous variable (optional)
#Purpose: To visualize the relationship between two categorical variables and, optionally, a continuous
#Why: Heatmaps are effective in displaying dense data and identifying patterns or clusters in categoric
#(2) Interactivity Plan:
#To make the project interactive, I plan to use the following features:
```

```
#Shiny: Incorporate interactive elements such as sliders, drop-down menus, or checkboxes to allow users
#ggplot2: Utilize interactive features available in ggplot2 such as tooltips or zooming functionality t
```