Bhasin-S-hw1-2

2023-01-26

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.

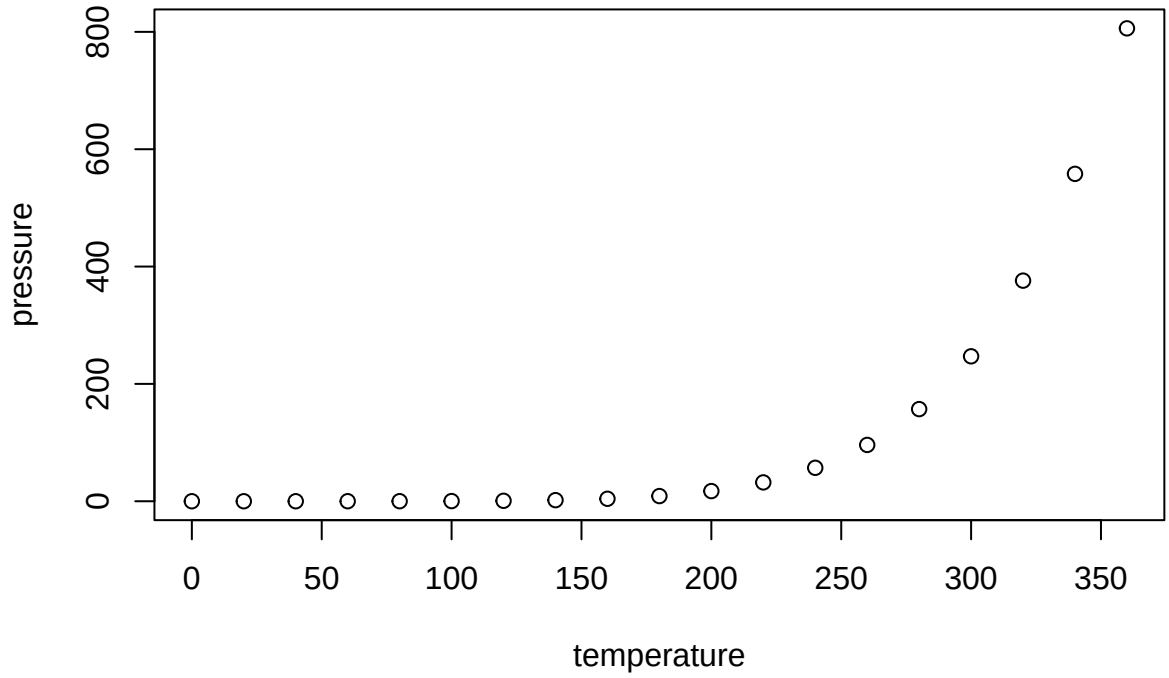
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

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.

if (!require("pacman")) install.packages("pacman") pacman::p_load(tidyverse, ggplot2, dplyr, lubridate, stringr, readxl, data.table, gdata)

source("data-code/1_Plan_Data.R") source("data-code/2_Plan_Characteristics.R") source("data-code/3_Service_Area.R") source("data-code/4_Penetration_Files.R")

#1 tot.obs <- as.numeric(count(full.ma.data %>% ungroup())) tot.obs #There are 19,126,783 observations in my current dataset of full.ma.data.

#2 plan.type.table <- full.ma.data %>% group_by(plan_type) %>% count() %>% arrange(-n) plan.type.table #There are 27 different plan_types in the data.

#3

plan.type.year1 <- full.ma.data %>% group_by(plan_type, year) %>% count() %>% arrange(year, -n) plan.type.year1 <- pivot_wider(plan.type.year1, names_from = "year", values_from = "n", names_prefix = "Count_") view(plan.type.year1)

#4

final.plans <- full.ma.data %>% filter(snp== 'No' & eghp == "No" & (planid < 800 | planid >= 900))

plan.type.year2 <- final.plans %>% group_by(plan_type, year) %>% count() %>% arrange(year,-n) plan.type.year2 <- pivot_wider(plan.type.year2, names_from = "year", values_from = "n", names_prefix = "Count_") view(plan.type.year2)

#5

final.data <- final.plans %>% inner_join(contract.service.area %>% select(contractid, fips, year), by=c("contractid", "fips", "year")) %>% filter(!is.na(avg_enrollment))

row(final.plans)

fig.avg.enrollment <- final.data %>% group_by(flips, year) %>% select(flips, year, avg_enrollment) %>% summarize(all_enroll=sum(avg_enrollment)) %>% ggplot2(aes(x=as, factor(year), y=all_enroll)) + stat_summary(fun.y="mean", geom = "bar") + labs(x= "Year" y= "People" title =" ") + scale_y_continous(labels=comma) + theme_bw()

#I keep getting an error with the ggplot2 function when I try to make the graph

#6 Since I keep getting an error for the previous question, I think I will merge the data as done abov using the following code using the left_join function after downloading the market penetration data.

fig.avg.enrollment <- final.data %>% group_by(fips, year) %>% select(fips, year, avg_enrollment) %>% summarize(all_enroll=sum(avg_enrollment))

```
%>%
  ggplot(aes(x=as.factor(year), y=all_enroll)) +
  stat_summary(fun.y = "mean", geom="bar") +
  labs(
    x="Year",
    y="People",
    title =""
  ) +scale_y_continuous(labels=comma) +
  theme_bw()


fig.avg.enrollment
```

#7 I think I need to use the ggplot2 function to create this graph. Before I do this, I need to eliminate the errors I am getting in the previous codes.

#8 I think we dropped it since there were replciates when we merged the dataset

#9 The beneficiary is not making a profit since they are charging the expect value of the cost.

#10 It has been very challenging to work with this data. I think getting the tables was a learnign experience since you had to make sure R knew exactly what data to put where. Also, it was aggervating when the errors would come, then I would try to fix them and they would keep occuring.