

DSC640_Exercise_2-2_JakeMeyer

Jake Meyer

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Assignment Instructions

Submit 1 line chart and 1 step chart with R.

Show Working directory

```
getwd()

## [1] "C:/Users/jkmey/Documents/Github/DSC640_Course_Assignments/DSC640_Repository/Weeks3&4"

dir()

## [1] "~$DSC640_Exercise_2-2_JakeMeyer.pptx"
## [2] "DSC640_Exercise_2-2_JakeMeyer.ipynb"
## [3] "DSC640_Exercise_2-2_JakeMeyer.pbix"
## [4] "DSC640_Exercise_2-2_JakeMeyer.pptx"
## [5] "DSC640_Exercise_2-2_JakeMeyer.twb"
## [6] "DSC640_Exercise_2-2_JakeMeyer_Tableau_Line_Plot.pdf"
## [7] "DSC640_Exercise_2-2_JakeMeyer_Tableau_Step_Plot.pdf"
## [8] "DSC640_Exercise_2-2_JakeMeyerRCode.Rmd"
## [9] "world-population.xlsm"

# setwd("C:/Users/jkmey/Documents/Github/DSC640_Course_Assignments/DSC640_Repository")
```

Import the necessary libraries

```
library(readxl)
library(ggplot2)
library(tidyverse)

## -- Attaching packages ----- tidyverse 1.3.2 --
## v tibble 3.1.8      v dplyr 1.0.10
## v tidyr 1.2.1      v stringr 1.5.0
## v readr 2.1.3      v forcats 0.5.2
## v purrr 0.3.5
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()

library(dplyr)
library(scales)

##
## Attaching package: 'scales'
##
```

```
## The following object is masked from 'package:purrr':
##
##   discard
##
## The following object is masked from 'package:readr':
##
##   col_factor
library(plotly)

##
## Attaching package: 'plotly'
##
## The following object is masked from 'package:ggplot2':
##
##   last_plot
##
## The following object is masked from 'package:stats':
##
##   filter
##
## The following object is masked from 'package:graphics':
##
##   layout
theme_set(theme_minimal())
```

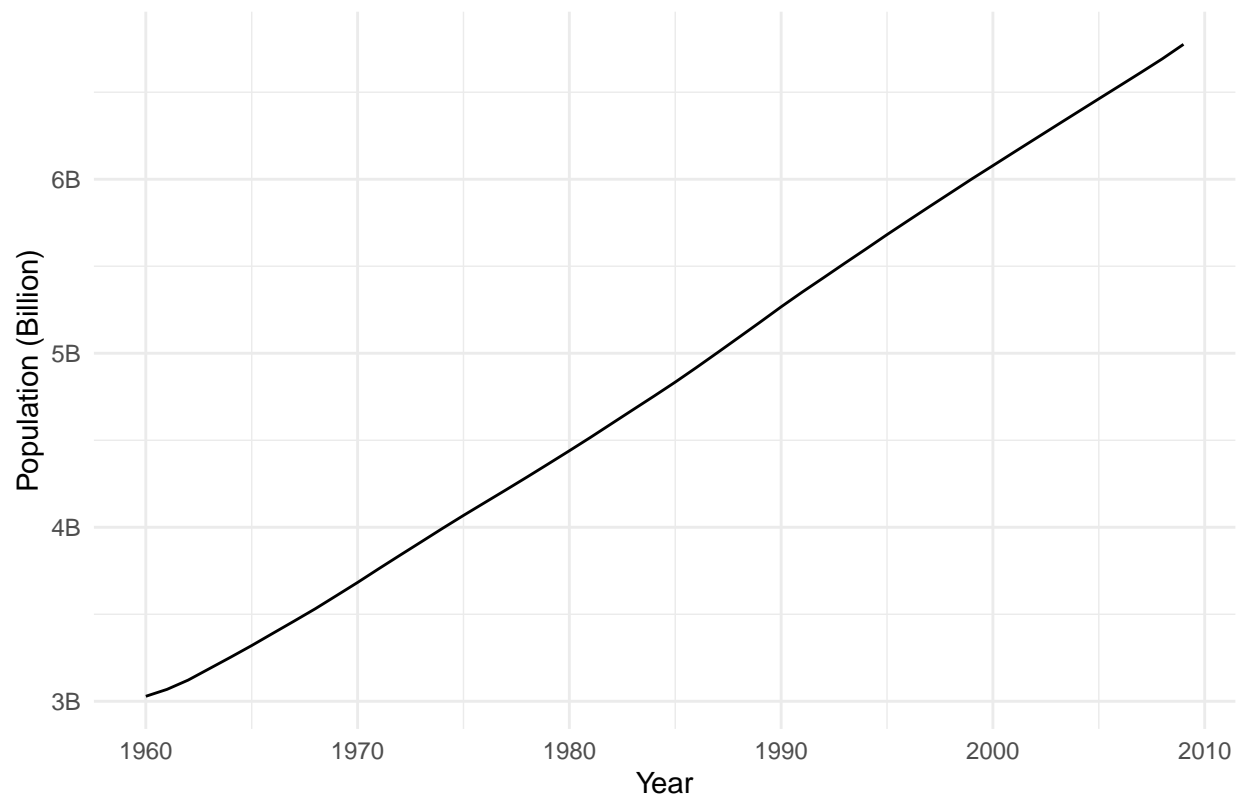
Import the data

```
df1 <- read_excel("world-population.xlsx")
```

Line Chart

```
ggplot(df1, aes(x = Year, y = Population, group = 1)) +
  geom_line() + xlab('Year') + ylab('Population (Billion)') +
  ggtitle('Population by Year (Line Chart)') +
  scale_y_continuous(labels = label_number(suffix = "B", scale = 1e-9))
```

Population by Year (Line Chart)



Step Chart

```
p <- ggplot(df1, aes(Year,Population)) + geom_step() + xlab('Year') +  
  ylab('Population (Billion)') +  
  ggtitle('Population by Year (Step Chart)') +  
  scale_y_continuous(labels = label_number(suffix = "B", scale = 1e-9))  
  
plotly::ggplotly(p)
```