

Untitled

2024-07-05

```
install.packages("tidyverse")
```

```
## Error in install.packages : Updating loaded packages
```

```
install.packages("WDI")
```

```
## Error in install.packages : Updating loaded packages
```

```
library(tidyverse)
```

```
library(WDI)
```

```
# Example: Download GDP data for the US and China from 2000 to 2020
```

```
gdp_data <- WDI(country = c("US", "IND"), indicator = "NY.GDP.MKTP.CD", start = 2000, end = 2020)
```

```
# Preview the data
```

```
head(gdp_data)
```

```
##   country iso2c iso3c year NY.GDP.MKTP.CD
## 1   India    IN   IND 2020  2.674852e+12
## 2   India    IN   IND 2019  2.835606e+12
## 3   India    IN   IND 2018  2.702930e+12
## 4   India    IN   IND 2017  2.651474e+12
## 5   India    IN   IND 2016  2.294797e+12
## 6   India    IN   IND 2015  2.103588e+12
```

```
tail(gdp_data)
```

```
##           country iso2c iso3c year NY.GDP.MKTP.CD
## 37 United States    US   USA 2005  1.303920e+13
## 38 United States    US   USA 2004  1.221720e+13
## 39 United States    US   USA 2003  1.145645e+13
## 40 United States    US   USA 2002  1.092911e+13
## 41 United States    US   USA 2001  1.058193e+13
## 42 United States    US   USA 2000  1.025095e+13
```

```
dim(gdp_data)
```

```
## [1] 42  5
```

```
summary(gdp_data)
```

```
##      country      iso2c      iso3c      year      NY.GDP.MKTP.CD
## Length:42      Length:42      Length:42      Min.   :2000      Min.   :4.684e+11
## Class :character Class :character Class :character 1st Qu.:2005      1st Qu.:1.712e+12
## Mode  :character Mode  :character Mode  :character Median :2010      Median :6.543e+12
##                                     Mean  :2010      Mean  :8.581e+12
##                                     3rd Qu.:2015      3rd Qu.:1.498e+13
##                                     Max.   :2020      Max.   :2.152e+13
```

```
# Plot GDP over time for the US and China
```

```
gdp_data %>%
  ggplot(aes(x = year, y = NY.GDP.MKTP.CD, color = country)) +
  geom_line() +
  labs(title = "GDP Over Time (2000-2020)",
       x = "Year",
       y = "GDP (current US$)",
       color = "Country") +
  theme_minimal()
```

