

# R-Excercises

```
In [1]: # Import required packages
library('magrittr')
library("ggplot2")
library("dplyr")
library("xlsx")
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

filter, lag

The following objects are masked from 'package:base':

intersect, setdiff, setequal, union

java.home option:

JAVA\_HOME environment variable: C:\Users\meena\anaconda3\Library\lib\jvm

Warning message in fun(libname, pkgname):

"Java home setting is INVALID, it will be ignored.

Please do NOT set it unless you want to override system settings."

```
In [2]: file = paste(getwd(), '/world-population.xlsm', sep = '')
df = xlsx::read.xlsx(file, sheetIndex = 1, stringsAsFactors = FALSE)
```

```
In [3]: df
```

A data.frame: 50 × 2

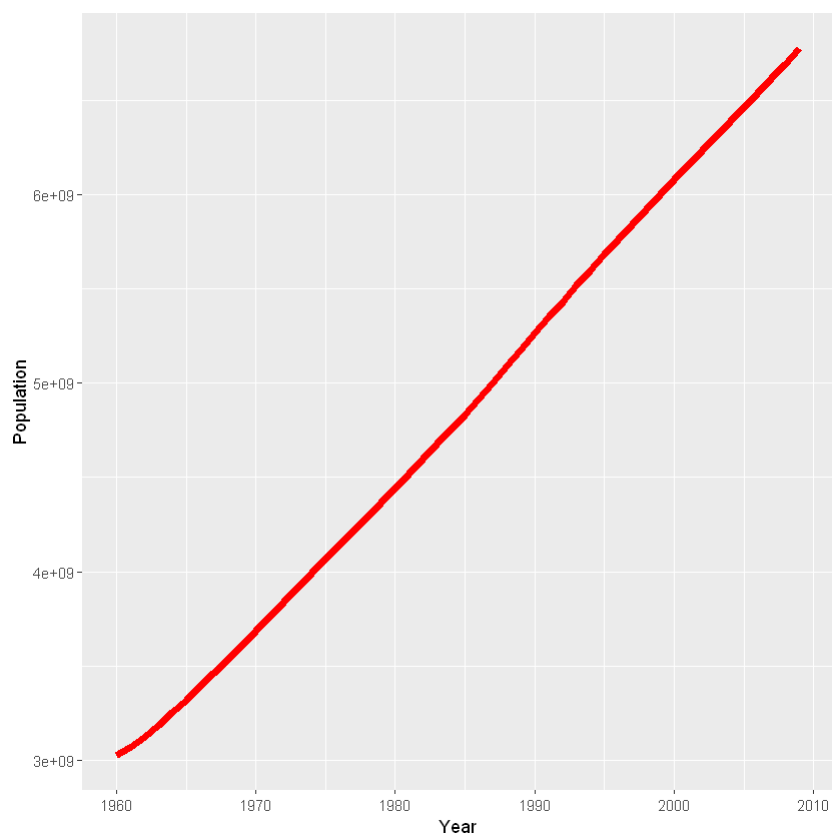
| <b>Year</b> | <b>Population</b> |
|-------------|-------------------|
| <dbl>       | <dbl>             |
| 1960        | 3028654024        |
| 1961        | 3068356747        |
| 1962        | 3121963107        |
| 1963        | 3187471383        |
| 1964        | 3253112403        |
| 1965        | 3320396924        |
| 1966        | 3390712300        |
| 1967        | 3460521851        |
| 1968        | 3531547287        |

| Year  | Population |
|-------|------------|
| <dbl> | <dbl>      |
| 1969  | 3606994959 |
| 1970  | 3682870688 |
| 1971  | 3761750672 |
| 1972  | 3839147707 |
| 1973  | 3915742695 |
| 1974  | 3992806090 |
| 1975  | 4068032705 |
| 1976  | 4141383058 |
| 1977  | 4214499013 |
| 1978  | 4288485981 |
| 1979  | 4363754326 |
| 1980  | 4439638086 |
| 1981  | 4516734312 |
| 1982  | 4595890494 |
| 1983  | 4675178812 |
| 1984  | 4753877875 |
| 1985  | 4834206631 |
| 1986  | 4918126890 |
| 1987  | 5004006066 |
| 1988  | 5090899475 |
| 1989  | 5178059174 |
| 1990  | 5266783430 |
| 1991  | 5351836347 |
| 1992  | 5433823608 |
| 1993  | 5516863641 |
| 1994  | 5598658151 |
| 1995  | 5681689325 |
| 1996  | 5762235749 |
| 1997  | 5842585301 |
| 1998  | 5921799957 |
| 1999  | 6001269553 |
| 2000  | 6078274622 |

| Year  | Population |
|-------|------------|
| <dbl> | <dbl>      |
| 2001  | 6155652495 |
| 2002  | 6232413711 |
| 2003  | 6309266583 |
| 2004  | 6385778679 |
| 2005  | 6462054420 |
| 2006  | 6538196688 |
| 2007  | 6614396907 |
| 2008  | 6692030277 |
| 2009  | 6775235741 |

## R - Line Chart

```
In [8]: ggplot2::ggplot(data=df, ggplot2::aes(x=Year, y=Population)) + ggplot2::geom_line(linet
```



## R - Step Chart

```
In [9]: ggplot2::ggplot(data=df, ggplot2::aes(x=Year, y=Population)) + ggplot2::geom_step(linet
```

