

R Data Camp Notes

Tidyverse

DPLYR

We can use **filter()** to select data in specific columns.

```
library(gapminder)
library(dplyr)
```

```
##
## 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
```

```
# Filter for China in 2002
gapminder %>%
  filter(country=="China", year==2002)
```

```
## # A tibble: 1 x 6
##   country continent  year lifeExp      pop gdpPercap
##   <fct>    <fct>    <int>  <dbl>    <int>    <dbl>
## 1 China    Asia      2002   72.0 1280400000   3119.
```

We can use **arrange()** to sort values.

```
# Sort in ascending order of lifeExp
gapminder %>%
  arrange(lifeExp)
```

```
## # A tibble: 1,704 x 6
##   country      continent  year lifeExp      pop gdpPercap
##   <fct>        <fct>    <int>  <dbl>    <int>    <dbl>
## 1 Rwanda      Africa    1992   23.6  7290203     737.
## 2 Afghanistan Asia     1952   28.8  8425333     779.
## 3 Gambia      Africa    1952    30   284320     485.
## 4 Angola      Africa    1952   30.0  4232095    3521.
## 5 Sierra Leone Africa    1952   30.3  2143249     880.
## 6 Afghanistan Asia     1957   30.3  9240934     821.
## 7 Cambodia    Asia     1977   31.2  6978607     525.
## 8 Mozambique  Africa    1952   31.3  6446316     469.
## 9 Sierra Leone Africa    1957   31.6  2295678    1004.
## 10 Burkina Faso Africa    1952   32.0  4469979     543.
## # ... with 1,694 more rows
```

```
# Sort in descending order of lifeExp
gapminder %>%
  arrange(desc(lifeExp))
```

```
## # A tibble: 1,704 x 6
```

```
##   country      continent  year  lifeExp      pop  gdpPercap
##   <fct>        <fct>    <int>   <dbl>    <int>    <dbl>
##  1 Japan      Asia      2007    82.6 127467972  31656.
##  2 Hong Kong, China Asia    2007    82.2  6980412   39725.
##  3 Japan      Asia      2002    82   127065841  28605.
##  4 Iceland    Europe    2007    81.8   301931   36181.
##  5 Switzerland Europe    2007    81.7   7554661   37506.
##  6 Hong Kong, China Asia    2002    81.5   6762476   30209.
##  7 Australia  Oceania   2007    81.2  20434176  34435.
##  8 Spain      Europe    2007    80.9  40448191  28821.
##  9 Sweden     Europe    2007    80.9   9031088   33860.
## 10 Israel     Asia      2007    80.7   6426679   25523.
## # ... with 1,694 more rows
```

We can use `mutate()`