Assignment2.1-2017555012

Sümeyra Çam

21 01 2022

| location | year | month | day | total\_cases | new\_cases | total\_deaths | new\_deaths |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Bosnia and Herzegovina | 2020 | 9 | 30 | 27469 | 243 | 856 | 13 |
| Cyprus | 2020 | 7 | 16 | 1023 | 1 | 19 | 0 |
| Hungary | 2020 | 5 | 1 | 2863 | 88 | 323 | 11 |
| Andorra | 2020 | 10 | 14 | 3190 | 195 | 59 | 2 |
| Albania | 2020 | 4 | 12 | 446 | 13 | 23 | 0 |
| Belgium | 2020 | 9 | 4 | 87174 | 630 | 9901 | 2 |
| Turkey | 2020 | 10 | 24 | 359784 | 2091 | 9727 | 69 |
| Poland | 2020 | 5 | 26 | 22074 | 443 | 1024 | 17 |
| Bosnia and Herzegovina | 2020 | 9 | 27 | 26920 | 123 | 822 | 2 |
| Italy | 2020 | 6 | 28 | 240310 | 174 | 34738 | 22 |

## Q1: Calculate the five-number summary statistics of covid-19 daily new cases for each country within each month.

## `summarise()` has grouped output by 'location'. You can override using the `.groups` argument.

| location | month | min | Q1 | Q2 | Q3 | max |
| --- | --- | --- | --- | --- | --- | --- |
| Albania | 4 | 7 | 11.50 | 13.5 | 17.75 | 29 |
| Albania | 5 | 6 | 7.50 | 9.0 | 10.50 | 12 |
| Albania | 6 | 20 | 28.00 | 36.0 | 54.00 | 72 |
| Albania | 8 | 155 | 155.00 | 155.0 | 155.00 | 155 |
| Albania | 10 | 273 | 273.00 | 273.0 | 273.00 | 273 |
| Albania | 11 | 381 | 473.00 | 565.0 | 610.50 | 656 |
| Albania | 12 | 510 | 592.50 | 675.0 | 757.50 | 840 |
| Andorra | 3 | 0 | 6.25 | 12.5 | 18.75 | 25 |
| Andorra | 4 | 11 | 17.75 | 24.5 | 31.25 | 38 |
| Andorra | 5 | 0 | 0.00 | 0.0 | 0.00 | 0 |

## Q2: Find the highest daily cases and deaths separately for each country.

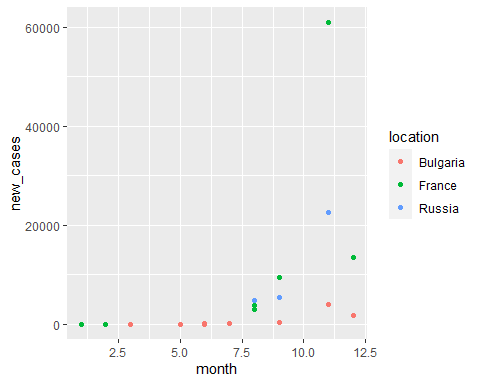
## Warning in max(new\_deaths, na.rm = TRUE): max için eksik olmayan argüman yok;  
## -Inf döndürülüyor

## # A tibble: 47 x 3  
## location max\_case max\_death  
## <chr> <dbl> <dbl>  
## 1 Albania 840 16  
## 2 Andorra 227 6  
## 3 Austria 3969 218  
## 4 Belarus 1957 10  
## 5 Belgium 21048 268  
## 6 Bosnia and Herzegovina 1555 69  
## 7 Bulgaria 3945 114  
## 8 Croatia 3327 92  
## 9 Cyprus 301 2  
## 10 Czechia 17039 151  
## # ... with 37 more rows

## Q3: Identify the month in which the mean daily cases is the highest for each country.

| location | month | Mean\_cases |
| --- | --- | --- |
| France | 11 | 60952.00 |
| France | 10 | 32139.00 |
| Italy | 11 | 30313.67 |
| Russia | 12 | 26074.00 |
| Turkey | 12 | 23449.17 |
| Spain | 12 | 22013.00 |
| Russia | 11 | 21022.50 |
| United Kingdom | 11 | 20580.00 |
| Germany | 11 | 19465.50 |
| Poland | 11 | 19272.00 |

## Q4: Select 3 country and plot the distribution of daily cases by month.Use location as clusters (i.e., color=location) to show the difference between countries.



```