Countries with Highest and Lowest Cases/Deaths Ratio

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Introduction

We are going to observe countries that have high and low case-fatality ratio.

Importing the Libraries

```
library(ggplot2)
library(dplyr)
library(lubridate)
library(ggthemes)
```

Importing dataset

```
data <- read.csv("https://opendata.ecdc.europa.eu/covid19/casedistribution/csv",
                 na.strings = "", fileEncoding = "UTF-8-BOM")
```

Clean and sort

```
data$dateRep = dmy(data$dateRep)
data = arrange(data, dateRep)
data = rename(data, country = countriesAndTerritories)
```

Case Fatality

```
country = data %>%
  select(dateRep, cases, deaths, country, popData2019) %>%
  group_by(country)  %>%
  summarize(cases = sum(cases, na.rm = TRUE)) %>%
  arrange(country)
```

```
deaths = data %>%
  select(dateRep, cases, deaths, country, popData2019) %>%
  group_by(country)  %>%
  summarize(deaths = sum(deaths, na.rm = TRUE)) %>%
  arrange(country)

population = data %>%
  select(dateRep, cases, deaths, country, popData2019) %>%
  group_by(country)  %>%
  summarize(popn = mean(popData2019, na.rm = TRUE)) %>%
  arrange(country)
```

Combine

```
country$deaths = deaths$deaths
country$population = population$popn
country$casefatality = country$cases/country$deaths
```

Ordering on the basis of casefatality

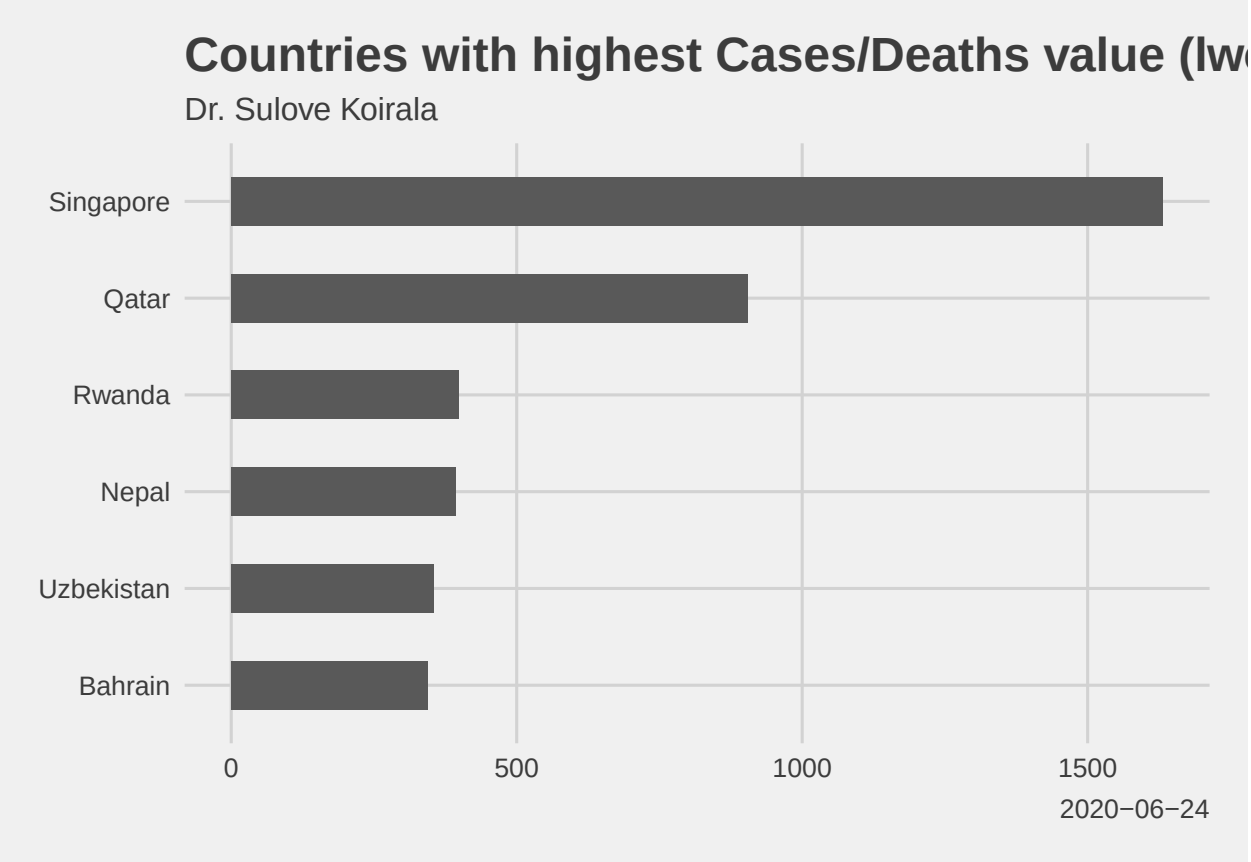
```
country = arrange(country, -casefatality)
```

Removing the rows with infinite values

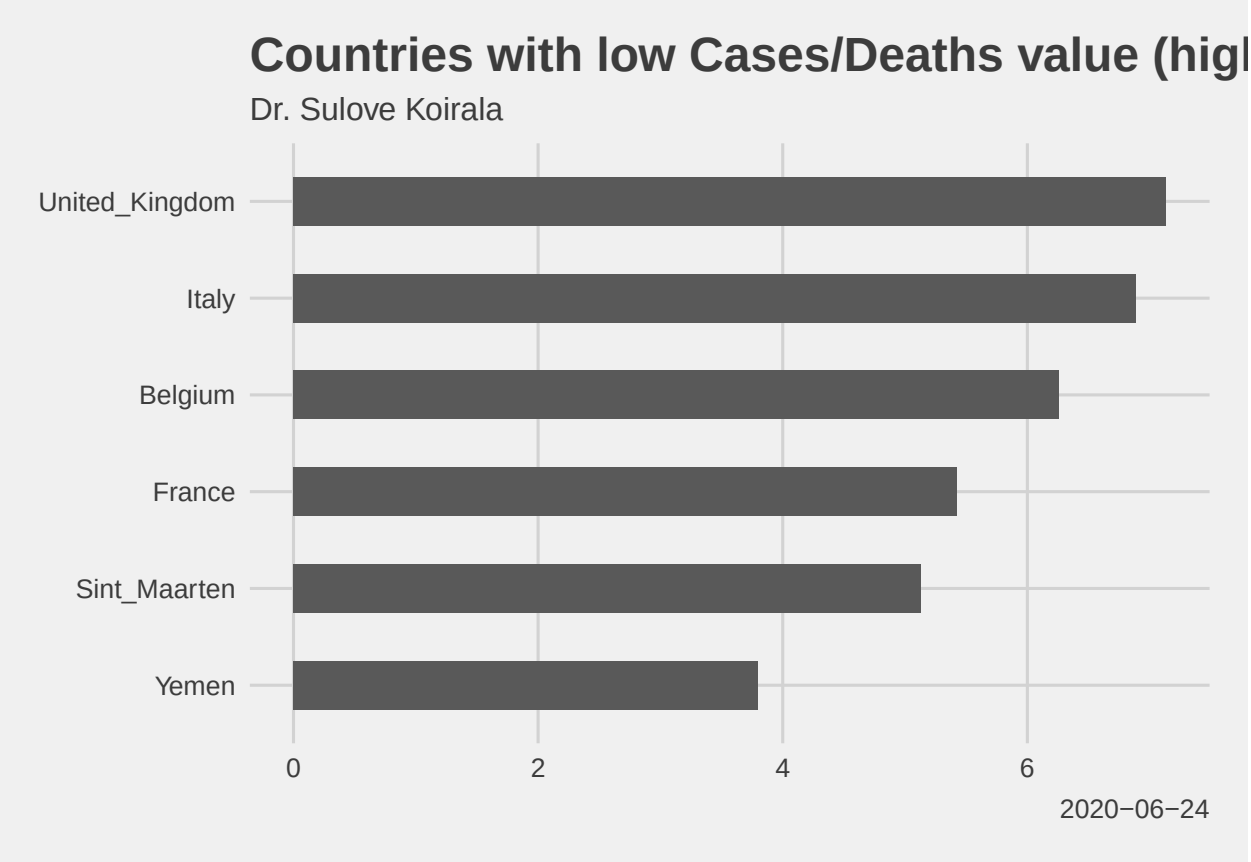
```
is.na(country) <- do.call(cbind,lapply(country, is.infinite))
country = na.omit(country)
```

Plots

```
ggplot(head(country), n = 10)+
    aes(reorder(country, casefatality), casefatality)+
    geom_bar(stat = "identity", width = 0.5)+
    theme_fivethirtyeight()+
    coord_flip()+
    labs(title = "Countries with highest Cases/Deaths value (lwo casefatality)",
         subtitle = "Dr. Sulove Koirala", caption = today())
```




```
ggplot(tail(country), n = 10)+
    aes(reorder(country, casefatality), casefatality)+
    geom_bar(stat = "identity", width = 0.5)+
    theme_fivethirtyeight()+
    coord_flip()+
    labs(title = "Countries with low Cases/Deaths value (high casefatality)",
         subtitle = "Dr. Sulove Koirala", caption = today())
```



Bibiliography

Download today's data on the geographic . (2020, June 14). Retrieved June 14, 2020, from https://www.ecdc.europa.eu/en/publications-data/download-todays-data-geographic-distribution-covid-19-cases-worldwide