# SAUDI DATA COMMUNITY

# Challenge of Analyzing Coronavirus (COVID-19)

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# 1.1 Introduction

**CoronaVirus (Covid-19)** is the new coronavirus and most cases appeared in the Chinese city, Wuhan at the end of December 2019 in the form of acute pneumonia.

**The origin of the virus** It is believed that the COVID-19 originated in animals and most cases appeared in the seafood and animal market in Wuhan.

The challenge have specified a number of questions for the community.

# 1.2 DataSets Used

We are used new updated DataSets from **World Health Organization (WHO)**:

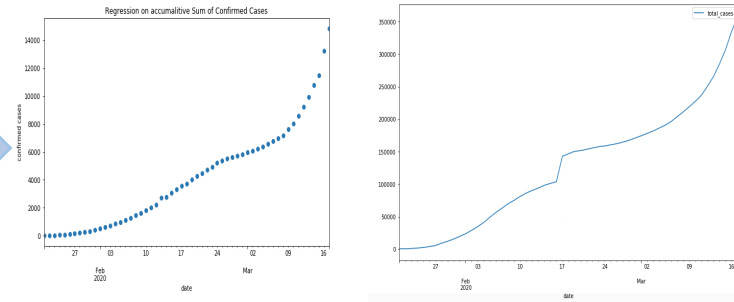| date | location | new_cases | new_deaths | total_cases | total_deaths |
|---|---|---|---|---|---|
| 12/31/19 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/1/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/2/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/3/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/4/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/5/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/6/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/7/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/8/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/9/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/10/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/11/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/12/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/13/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/14/20 | Afghanistan | 0 | 0 | 0 | 0 |
| 1/15/20 | Afghanistan | 0 | 0 | 0 | 0 |

# 1.3 Techniques

In this research we used new update of coronavirus by new ways , so we are use these techniques : python & Tableau
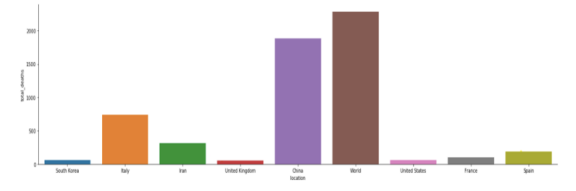
# 1.4 Visualization of Data

Sort the values of total cases and total deaths in the world as descending order :

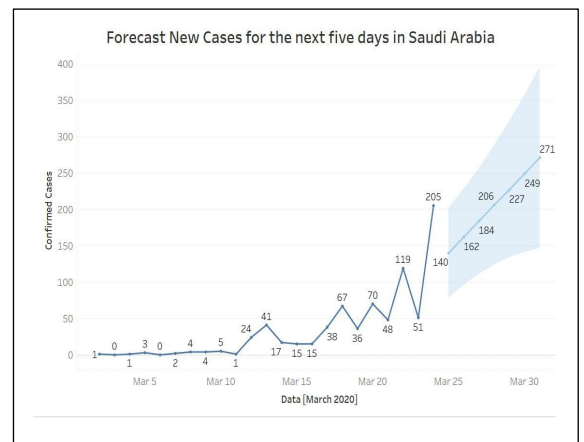| total_deaths | total_cases | new_deaths | new_cases | | location | date | |
|---|---|---|---|---|---|---|---|
| 7426 | 179112 | 819 | 11594 | | World | 00:00:00 2020-03-17 | 0 |
| 6606 | 167506 | 855 | 13971 | | World | 00:00:00 2020-03-16 | 1 |
| 5735 | 153517 | 343 | 10967 | | World | 00:00:00 2020-03-15 | 2 |
| 5392 | 142534 | 433 | 9761 | | World | 00:00:00 2020-03-14 | 3 |
| 4956 | 132758 | 338 | 7488 | | World | 00:00:00 2020-03-13 | 4 |
| 4613 | 125260 | 317 | 6936 | | World | 00:00:00 2020-03-12 | 5 |
| 4292 | 118319 | 275 | 4611 | | World | 00:00:00 2020-03-11 | 6 |
| 4012 | 113702 | 201 | 4119 | | World | 00:00:00 2020-03-10 | 7 |
| 3809 | 109577 | 224 | 3979 | | World | 00:00:00 2020-03-09 | 8 |
| 3584 | 105592 | 96 | 3644 | | World | 00:00:00 2020-03-08 | 9 |
| 3486 | 101927 | 104 | 3730 | | World | 00:00:00 2020-03-07 | 10 |

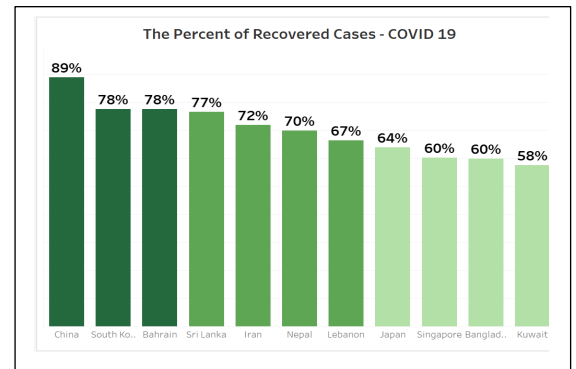Trending line to show number of cases according date:
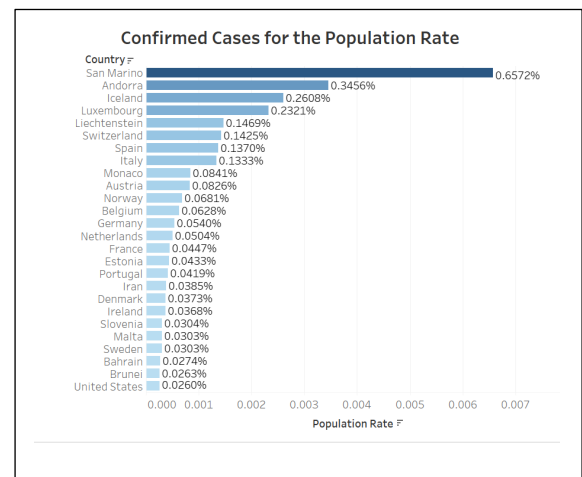


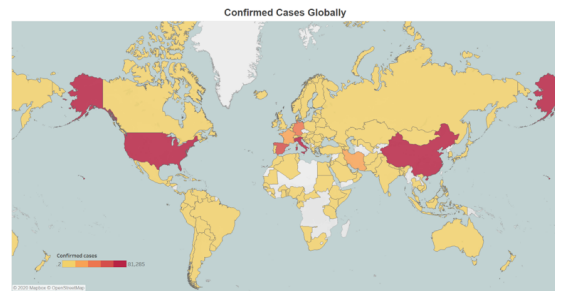Show number of country have more than 500 cases :



To forecasting new cases:



To show percent of Recovered cases :
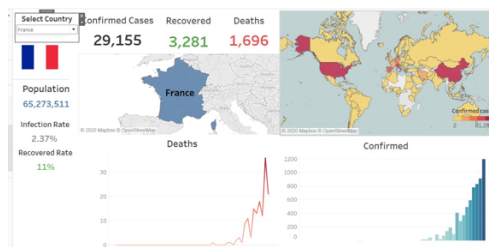


Confirmed cases and population rate :

**Confirmed Cases Globally**



Confirmed cases as globally

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To show the number of each :Confirmed cases , Recovered , Deaths  in China .

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To show the number of each :Confirmed cases , Recovered , Deaths  in Spain .



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To show the number of each :Confirmed cases , Recovered , Deaths  in France .

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To show the number of each :Confirmed cases , Recovered , Deaths  in Italy .



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## Resources:

- World Health Organization (WHO):
  https://www.who.int/
- https://google.org/crisisresponse/covid1