Coivd-19 case prediction

0.1 Project Details:

In this project, I will be developing an AI based machine learning project on Covid-19 cases prediction with Python for the next 30 days. These types of predictive models help in providing an accurate prediction of epidemics, which is essential for obtaining information on the likely spread and consequences of infectious diseases. Governments and other legislative bodies rely on these kinds of machine learning predictive models and ideas to suggest new policies and assess the effectiveness of applied policies.

0.2 Approaches:

I have used COVID-19 data from John Hopkins University (collected from Kaggle) to predict future epidemics and take necessary precautions to reduce for mankind. I have a plan to implement this using the Bangladesh Covid 19 data as it is not available in my hand I have taken the alternative decision.

0.3 Steps:

The following task involves some steps to be taken in order to predict the future condition of Covid scenario. I can make them in order below:

- Importing the Libraries.

- Data Collection

- Data Visualization

- Fitting Facebook prophet model

- Covid-19 cases prediction

0.4 Visualization:

For globally the covid 19 condition is visualized in the following figure 1. This draws the significant scenario about how covid has affected the people around the world.
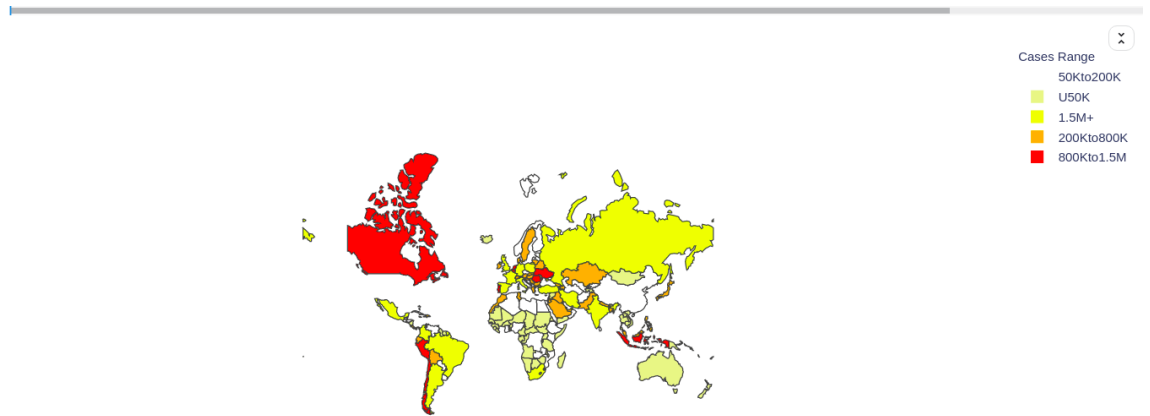
Figure 1: Data Visualization

0.5 Statistics:

Daily candlestick shows the affected and death rate around the world. Now here I will prepare three visualizations. One will be a geographical visualization to visualize the worldwide spread of Covid-19. Then the next visualization will be to have a look at the daily cases of Covid-19 in the world. Then the last visualization will be to have a look at the daily death cases of Covid-19 in the world.

Now let's start data visualization by looking at the worldwide spread of Covid-19:
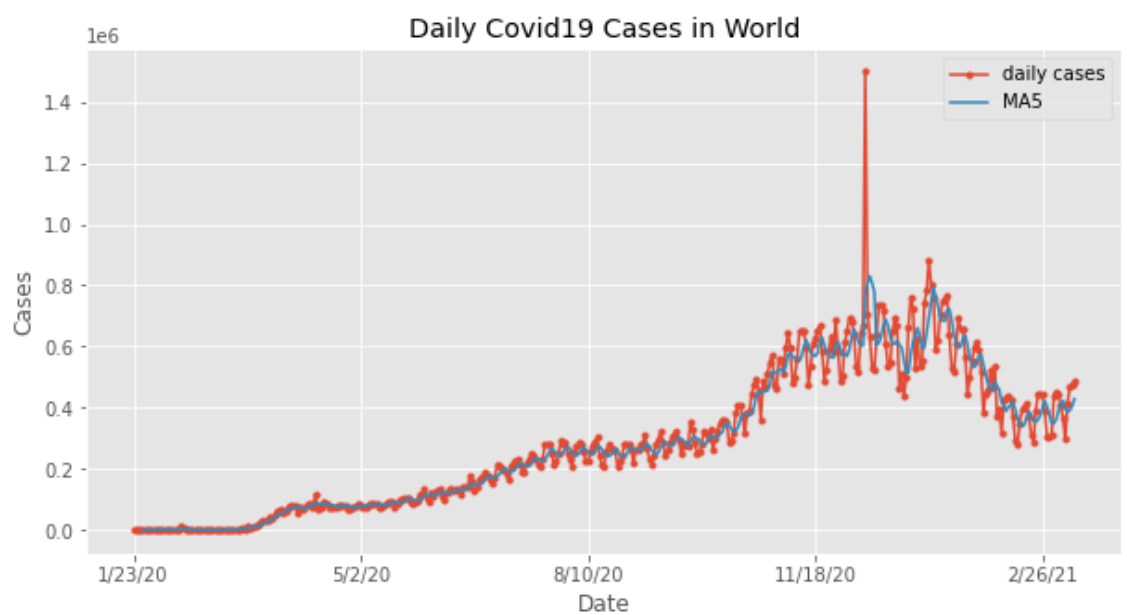
0.5.1 Daily cases around the world

Figure 2: Covid-19 daily cases around the world
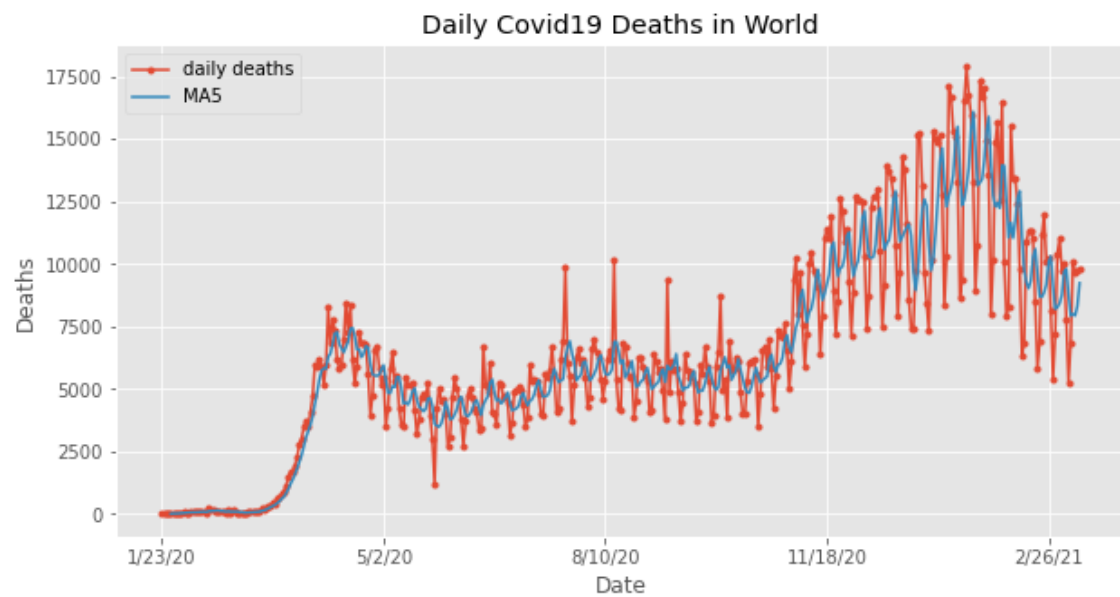
0.5.2 Daily death cases around the world

Figure 3: Daily deaths around the world

0.6 Result:

Now, I will use the Facebook prophet model for the task of Covid-19 cases prediction with Python for the next 30 days. Facebook prophet model uses time series method for forecasting. Let's see how we can use the Facebook prophet model for Covid-19 cases prediction with Python for the next 30 days:
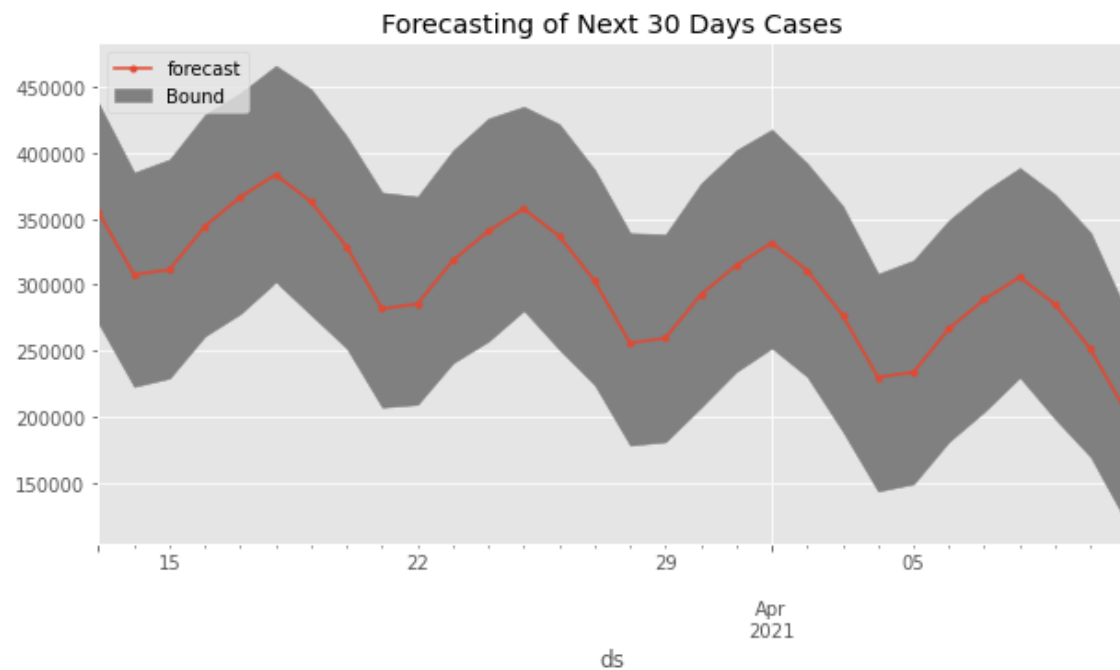

Figure 4: Forecasting of next 30 days

0.7 Resource:

Drive Link of Code: Coivd-19 case prediction

0.8 Conclusion

I have tried to visualize the upcoming condition of this pandemic situation. Though this is a minimal contribution I belief that this would help the front line people to deal with the conditions and reduce the severe condition for the betterment of mankind.

0.9 Student Info

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Thank You!