

TASK 1

As part of **Team Task 1**, we are required to

- Compare the weekly statistics (mean, median, mode) for number of new cases and deaths across US.

In this, we have calculated mean number of new cases per week and then calculating for 5 weeks taken together.

- Compare the data against other countries of the world.
- Choose at least 5 similar populations countries to compare.
- Plot daily trends (cases and deaths) of US and compare other countries. Utilize aggregate, normalized by population (ex: number of cases per 100,000), difference in cases (new cases), and log normalized values.

Weekly Stats for New Cases across US

```
from statistics import mean, median, mode
print("The last 5 weeks average cases in US is:", mean(avg_new_cases))
print("The last 5 weeks median cases in US is:", median(avg_new_cases))
print("The last 5 weeks mode cases in US is:", mode(avg_new_cases))
```

```
The last 5 weeks average cases in US is: 392610.2
The last 5 weeks median cases in US is: 333497
The last 5 weeks mode cases in US is: 750547
```

Weekly Stats for New Deaths across US

```
from statistics import mean, median, mode
print("The last 5 weeks average deaths in US is:", mean(avg_new_deaths))
print("The last 5 weeks median deaths in US is:", median(avg_new_deaths))
print("The last 5 weeks mode deaths in US is:", mode(avg_new_deaths))
```

```
The last 5 weeks average deaths in US is: 2148
The last 5 weeks median deaths in US is: 2209
The last 5 weeks mode deaths in US is: 1909
```

Weekly Stats for New Cases across 5 Other Countries

```
The last 5 weeks average cases in indonesia is: 21746
The last 5 weeks average cases in pakistan is: 5167
The last 5 weeks average cases in brazil is: 146227
The last 5 weeks average cases in united states is: 414737
The last 5 weeks average cases in china is: 145
The last 5 weeks average cases in india is: 119363
```

```
The last 5 weeks median cases in indonesia is: 15030
The last 5 weeks median cases in pakistan is: 5378
The last 5 weeks median cases in brazil is: 146808
The last 5 weeks median cases in united states is: 351223
The last 5 weeks median cases in china is: 173
The last 5 weeks median cases in india is: 72399
```

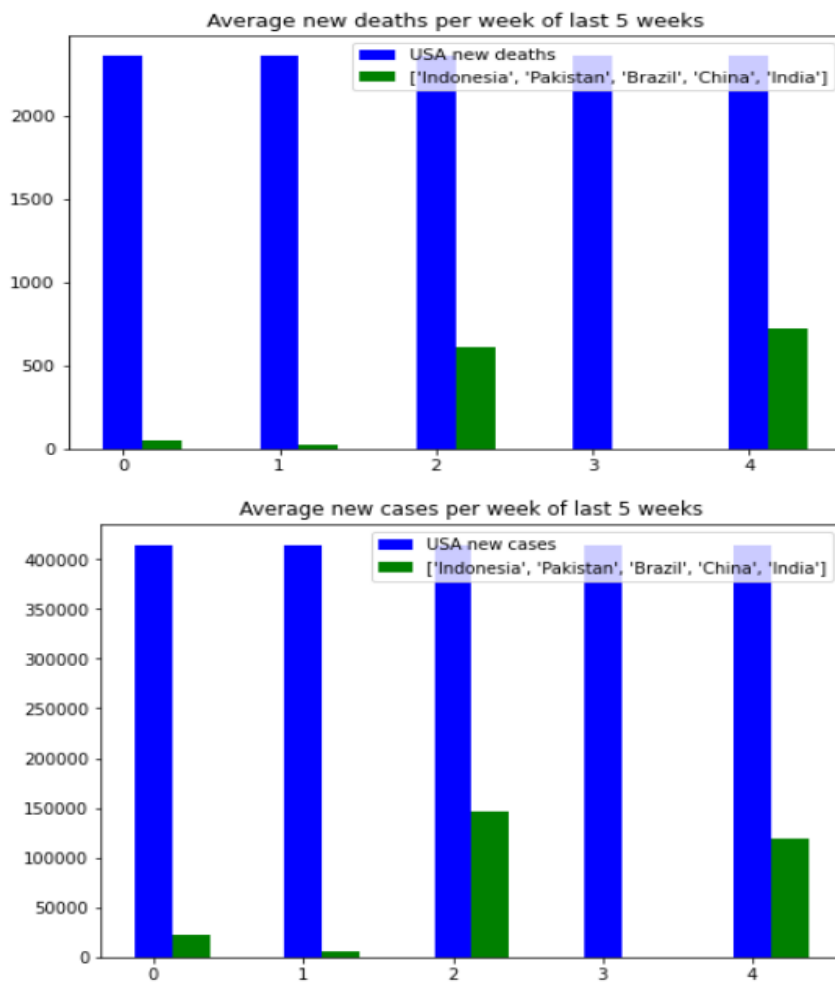
```
The last 5 weeks mode cases in indonesia is: 1251
The last 5 weeks mode cases in pakistan is: 5378
The last 5 weeks mode cases in brazil is: 110429
The last 5 weeks mode cases in united states is: 122145
The last 5 weeks mode cases in china is: 80
The last 5 weeks mode cases in india is: 7681
```

Weekly Stats for New Deaths across 5 Other Countries

```
The last 5 weeks average deaths in Indonesia is: 48
The last 5 weeks average deaths in Pakistan is: 27
The last 5 weeks average deaths in Brazil is: 609
The last 5 weeks mode deaths in Usa is: 2065
The last 5 weeks average deaths in China is: 0
The last 5 weeks average deaths in India is: 727
```

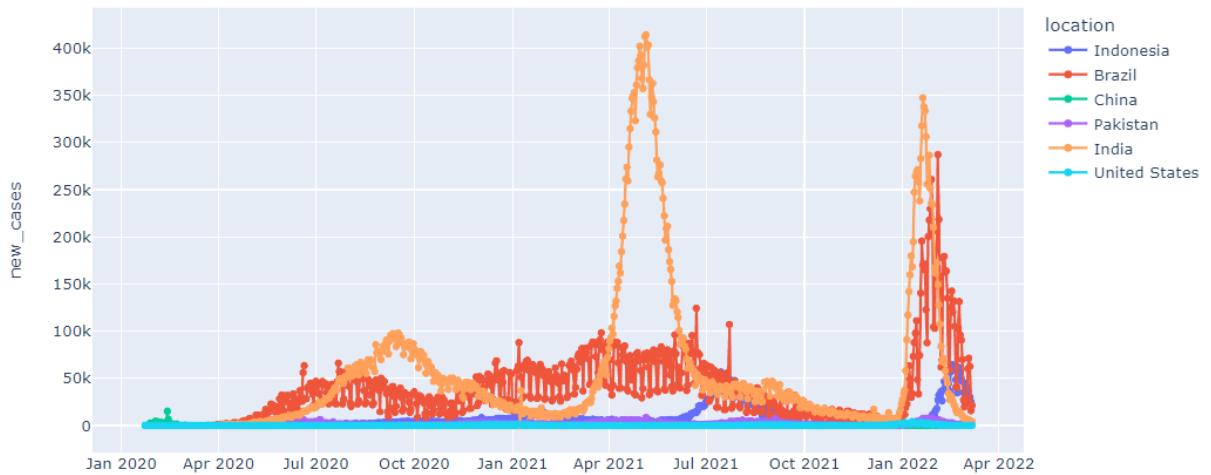
```
The last 5 weeks median deaths in Indonesia is: 21
The last 5 weeks median deaths in Pakistan is: 33
The last 5 weeks median deaths in Brazil is: 702
The last 5 weeks mode deaths in usa is: 2065
The last 5 weeks median deaths in China is: 0
The last 5 weeks median deaths in India is: 562
```

The last 5 weeks mode deaths in Indonesia is: 6
 The last 5 weeks mode deaths in Pakistan is: 38
 The last 5 weeks mode deaths in Brazil is: 235
 The last 5 weeks mode deaths in Usa is: 2065
 The last 5 weeks mode deaths in China is: 0
 The last 5 weeks mode deaths in India is: 421



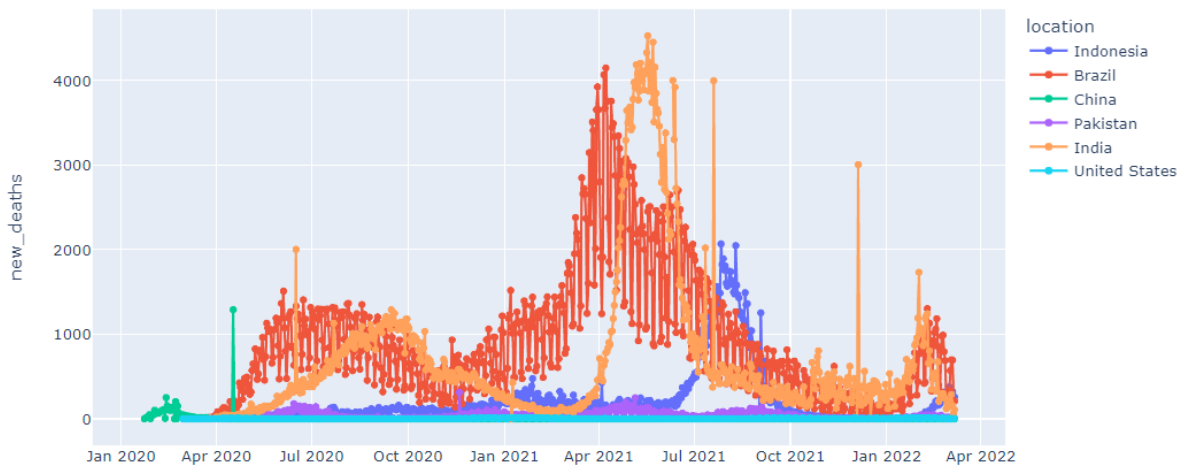
New Cases – US vs 5 Other Countries

New Cases of USA vs Other Countries



New Deaths – US vs 5 Other Countries

New deaths of USA vs Other Countries



US Cases and Deaths – Peak Week

The highest number of cases in a peek week are: 527245720

The peek week in which there are highest number of cases are: 2022-02-09 2022-02-10 2022-02-11 2022-02-12 2022-02-13 2022-02-14 2022-02-15

The highest number of cases in a peek week are: 6118759

The peek week in which there are highest number of cases are: 2022-02-09 2022-02-10 2022-02-11 2022-02-12 2022-02-13 2022-02-14 2022-02-15

Other Country Cases - Peak Week

The highest number of Indonesia cases in a peek week are: 34020728
The peek week of Indonesia in which there are highest number of cases are: 2022-02-11 2022-02-12 2022-02-13 2022-02-14 2022-02-15 2022-02-16 2022-02-17

The highest number of Pakistan cases in a peek week are: 10291195
The peek week of Pakistan in which there are highest number of cases are: 2022-02-05 2022-02-06 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11

The highest number of Brazil cases in a peek week are: 188797996
The peek week of Brazil in which there are highest number of cases are: 2022-02-06 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11 2022-02-12

The highest number of China cases in a peek week are: 746798
The peek week of China in which there are highest number of cases are: 2022-02-06 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11 2022-02-12

The highest number of India cases in a peek week are: 297648283
The peek week of India in which there are highest number of cases are: 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11 2022-02-12 2022-02-13

Other Country Deaths - Peak Week

The highest number of Indonesia deaths in a peek week are: 1017425
The peek week of Indonesia in which there are highest number of deaths are: 2022-02-11 2022-02-12 2022-02-13 2022-02-14 2022-02-15 2022-02-16 2022-02-17

The highest number of Pakistan deaths in a peek week are: 207214
The peek week of Pakistan in which there are highest number of deaths are: 2022-02-05 2022-02-06 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11

The highest number of Brazil deaths in a peek week are: 4447150
The peek week of Brazil in which there are highest number of deaths are: 2022-02-06 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11 2022-02-12

The highest number of China deaths in a peek week are: 32455
The peek week of Nigeria in which there are highest number of deaths are: 2021-07-18 2021-07-19 2021-07-20 2021-07-21 2021-07-22 2021-07-23 2021-07-24

The highest number of India deaths in a peek week are: 3548695
The peek week of India in which there are highest number of deaths are: 2022-02-07 2022-02-08 2022-02-09 2022-02-10 2022-02-11 2022-02-12 2022-02-13
