

# Retrieving Data

```
In [1]: # Retrieving data from API
import json
import requests

url = "https://api.covid19api.com/total/country/singapore/status/confirmed"

payload={}
headers = {}

response = requests.request("GET", url, headers=headers, data=payload)
data = json.loads(response.text)
```

# Preprocessing Data

```
In [2]: import pandas as pd

df = pd.DataFrame(data)
```

```
In [3]: df.tail()
```

Out[3]:

	Country	CountryCode	Province	City	CityCode	Lat	Lon	Cases	Status	Date
644	Singapore					0	0	184419	confirmed	2021-10-27T00:00:00Z
645	Singapore					0	0	187851	confirmed	2021-10-28T00:00:00Z
646	Singapore					0	0	192099	confirmed	2021-10-29T00:00:00Z
647	Singapore					0	0	195211	confirmed	2021-10-30T00:00:00Z
648	Singapore					0	0	198374	confirmed	2021-10-31T00:00:00Z

```
In [4]: df.shape
```

Out[4]: (649, 10)

```
In [5]: df = df[['Date', 'Cases']]
df.head()
```

Out[5]:

	Date	Cases
0	2020-01-22T00:00:00Z	0
1	2020-01-23T00:00:00Z	1
2	2020-01-24T00:00:00Z	3
3	2020-01-25T00:00:00Z	3
4	2020-01-26T00:00:00Z	4

```
In [6]: from datetime import datetime, date

df['Date'] = df['Date'].apply(lambda x: x.split('T')[0])
df.tail()
```

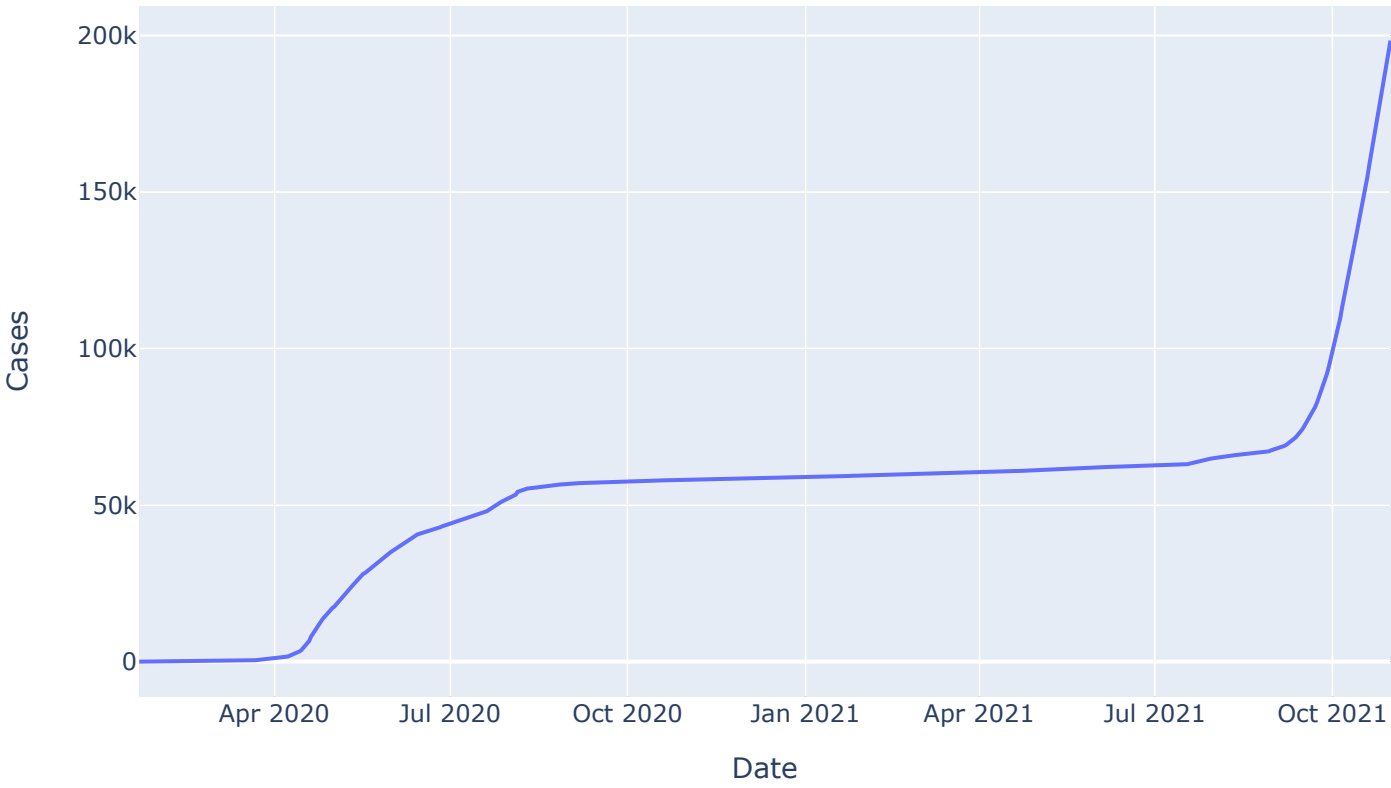
Out[6]:

	Date	Cases
644	2021-10-27	184419
645	2021-10-28	187851
646	2021-10-29	192099
647	2021-10-30	195211
648	2021-10-31	198374

# Generating Visualisation

```
In [7]: import plotly.express as px
%matplotlib inline
fig = px.line(df, x="Date", y="Cases", title="Total number of cases in Singapore over time")
fig.show()
```

Total number of cases in Singapore over time



```
In [8]: fig.write_image("CovidTotal.png")
```

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In [ ]:
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