

1. Load dataset from - <https://covid.ourworldindata.org/data/owid-covid-data.csv>
2. Subset only those rows that have "India" in the "location" column(This subsetted dataframe has to be used for modelling)
3. Handle Missing values:
 - a. If there are null values in continuous numerical column, replace the null values by the mean of that column
 - b. If there are null values in ordinal numerical column, replace the null values by the mode of that column
 - c. If there are null values in categorical column, replace the null values by the mode of that column
 - d. If more than 50%the values in a column are null, then drop that entire column
4. Univariate Analysis:
 - a. Draw histograms of 10 feature columns
 - b. Find mean, median and mode of each column
5. Bivariate Analysis:
 - a. Draw scatter plots of target column versus 10 features
 - b. Draw line plots of target column versus 10 features
6. Convert date column to ordinal
 - a. Code:

```
import datetime as dt
```

```
df["date"]=pd.to_datetime(df["date"])  
df["date"]=df["date"].map(dt.datetime.toordinal)
```

7. Drop useless categorical columns, and convert useful categorical to numerical by labelencoder
8. Select "total_cases" column as the target variable
9. Select the other columns as the features(NOTE: the "date" column has to be compulsorily in the features)
10. Perform train-test split
11. Modelling:
 - a. Linear Regression
 - b. Random Forest Regressor
12. Get accuracy
13. Predict Total case for a new date

NOTE: To convert anytime back from ordinal to date-time use the following sample code:

```
from datetime import datetime
```

```
ordinal value = 733828 # This is an example
```

```
dt = datetime.fromordinal(ordinal value)
```

