```python
import pandas as pd
import numpy as np
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error, r2_score
import matplotlib.pyplot as plt
import seaborn as sns
```

```python
# Load the dataset
data = pd.read_csv("/content/Instagram-Reach.csv")
print(data.head())
```

```
                    Date  Instagram reach
0  2022-04-01T00:00:00             7620
1  2022-04-02T00:00:00            12859
2  2022-04-03T00:00:00            16008
3  2022-04-04T00:00:00            24349
4  2022-04-05T00:00:00            20532
```

```python
data.isnull().sum()
```

```
Date               0
Instagram reach    0
dtype: int64
```

```python
data = data.dropna()
```

```python
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 365 entries, 0 to 364
Data columns (total 2 columns):
 #   Column           Non-Null Count  Dtype
---  ------           --------------  -----
 0   Date             365 non-null    object
 1   Instagram reach  365 non-null    int64
dtypes: int64(1), object(1)
memory usage: 5.8+ KB
```

```python
plt.figure(figsize=(5,8))
plt.title('distribution of date in Instagram reach ')
sns.distplot(data['Instagram reach'])
plt.show()
```

```
<ipython-input-6-ca2ab912a1fd>:3: UserWarning:

`distplot` is a deprecated function and will be removed in seaborn v0.14.0.

Please adapt your code to use either `displot` (a figure-level function with
similar flexibility) or `histplot` (an axes-level function for histograms).

For a guide to updating your code to use the new functions, please see
https://gist.github.com/mwaskom/de44147ed2974457ad6372750bbe5751

  sns.distplot(data['Instagram reach'])
```
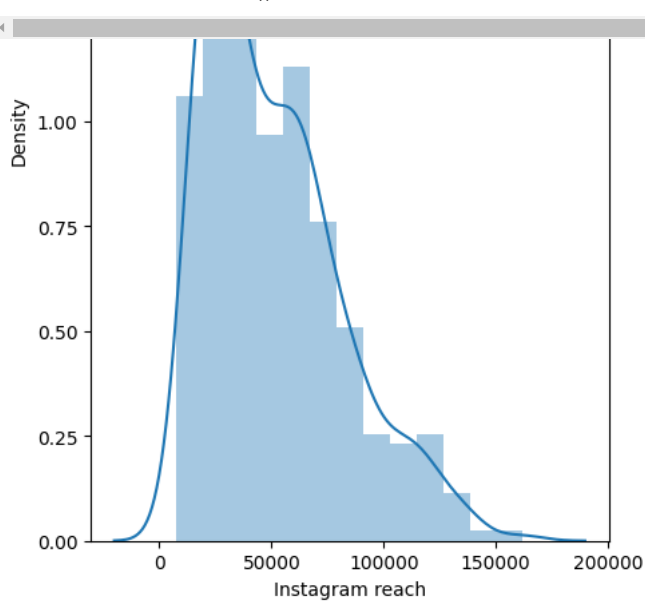

distribution of date in Instagram reach
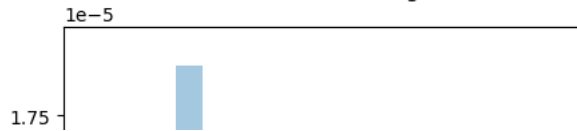
```
correlation = data.corr()
print(correlation["Instagram reach"].sort_values(ascending=False))
```

```
Instagram reach    1.0
Name: Instagram reach, dtype: float64
<ipython-input-22-aaebebc5f752>:1: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future ve
  correlation = data.corr()
```


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