In [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
import warnings
warnings.simplefilter(action="ignore", category=FutureWarning)
```

In [2]:

```
df_t = pd.read_csv('temples.csv')
```

In [3]:

```
#Lets checkout how our dataset looks like
df_t.head()
```

Out[3]:

	templeName	Description	Location	Coordinates	DistanceFromMumbai(Km)	DistanceFromN
0	Badrinath Temple | Badrinath, Uttarakhand	The Badrinath temple also known as Badrinaraya...	Badrinath	(30.7423302, 79.4930256)	1454.013555	
1	Kedarnath Temple | Kedarnath, Uttarakhand	Located at the highest altitude among the Char...	Kedarnath	(30.7345609, 79.0673204)	1434.105557	
2	Gangotri Temple | Gangotri, Uttarakhand	The birthplace of the holy River Ganges is in ...	Gangotri	(30.9943684, 78.9398699)	1454.357504	
3	Yamunotri Temple | Yamunotri, Uttarakhand	Located opposite to Gangotri is the sacred shr...	Yamunotri	(30.999214, 78.4626951)	1435.376936	
4	Har Ki Pauri | Haridwar, Uttarakhand	As one of the oldest living cities of India, H...	Haridwar	(29.9384473, 78.1452985)	1315.804055	

In [4]:

```
df_t.tail()
```

Out[4]:

	templeName	Description	Location	Coordinates	DistanceFromMumbai(K
48	Brihadeshwara Temple | Thanjavur, Tamil Nadu	The Brihadeshwara Temple is a masterpiece and ...	Thanjavur	(10.7860267, 79.1381497)	1137.5878
49	Chennakesava Temple | Belur, Karnataka	A stunner from the Hoysala period, the Chennak...	Belur	(22.6357323, 88.3398223)	1655.7684
50	Thillai Nataraja Temple | Chidambaram, Tamil Nadu	The Chidambaram Temple is dedicated to Lord Sh...	Chidambaram	(11.41018075, 79.67222017841891)	1118.6307
51	Annamalaiyer Temple | Thiruvannamalai, Tamil Nadu	Located at the base of Annamalai Hills in Thir...	Thiruvannamalai	(9.539867, 77.6197904)	1172.3191
52	Kailashanatha Temple | Kanchipuram, Tamil Nadu	Built under the patronage of the Pallava ruler...	Kanchipuram	(12.836393, 79.7053304)	1005.1765

In [5]:

```
df_t.shape
```

Out[5]:

```
(53, 8)
```

In [6]:

```
df_t.columns
```

Out[6]:

```
Index(['templeName', 'Description', 'Location', 'Coordinates',
       'DistanceFromMumbai(Km)', 'DistanceFromNewDelhi(Km)',
       'DistanceFromChennai(Km)', 'DistanceFromKolkata(Km)'],
      dtype='object')
```

In [7]:

```
df_t.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 53 entries, 0 to 52
Data columns (total 8 columns):
 #   Column                   Non-Null Count  Dtype  
---  ------                   --------------  -----  
 0   templeName               53 non-null     object 
 1   Description              53 non-null     object 
 2   Location                 52 non-null     object 
 3   Coordinates              53 non-null     object 
 4   DistanceFromMumbai(Km)   53 non-null     float64
 5   DistanceFromNewDelhi(Km) 53 non-null     float64
 6   DistanceFromChennai(Km)  53 non-null     float64
 7   DistanceFromKolkata(Km)  53 non-null     float64
dtypes: float64(4), object(4)
memory usage: 3.4+ KB
```

In [8]:

```
df_t.describe()
```

Out[8]:

	DistanceFromMumbai(Km)	DistanceFromNewDelhi(Km)	DistanceFromChennai(Km)	Distanc
count	53.000000	53.000000	53.000000	
mean	1195.137153	1141.181755	1323.089894	
std	844.276632	956.735097	1087.565648	
min	0.000000	0.000000	52.010385	
25%	851.545156	496.787727	487.198055	
50%	1158.782925	1087.326052	1352.260203	
75%	1405.563660	1668.348726	1797.144168	
max	6345.522996	5987.434545	7374.452960	

In [9]:

```
#checking for duplicates and null values
df_t.duplicated().sum()
```

Out[9]:

```
0
```

In [10]:

```
df_t.isnull().sum()
```

Out[10]:

```
templeName                  0
Description                 0
Location                    1
Coordinates                 0
DistanceFromMumbai(Km)      0
DistanceFromNewDelhi(Km)    0
DistanceFromChennai(Km)     0
DistanceFromKolkata(Km)     0
dtype: int64
```

In [12]:

```
#dropping the null values
df_t = df_t.dropna()
```

In [13]:

```
df_t.isnull().sum()
```

Out[13]:

```
templeName                  0
Description                 0
Location                    0
Coordinates                 0
DistanceFromMumbai(Km)      0
DistanceFromNewDelhi(Km)    0
DistanceFromChennai(Km)     0
DistanceFromKolkata(Km)     0
dtype: int64
```

In [14]:

```
# looking at our dataset we can see the templename column consists of the temple name and s
df_t['State'] = df_t['templeName'].str.split(',', expand = True)[1]
```

In [15]:

```
#now lets check if it was successful
df_t.head()
```

Out[15]:

	templeName	Description	Location	Coordinates	DistanceFromMumbai(Km)	DistanceFromN
0	Badrinath Temple | Badrinath, Uttarakhand	The Badrinath temple also known as Badrinaraya...	Badrinath	(30.7423302, 79.4930256)	1454.013555	
1	Kedarnath Temple | Kedarnath, Uttarakhand	Located at the highest altitude among the Char...	Kedarnath	(30.7345609, 79.0673204)	1434.105557	
2	Gangotri Temple | Gangotri, Uttarakhand	The birthplace of the holy River Ganges is in ...	Gangotri	(30.9943684, 78.9398699)	1454.357504	
3	Yamunotri Temple | Yamunotri, Uttarakhand	Located opposite to Gangotri is the sacred shr...	Yamunotri	(30.999214, 78.4626951)	1435.376936	
4	Har Ki Pauri | Haridwar, Uttarakhand	As one of the oldest living cities of India, H...	Haridwar	(29.9384473, 78.1452985)	1315.804055	

In [16]:

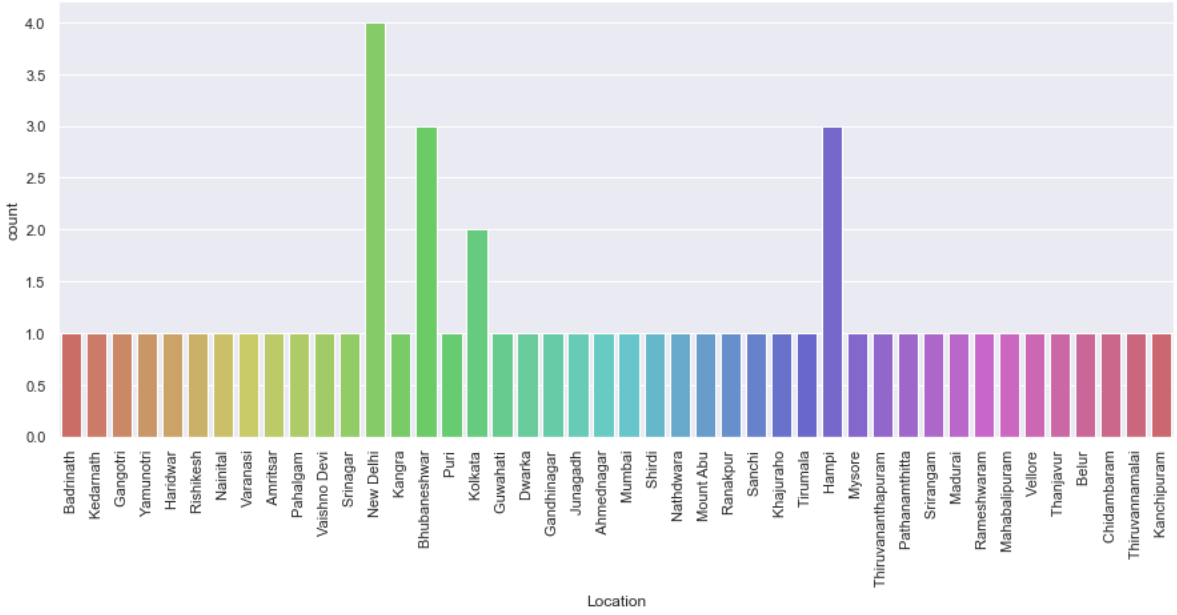
```
#so lets check the location with the highest numbers of indian temple and show it through v
df_t.Location.value_counts()
```

Out[16]:

```
New Delhi             4
Hampi                 3
Bhubaneshwar          3
Kolkata               2
Badrinath             1
Ranakpur              1
Sanchi                1
Khajuraho             1
Tirumala              1
Mysore                1
Thiruvananthapuram    1
Pathanamthitta        1
Nathdwara             1
Srirangam             1
Madurai               1
Rameshwaram           1
Mahabalipuram         1
Vellore               1
Thanjavur             1
Belur                 1
Chidambaram           1
Thiruvannamalai       1
Mount Abu             1
Mumbai                1
Shirdi                1
Kedarnath             1
Gangotri              1
Yamunotri             1
Haridwar              1
Rishikesh             1
Nainital              1
Varanasi              1
Amritsar              1
Pahalgam              1
Vaishno Devi          1
Srinagar              1
Kangra                1
Puri                  1
Guwahati              1
Dwarka                1
Gandhinagar           1
Junagadh              1
Ahmednagar            1
Kanchipuram           1
Name: Location, dtype: int64
```

In [17]:

```
sns.set_theme()
plt.figure(figsize = (15,6))
sns.countplot(df_t['Location'], data = df_t, palette = 'hls')
plt.xticks(rotation = 90)
plt.show()
```



In [18]:

```
# we checked with location earlier, now lets check based on state.
df_t.State.unique()
```

Out[18]:

```
array([' Uttarakhand', ' Uttar Pradesh', ' Punjab', ' Jammu & Kashmir',
       ' Delhi', ' Himachal Pradesh', ' Orissa', ' West Bengal', ' Assam',
       ' Gujarat', ' Maharashtra', ' Rajasthan', ' Madhya Pradesh',
       ' Andhra Pradesh', ' Karnataka', ' Kerala', ' Tamil Nadu'],
      dtype=object)
```

In [19]:

```
df_t.State.value_counts()
```

Out[19]:

```
Tamil Nadu          9
Uttarakhand         7
Karnataka           5
Delhi               4
Orissa              4
Jammu & Kashmir     3
Gujarat             3
Maharashtra         3
Rajasthan           3
West Bengal         2
Madhya Pradesh      2
Kerala              2
Punjab              1
Himachal Pradesh    1
Uttar Pradesh       1
Andhra Pradesh      1
Assam               1
Name: State, dtype: int64
```

In [20]:

```
sns.set_theme()
plt.figure(figsize= (15, 6))
sns.histplot(df_t.State, bins= 60)
plt.xticks(rotation = 90)
plt.show()
```