

In [1]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import warnings
warnings.filterwarnings("ignore")
```

In [2]:

```
temple_data = pd.read_csv("temples.csv")
```

In [3]:

```
temple_data.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]:

```
temple_data.tail()
```

Out[4]:

	templeName	Description	Location	Coordinates	DistanceFromMumbai(km)
48	Brihadeshwara Temple Thanjavur, Tamil Nadu	The Brihadeshwara Temple is a masterpiece and ...	Thanjavur	(10.7860267, 79.1381497)	1137.5871
49	Chennakesava Temple Belur, Karnataka	Astunner from the Hoysala period, the Chennak...	Belur	(22.6357323, 88.3398223)	1655.7681
50	Thillai Nataraja Temple Chidambaram, Tamil Nadu	The Chidambaram Temple is dedicated to Lord Sh...	Chidambaram	(11.41018075, 79.67222017841891)	1118.6301
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)	1005.1761

In [5]:

```
temple_data.shape
```

Out[5]:

(53, 8)

In [6]:

```
temple_data.columns
```

Out[6]:

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

In [7]:

```
temple_data.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]:

```
temple_data.describe()
```

Out[8]:

	DistanceFromMumbai(Km)	DistanceFromNewDelhi(Km)	DistanceFromChennai(Km)	DistanceFromKolkata(Km)
count	53.000000	53.000000	53.000000	53.000000
mean	1195.137153	1141.181755	1323.089894	1245.137153
std	844.276632	956.735097	1087.565648	844.276632
min	0.000000	0.000000	52.010385	0.000000
25%	851.545156	496.787727	487.198055	851.545156
50%	1158.782925	1087.326052	1352.260203	1158.782925
75%	1405.563660	1668.348726	1797.144168	1405.563660
max	6345.522996	5987.434545	7374.452960	6345.522996

In [9]:

```
temple_data.isnull().sum()
```

Out[9]:

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

In [11]:

```
temple_data = temple_data.dropna()
```

In [13]:

```
temple_data.isnull().any().any()
```

Out[13]:

```
False
```

In [14]:

```
temple_data['State']=temple_data['templeName'].str.split(',',expand=True)[1]
```

In [15]:

```
temple_data.State.unique()
```

Out[15]:

```
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 [16]:

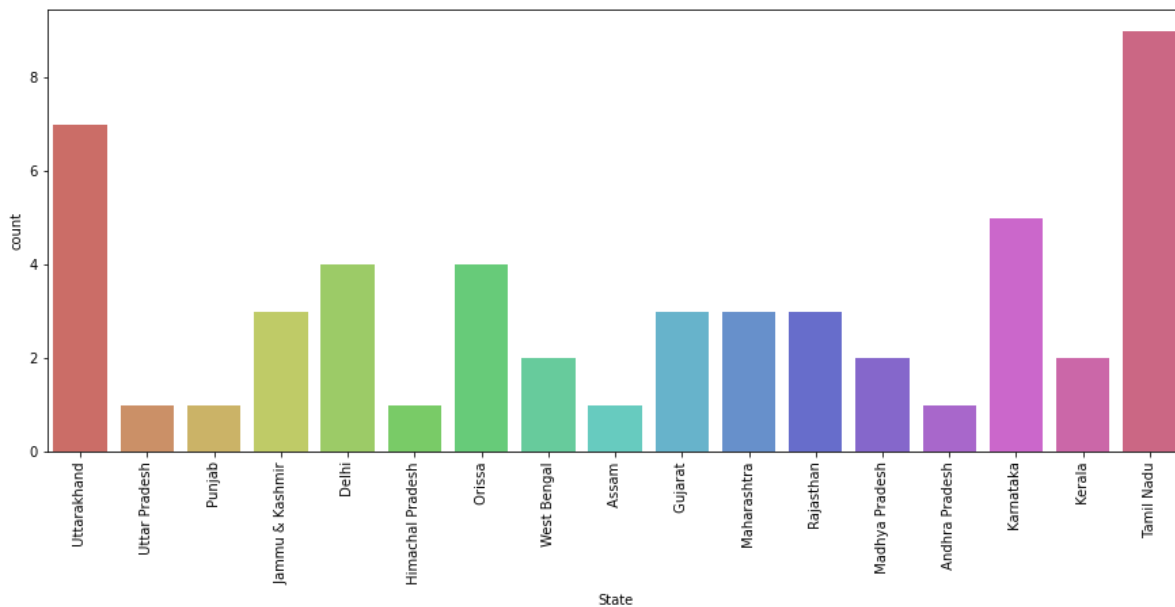
```
temple_data.State.value_counts()
```

Out[16]:

```
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 [17]:

```
plt.figure(figsize=(15,6))
sns.countplot('State', data = temple_data, palette='hls')
plt.xticks(rotation = 90)
plt.show()
```



In [18]:



```
temple_data.Location.unique()
```

Out[18]:

```
array([' Badrinath', ' Kedarnath', ' Gangotri', ' Yamunotri', ' Haridwar',  
      ' Rishikesh', ' Nainital', ' Varanasi', ' Amritsar', ' Pahalgam',  
      ' Vaishno Devi', ' Srinagar', ' New Delhi', ' Kangra',  
      ' Bhubaneshwar', ' Puri', ' Kolkata', ' Guwahati', ' Dwarka',  
      ' Gandhinagar', ' Junagadh', ' Ahmednagar', ' Mumbai', ' Shirdi',  
      ' Nathdwara', ' Mount Abu', ' Ranakpur', ' Sanchi', ' Khajuraho',  
      ' Tirumala', ' Hampi', ' Mysore', ' Thiruvananthapuram',  
      ' Pathanamthitta', ' Srirangam', ' Madurai', ' Rameshwaram',  
      ' Mahabalipuram', ' Vellore', ' Thanjavur', ' Belur',  
      ' Chidambaram', ' Thiruvannamalai', ' Kanchipuram'], dtype=object)
```

In [19]:



```
temple_data.Location.value_counts()
```

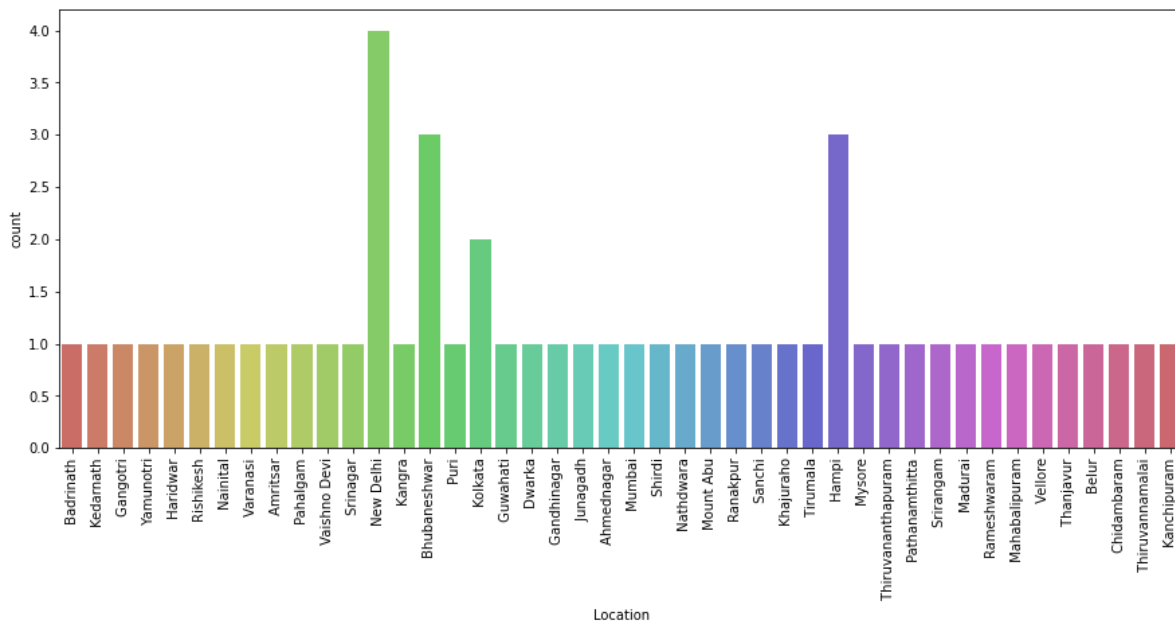
Out[19]:

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 [22]:

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



In [23]:

```
def temp(city):
    return temple_data.sort_values(by=[city],ignore_index=True).loc[:,['templeName',city]].head(10)
```


In [24]:

```
temp('DistanceFromNewDelhi(Km)')
```

Out[24]:

	templeName	DistanceFromNewDelhi(Km)
0	ISKON Temple New Delhi, Delhi	0.000000
1	Birla Mandir New Delhi, Delhi	0.000000
2	Akshardham Temple New Delhi, Delhi	0.000000
3	Lotus Temple New Delhi, Delhi	0.000000
4	Har Ki Pauri Haridwar, Uttarakhand	172.720329
5	Neelkanth Mahadev Temple Rishikesh, Uttarakhand	196.212348
6	Naina Devi Temple Nainital, Uttarakhand	227.940519
7	Yamunotri Temple Yamunotri, Uttarakhand	290.856707
8	Kedarnath Temple Kedarnath, Uttarakhand	295.986734
9	Gangotri Temple Gangotri, Uttarakhand	312.443007

In [25]:

```
temp('DistanceFromMumbai(Km)')
```

Out[25]:

	templeName	DistanceFromMumbai(Km)
0	Siddhi Vinayak Temple Mumbai, Maharashtra	0.000000
1	Shirdi Sai Baba Temple Shirdi, Maharashtra	184.432488
2	Shani Shingnapur Ahmednagar, Maharashtra	208.615647
3	Somnath Temple Junagadh, Gujarat	369.551338
4	Akshardham Temple Gandhinagar, Gujarat	459.796830
5	Dwarkadhish Temple Dwarka, Gujarat	537.226142
6	Jain Temple Ranakpur, Rajasthan	550.464049
7	Vitthala Temple Hampi, Karnataka	562.648882
8	Pattabhirama Temple Hampi, Karnataka	562.648882
9	Virupaksha Temple Hampi, Karnataka	562.648882

In [26]:

```
temp('DistanceFromChennai(Km)')
```

Out[26]:

	templeName	DistanceFromChennai(Km)
0	Shore Temple Mahabalipuram, Tamil Nadu	52.010385
1	Kailashanatha Temple Kanchipuram, Tamil Nadu	67.117235
2	Tirupati Temple (Tirumala Venkateshwara) Tir...	119.519574
3	Sripuram Golden Temple Vellore, Tamil Nadu	141.417934
4	Thillai Nataraja Temple Chidambaram, Tamil Nadu	196.229639
5	Brihadeshwara Temple Thanjavur, Tamil Nadu	282.501204
6	Ranganathaswamy Temple Srirangam, Tamil Nadu	311.612450
7	Chamundeshwari Temple Mysore, Karnataka	401.956211
8	Meenakshi Temple Madurai, Tamil Nadu	421.088784
9	Ramanathaswamy Temple Rameshwaram, Tamil Nadu	433.071552

In [27]:

```
temp('DistanceFromKolkata(Km)')
```

Out[27]:

	templeName	DistanceFromKolkata(Km)
0	Kalighat Kali Temple Kolkata, West Bengal	0.000000
1	Dakshineswar Kali Temple Kolkata, West Bengal	0.000000
2	Chennakesava Temple Belur, Karnataka	10.604555
3	Mukteswar Temple Bhubaneshwar, Orissa	363.262575
4	Lingaraj Temple Bhubaneshwar, Orissa	363.262575
5	Rajarani Temple Bhubaneshwar, Orissa	363.262575
6	Jagannath Temple Puri, Orissa	400.952315
7	Kamakhya Temple Guwahati, Assam	530.247295
8	Kashi Vishwanath Temple Varanasi, Uttar Pradesh	626.321884
9	Khajuraho Temples Khajuraho, Madhya Pradesh	896.987576