



Finlatics
ENABLING INSIGHTS

Business Analyst Experience Program

Project-2

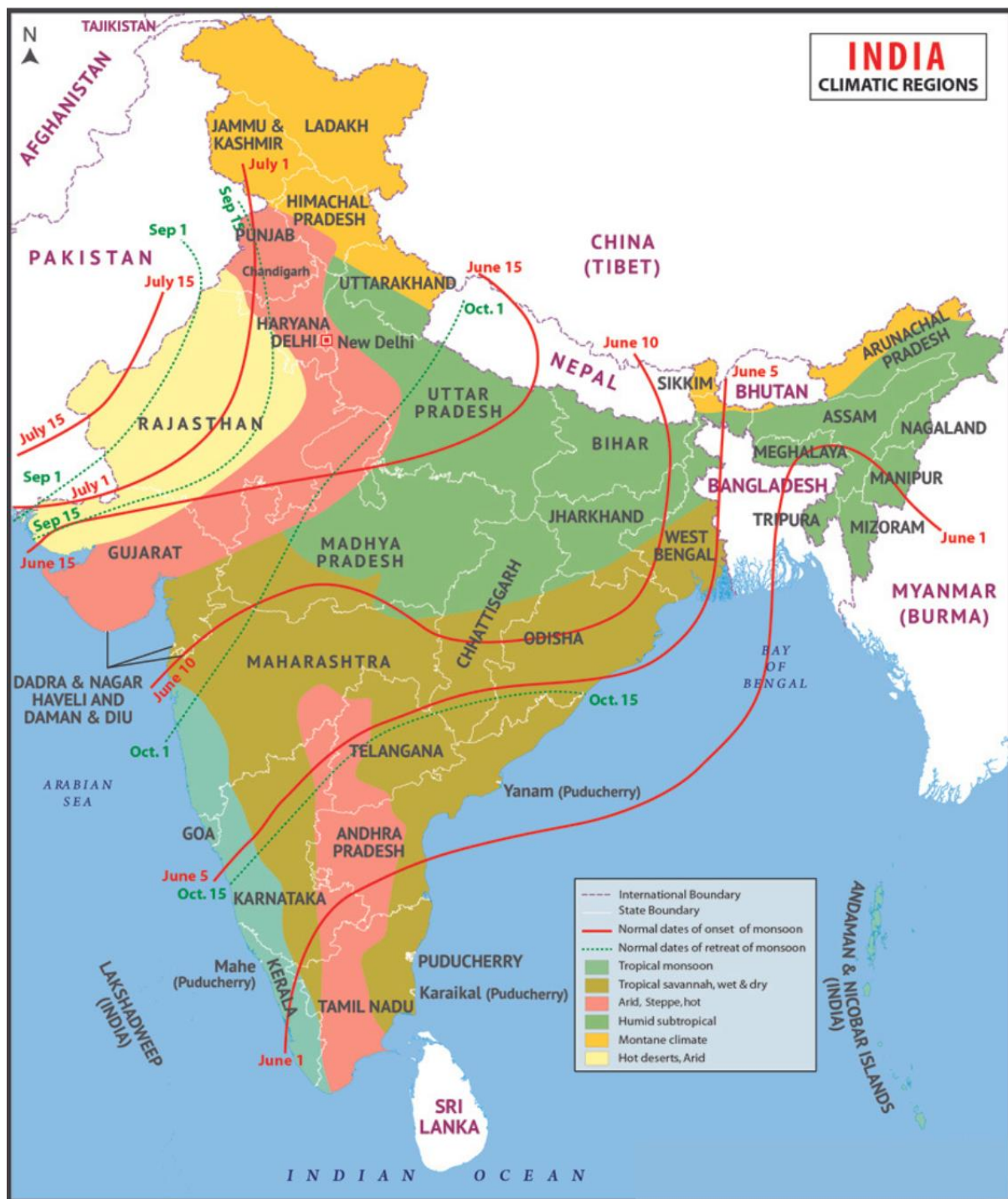
Submitted By-

Name- Gaurav Kumar Singh

College – IIT Hyderabad

Email- bm22mtech11002@iith.ac.in

Contact – 9304222911



The above-mentioned map showcases the various seasons that are experienced across states in India. A key focus of the map is on the onset and retreat of the Southwest Monsoons in the country across various states and regions.

The climates of India are mainly divided into four different groups. The classification of these groups is based on the Koppen climate classification system.

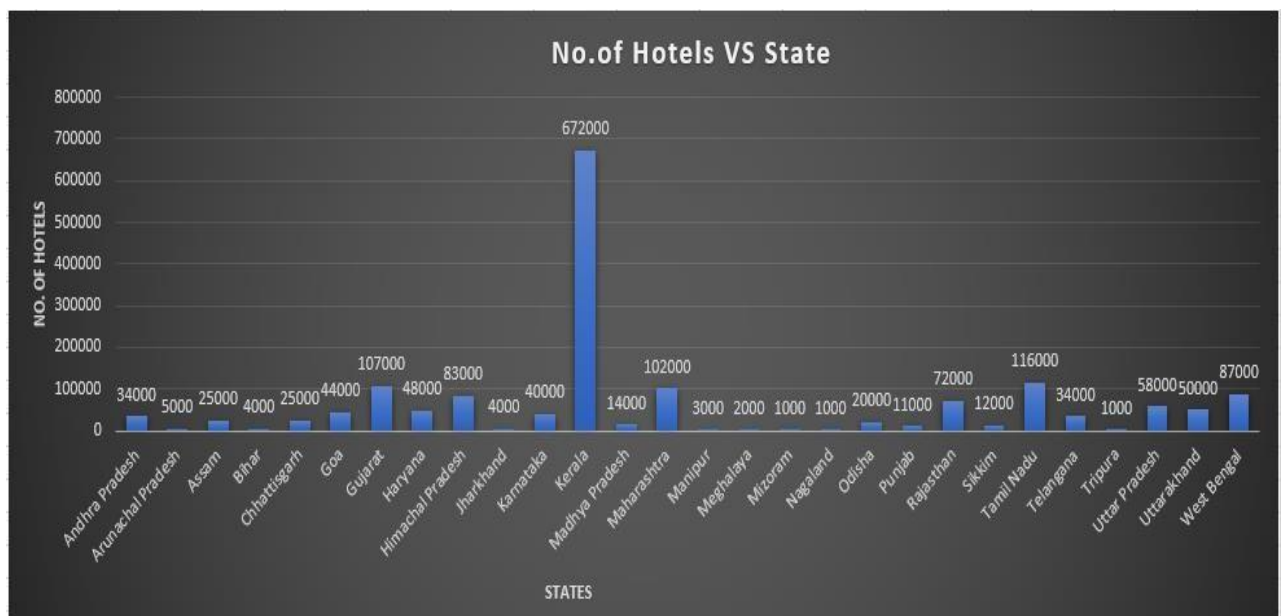
- **Tropical Wet (Humid):** The tropical wet (humid) climate group in India is separated into two subparts: the tropical wet and dry climate, often known as the savannah climate, and the tropical monsoon climate. A tropical monsoon climate prevails in the Western Ghats, the Malabar Coast, southern Assam, Lakshadweep, and the Andaman & Nicobar Islands. It has seasonally significant rain and moderate to high temperatures. The wettest months are May through November, and the rain that falls during this time is more than enough for vegetation to grow all year. The most typical climate in the nation is the savannah climate or a tropical wet and dry climate. Except for some areas of the Western Ghats, it is most prevalent throughout the country's inland peninsula. The humid summer months last from June to September, and they are extremely hot.
- **Tropical Dry:** There are three subgroups of the tropical dry climate group: (a) tropical semi-arid (steppe), (b) subtropical arid (desert), and (c) subtropical semi-arid (steppe). The tropical semi-arid (steppe) climate is found in Karnataka, central Maharashtra, some regions of Tamil Nadu, and Andhra Pradesh. In this type of environment, rainfall is quite unpredictable, and the hot, dry summers last from March through May. Western Rajasthan experiences a subtropical arid (desert) climate with irregular and sparse rainfall. The sub-tropical semi-arid (steppe) climate is present in the tropical desert regions that stretch from Punjab and Haryana to Kathiawar. In this environment, the summertime high temperature can reach 40°C, while rains are unpredictable and typically fall during the summer monsoon season.
- **Subtropical Humid Climate:** The majority of northern and northeastern India experiences this climate. Summers are quite hot, and winters can see temperatures as low as 0°C. The majority of the time, rain falls in the summer, however certain places also have snowfall or sporadic rain throughout the winter. The hottest months are May and June, while frost can sometimes be found in the winter for a few months.
- **Mountain Climate:** In the Himalayas, the temperature drops by 0.6°C for every 100 m of elevation gain, resulting in a variety of climates, from tropical to tundra. The northern side of the western Himalayas, known as the trans-Himalayan region, is chilly, dry, and windswept. In contrast to the well-exposed slopes, the leeward side of the mountains experiences less rain. The months of December through February saw the most snowfall.

Instruction Set

1. Study the map and draw out key indicating parameters in a list format. Also, think about other parameters that indirectly affect our goal.
2. Collection of data.
3. Do descriptive and diagnostic analysis to fill the missing data points and scan the outliers.
4. Creation of separate sheets for each question and creating pivot tables accordingly.
5. Draw out conclusions by observing the visual charts made from the pivot tables.
6. All the best! Submit your answers in a PDF file.

Answer the following questions based on data collection and visualisation of data, using MS-Excel.

1. Which state has the highest number of hotels? Depict this via a bar graph that compares all states.

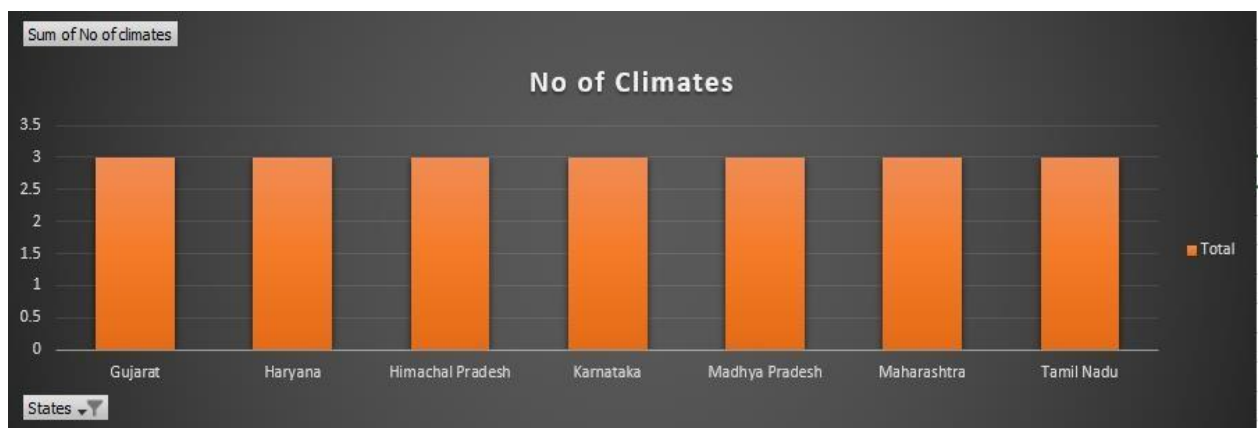
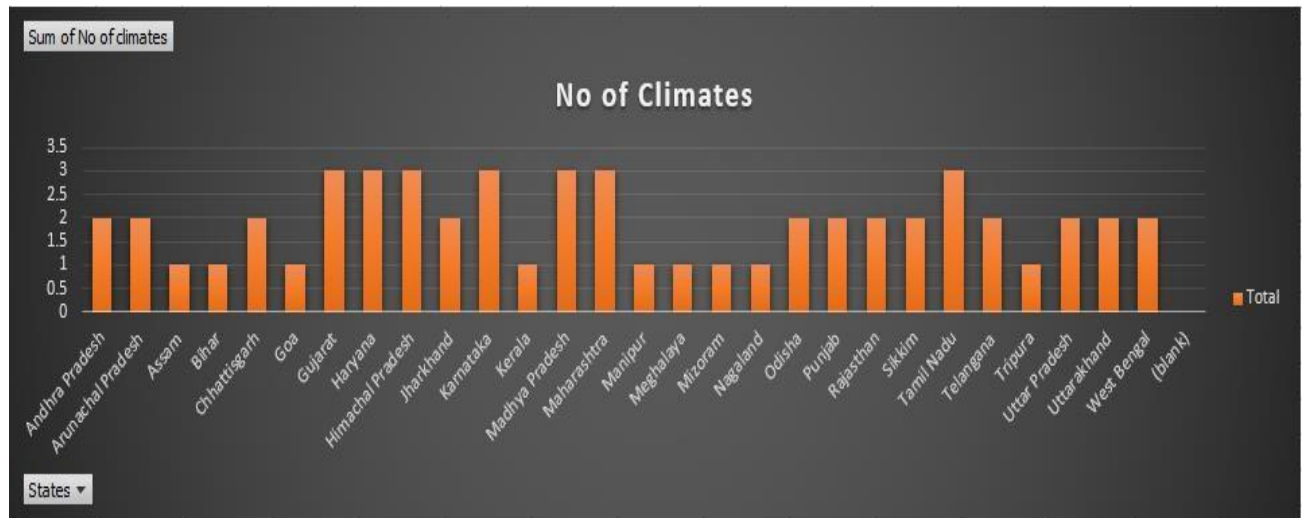


By looking at the above bar graph, we can clearly state that the **"Kerala"** has the highest number of hotels i.e., 672,000 in India.

2. Which states have three types of climatic conditions? (Convert the map, an unstructured data, to an Excel file in a structured format and mention the number of climates along with the state)

Serial No.	States	Seasons						Total No. of Seasons
		Tropical Monsoon	Tropical Savannah, Wet & Dry	Arid, Steppe, Hot	Humid Subtropical	Mountain Climate	Hot Deserts, Arid	
1	Andhra Pradesh			✓				1
2	Arunachal Pradesh				✓	✓		2
3	Assam				✓			1
4	Bihar				✓			1
5	Chhattisgarh		✓		✓			2
6	Goa	✓						1
7	Gujarat		✓	✓			✓	3
8	Haryana			✓	✓		✓	3
9	Himachal Pradesh			✓	✓	✓		3
10	Jharkhand		✓		✓			2
11	Karnataka	✓	✓	✓				3
12	Kerala	✓			✓			2
13	Madhya Pradesh		✓	✓	✓			3
14	Maharashtra	✓	✓		✓			3
15	Manipur				✓			1
16	Meghalaya				✓			1
17	Mizoram				✓			1
18	Nagaland				✓			1
19	Odisha		✓		✓			2
20	Punjab			✓			✓	2
21	Rajasthan			✓			✓	2
22	Sikkim					✓		1
23	Tamil Nadu	✓	✓	✓				3
24	Telangana		✓	✓				2
25	Tripura				✓			1
26	Uttar Pradesh			✓	✓			2
27	Uttarakhand				✓	✓		2

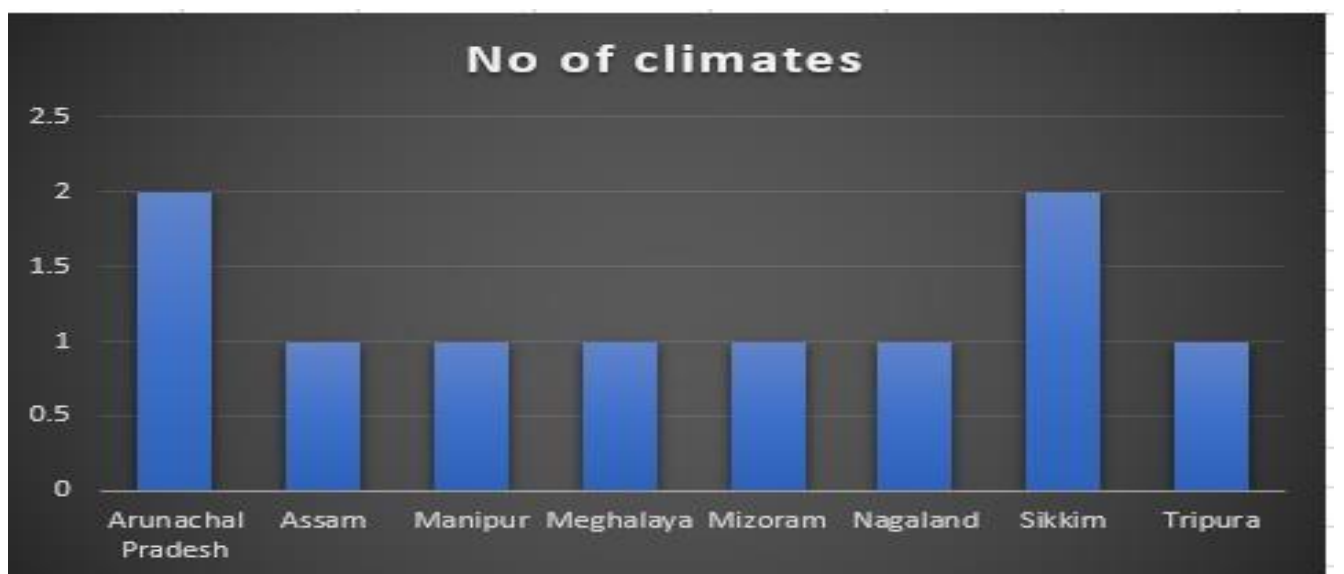
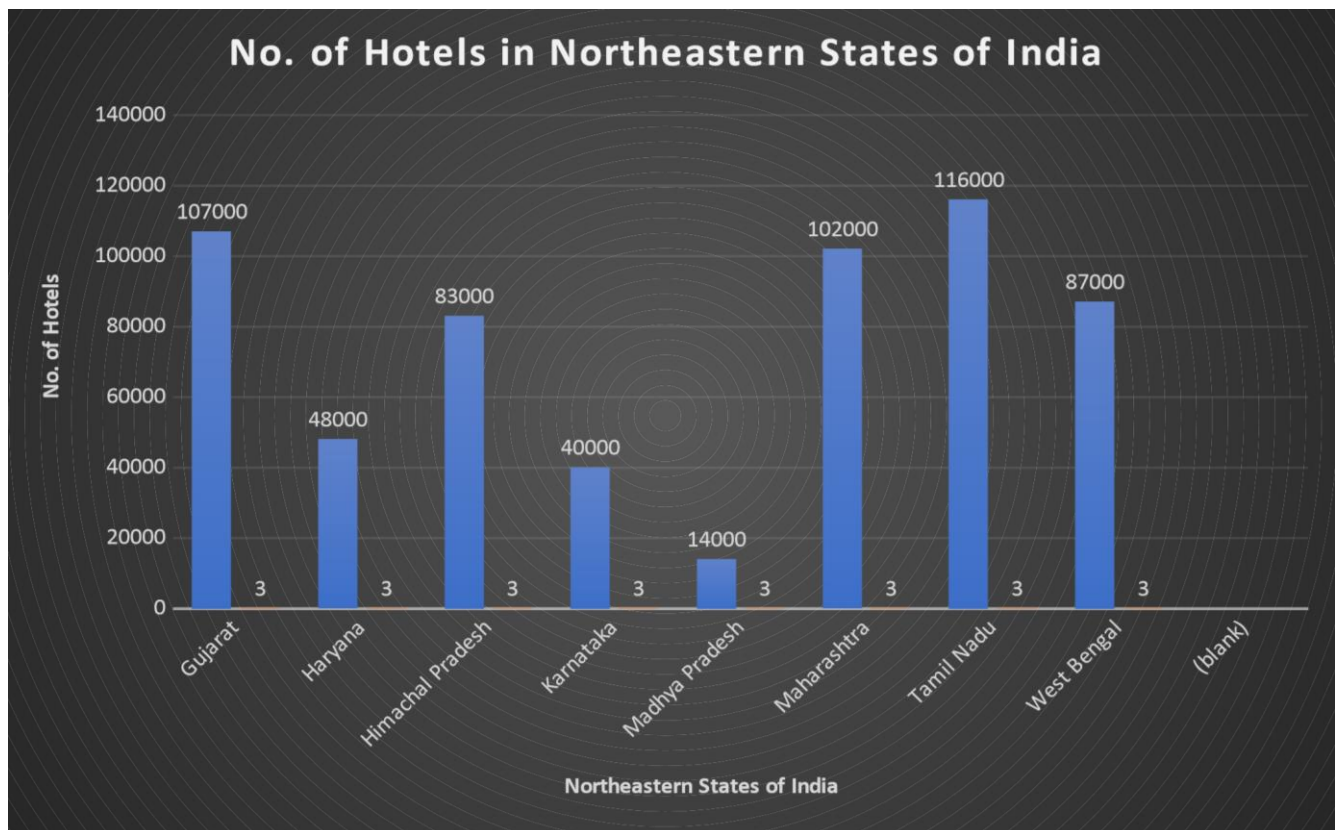
28	West Bengal		✓		✓	✓		3
----	-------------	--	---	--	---	---	--	---



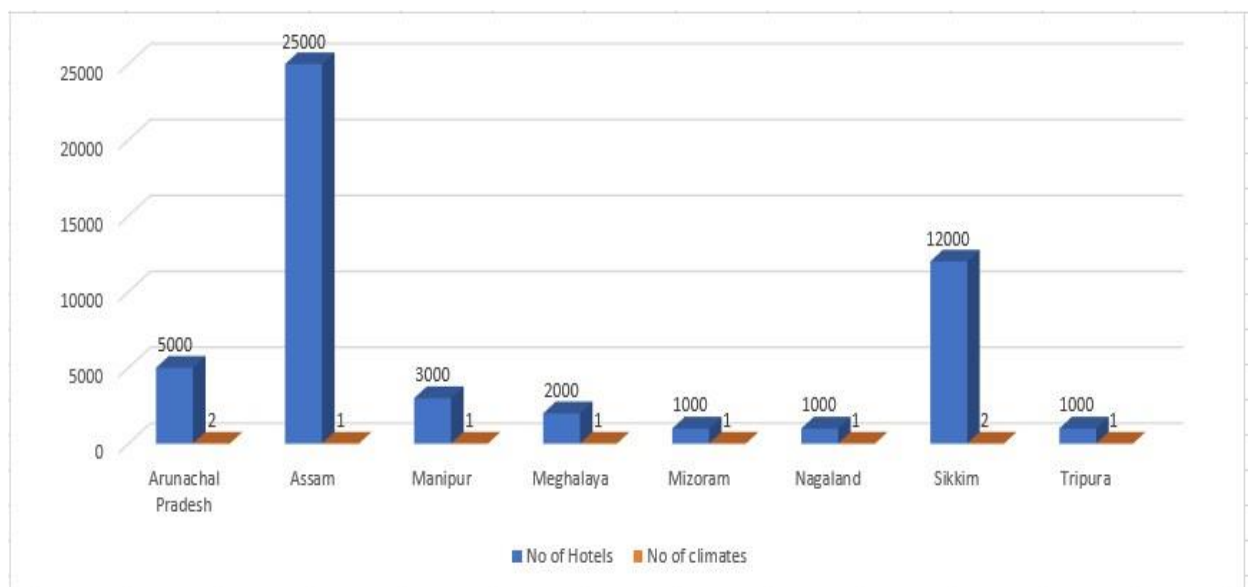
❖ The states having three types of Climatic Conditions are as follows:

- Gujarat
- Haryana
- Himanchal Pradesh
- Karnataka
- Madhya Pradesh
- Maharashtra
- Tamil Nadu

3. Among the northeastern states which are best to set up a hotel? Use Clustered Column Chart and give recommendations for hotel industry investors.



Row Labels	Sum of No of Hotels	Sum of Total No. Climatic Conditions
Arunachal Pradesh	5000	2
Assam	25000	1
Manipur	3000	1
Meghalaya	2000	1
Mizoram	1000	1
Nagaland	1000	1
Tripura	1000	1
Grand Total	38000	8




From the above figure, following recommendation can be given as per the data.

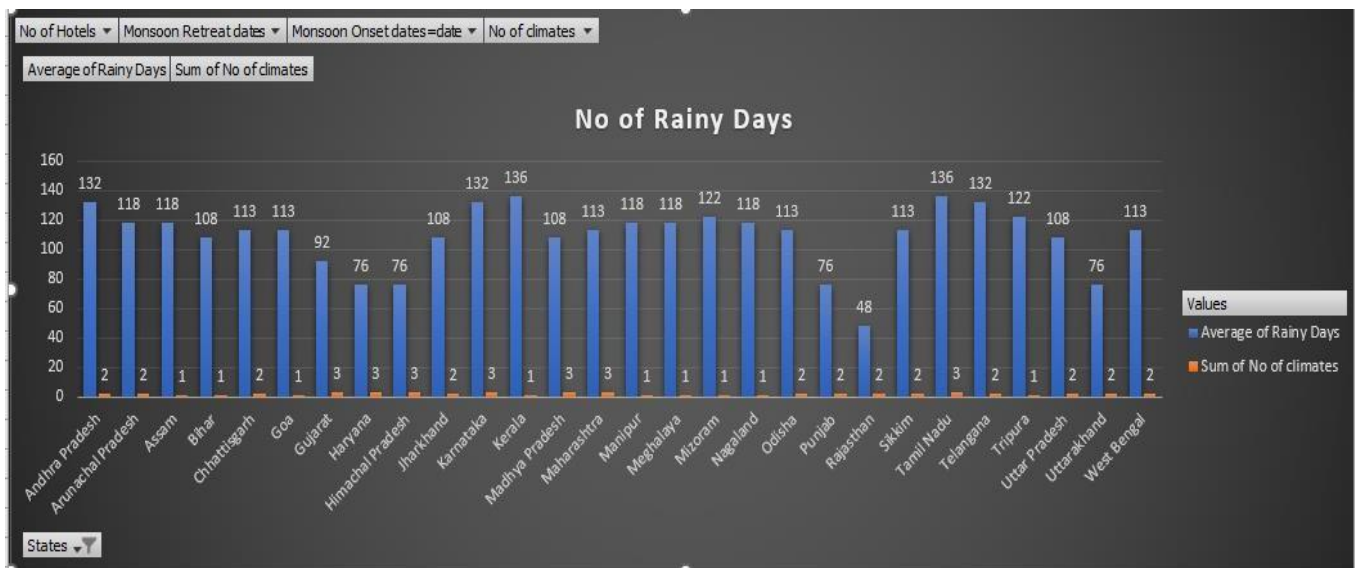
1. Sikkim appears to be a good northeastern state to set up a hotel. It has a relatively higher number of hotels (12,000) compared to the other northeastern states, and it also experiences multiple seasons (2 seasons). The combination of a decent number of hotels and multiple seasons suggests a potential market for hospitality and tourism-related businesses in Sikkim.

But on the other hand, States with fewer hotels may indeed present opportunities due to less competition and potentially untapped markets. When considering where to set up a hotel, the number of hotels is just one of several factors to consider, and each state's unique characteristics should be evaluated.

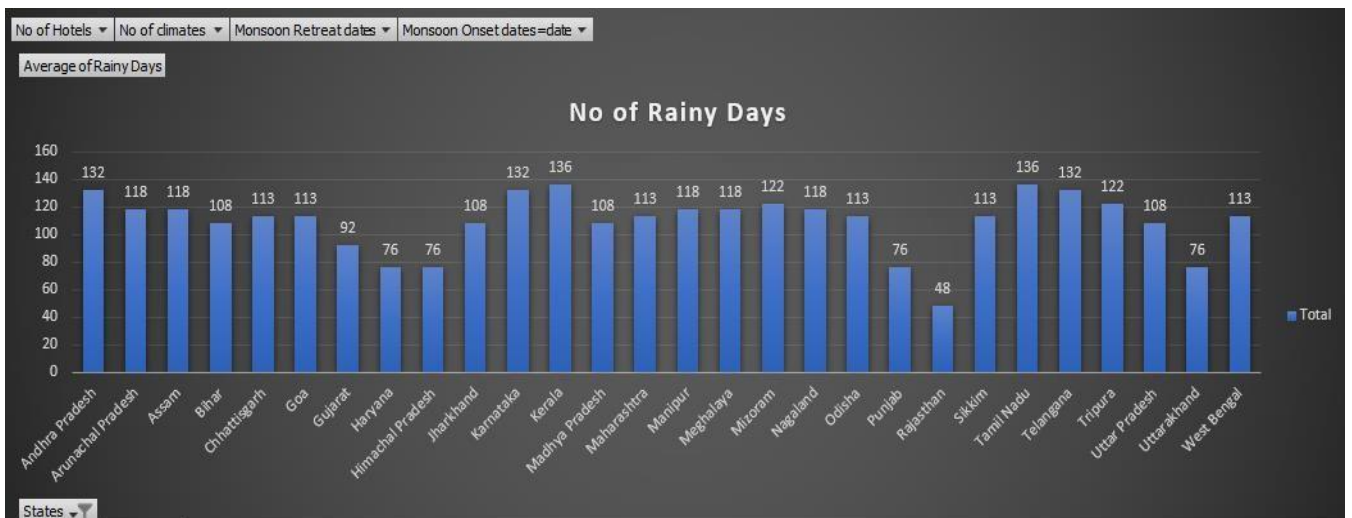
2. Meghalaya, as it is a beautiful northeastern state in India with great potential for various industries, including tourism and hospitality. Setting up a hotel in Meghalaya can be a promising venture due to its unique attractions and natural beauty. Here are some possibilities and considerations for setting up a hotel in Meghalaya: Tourism Potential, Ecotourism and Adventure Tourism, Heritage and Culture, Less Competition, Potential Demand, Market Gap, Supportive Environment

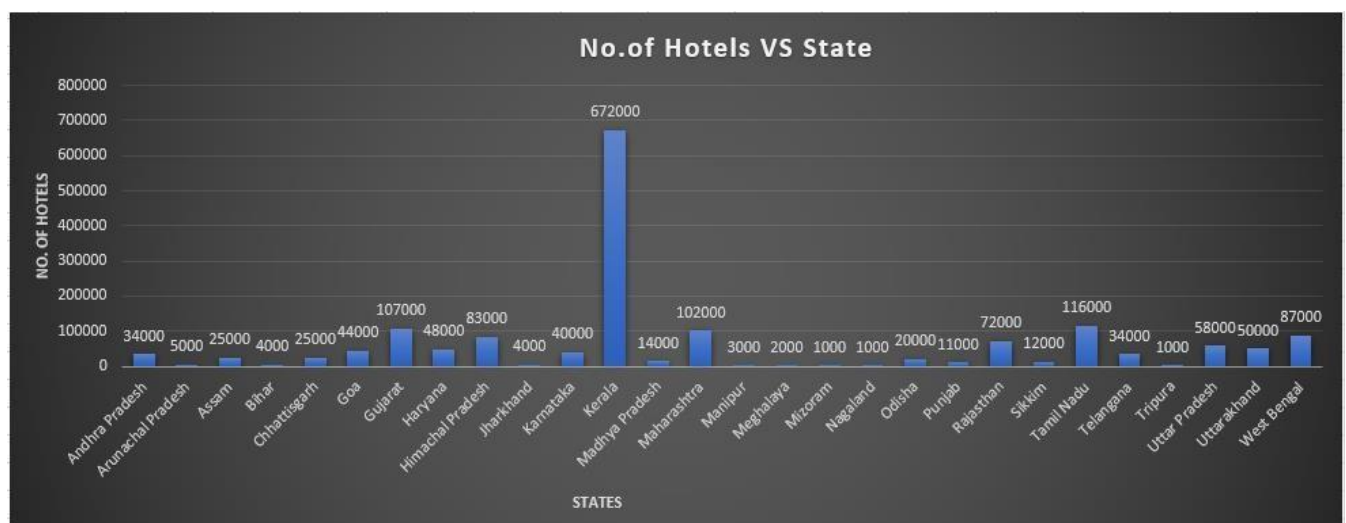
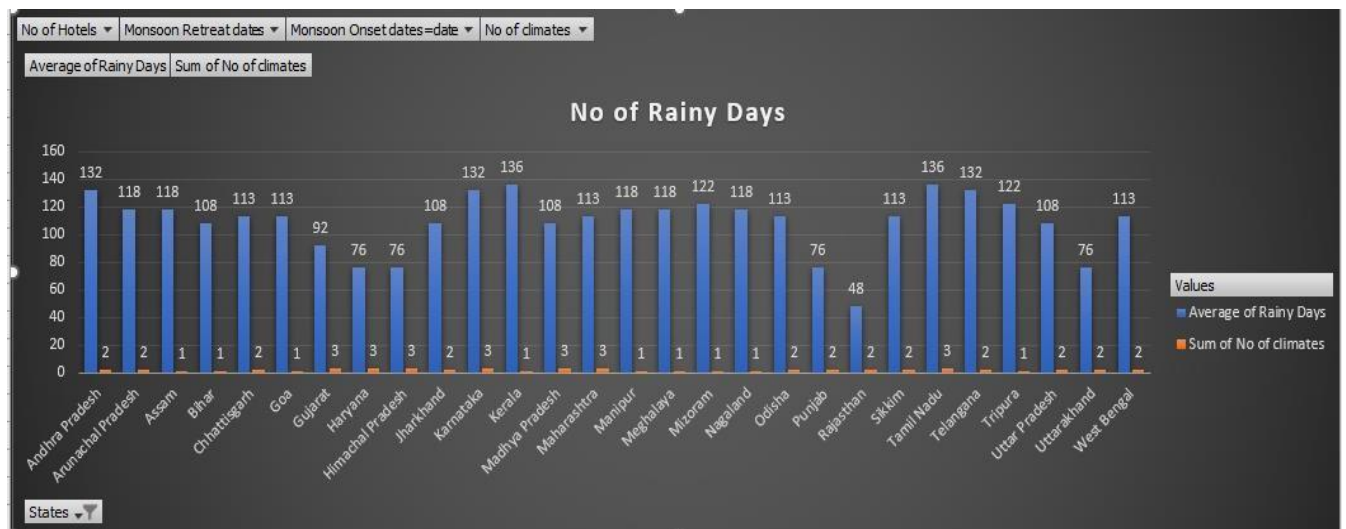
4. Customise the pivot charts to add/change the fields in the fields list with other fields and by using chart styles to customise the charts. (Choose the data and parameters according to your choice)

Row Labels		 Sum of No of Hotels	Sum of No of climates	Average of Rainy Days
Andhra Pradesh	34000		2	132
Arunachal Pradesh	5000		2	118
Assam	25000		1	118
Bihar	4000		1	108
Chhattisgarh	25000		2	113
Goa	44000		1	113
Gujarat	107000		3	92
Haryana	48000		3	76
Himachal Pradesh	83000		3	76
Jharkhand	4000		2	108
Karnataka	40000		3	132
Kerala	672000		1	136
Madhya Pradesh	14000		3	108
Maharashtra	102000		3	113
Manipur	3000		1	118
Meghalaya	2000		1	118
Mizoram	1000		1	122
Nagaland	1000		1	118
Odisha 20000 2 113 Punjab 11000 2 76				
Rajasthan 72000 2 48 Sikkim 12000 2 113				
Tamil Nadu	116000		3	136
Telangana	34000		2	132
Tripura	1000		1	122
Uttar Pradesh 58000 2 108 Uttarakhand 50000 2 76 West Bengal 87000 2 113				
Grand Total	1675000		54	109.1428571

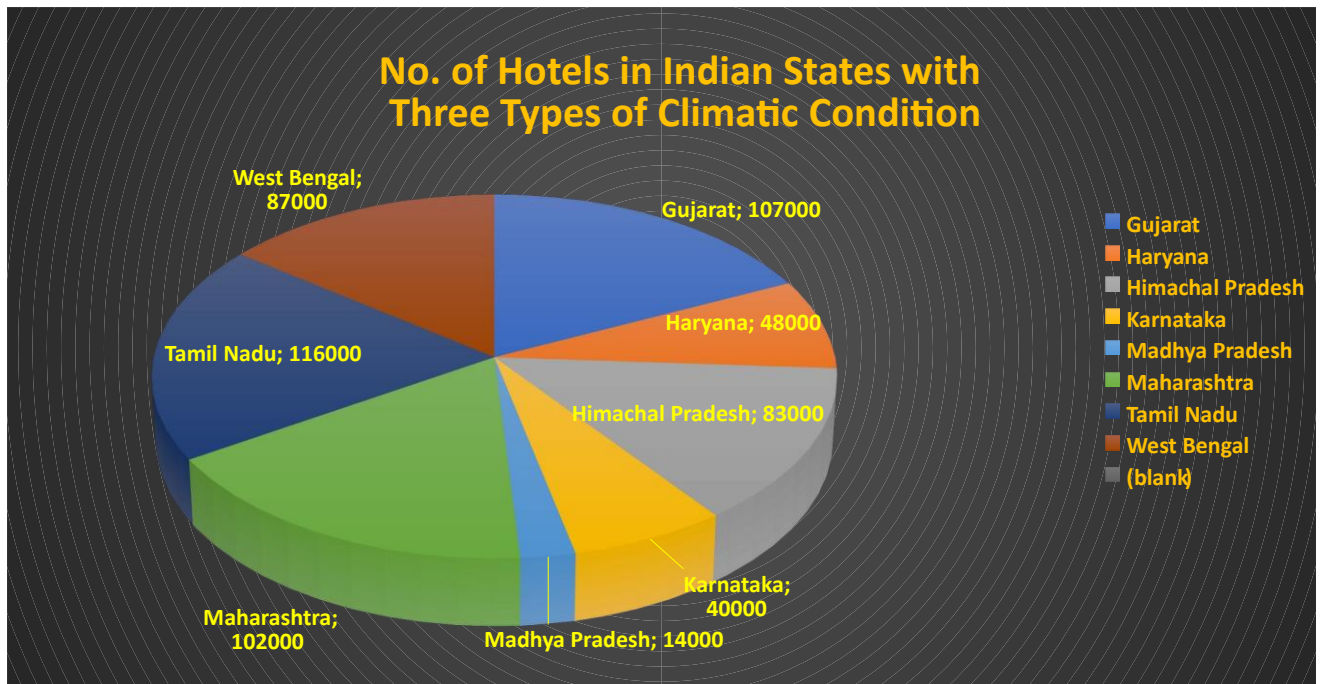


5. Which is the best state for setting up a hotel? Why?





Row Labels	Sum of No of Hotels	Sum of Total No. of Seasons
Gujarat	107000	3
Haryana	48000	3
Himachal Pradesh	83000	3
Karnataka	40000	3
Madhya Pradesh	14000	3
Maharashtra	102000	3
Tamil Nadu	116000	3
West Bengal	87000	3
Grand Total	597000	24



From the above pie chart, we can say that **Madhya Pradesh** is a state in central India with significant potential for the hospitality industry, including hotels. It offers a diverse range of attractions, including historical sites, wildlife sanctuaries, national parks, and cultural heritage, making it an attractive destination for tourists.

Here are some factors to consider for setting up a hotel in Madhya Pradesh:

- Tourism Potential
- Central Location
- Religious Tourism
- Less Competition in Some Areas
- Local Culture and Traditions
- Government Initiatives
- Infrastructure Development

6. What is the average number of days the rainy season lasts in Indian states?

Average no of rainy season lasts for approximately **110 days**.

Row Labels	Average of Rainy Days
Andhra Pradesh	132
Arunachal Pradesh	118
Assam	118
Bihar	108
Chhattisgarh	113
Goa	113
Gujarat	92

Haryana	76
Himachal Pradesh	76
Jharkhand	108
Karnataka	132
Kerala	136
Madhya Pradesh	108
Maharashtra	113
Manipur	118
Meghalaya	118
Mizoram	122
Nagaland	118
Odisha	113
Punjab	76
Rajasthan	48
Sikkim	113
Tamil Nadu	136
Telangana	132
Tripura	122
Uttar Pradesh	108
Uttarakhand	76
West Bengal	113

Grand Total	109.1428571
--------------------	--------------------