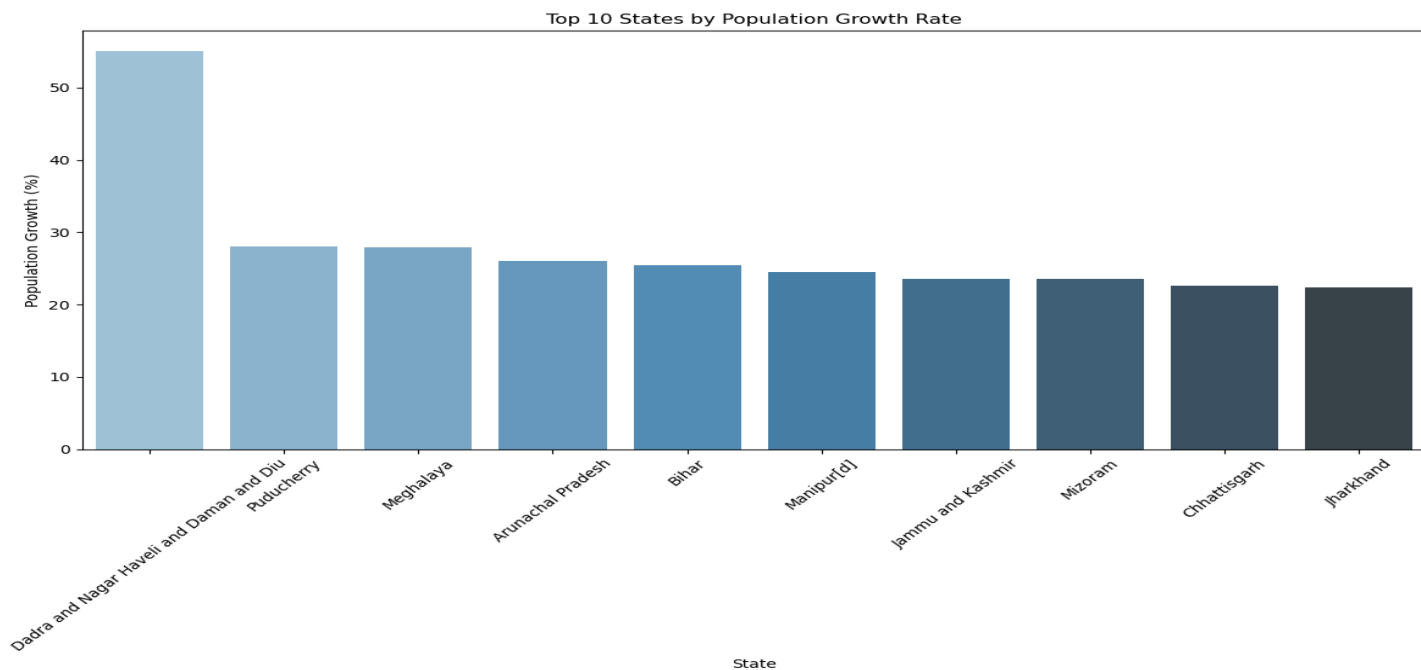


CAPSTONE PROJECT

TOPIC NAME - Crime Analysis In India

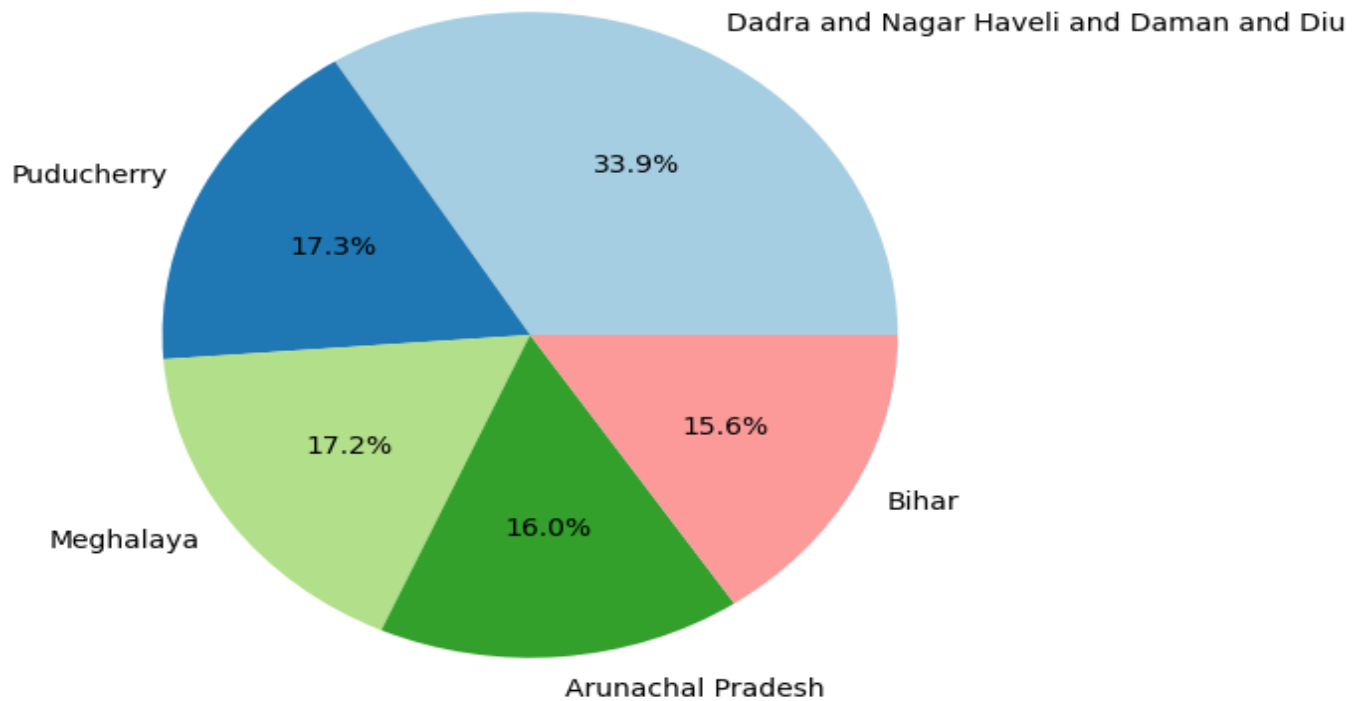
BY – SOURAV KUMAR SINGH

Top 10 population Growth State in India

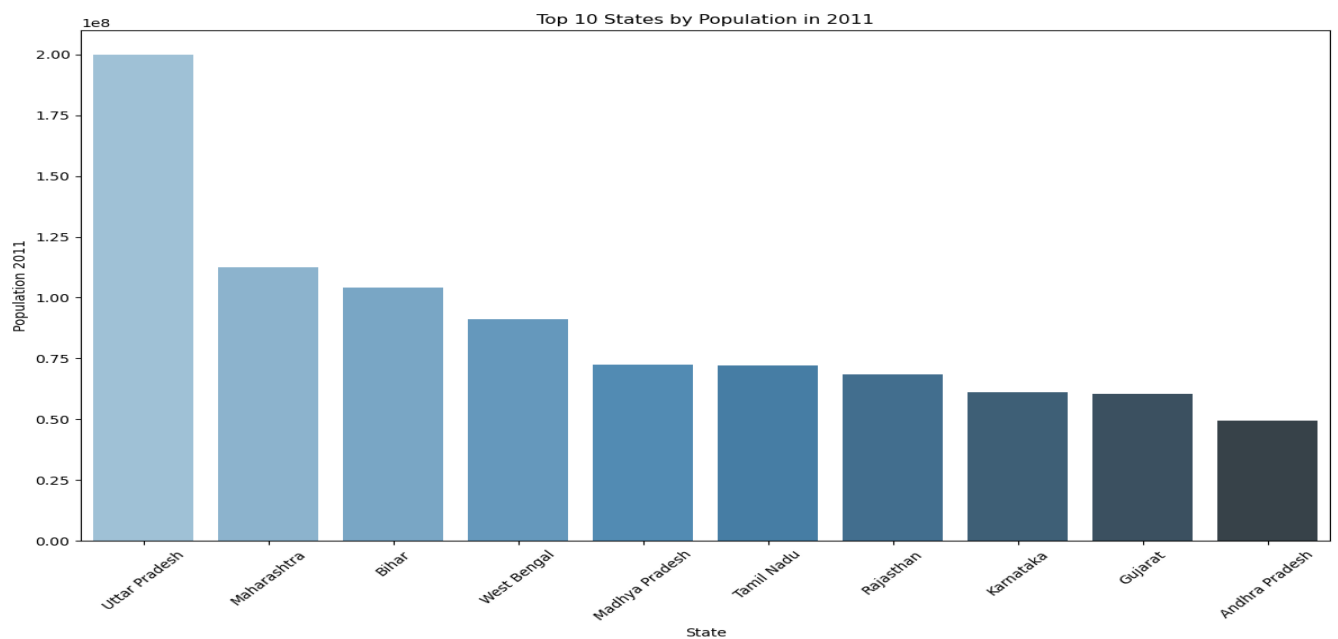


Top 5 population Growth State in India using pie chart

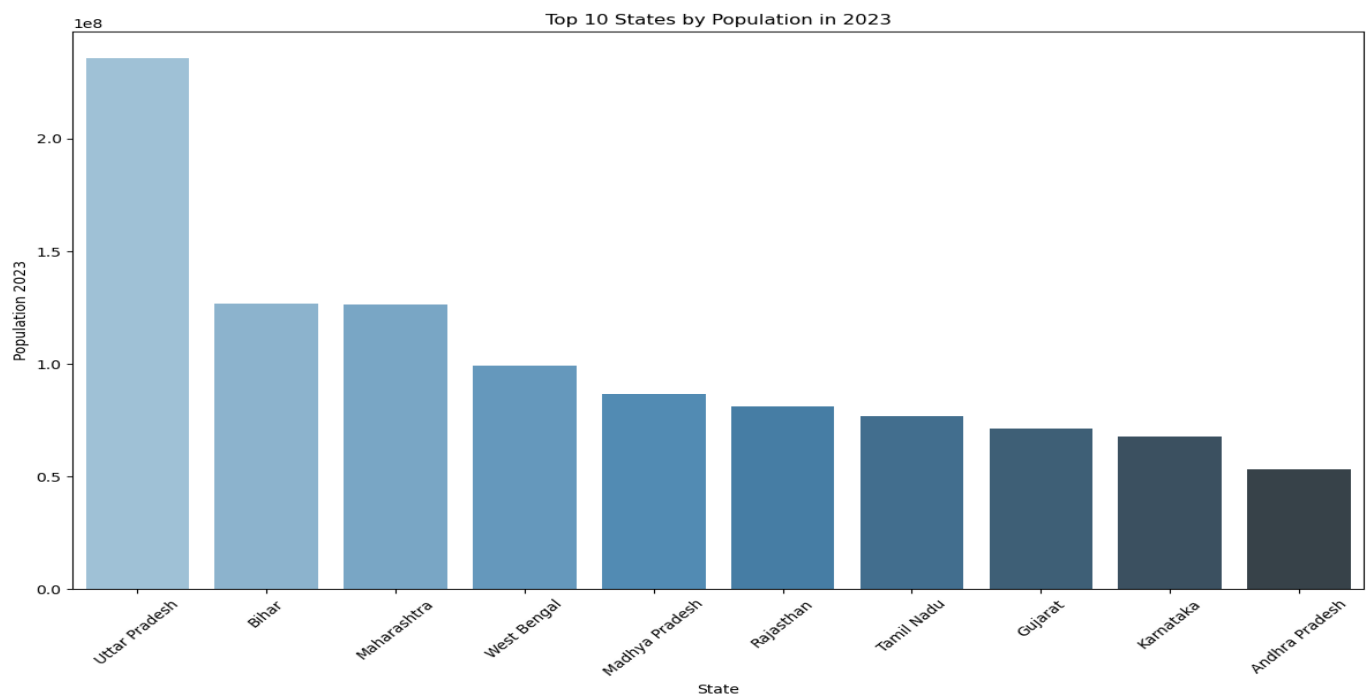
Top 5 Distribution of States with Growth Rate



Top 10 population in 2011 State in India

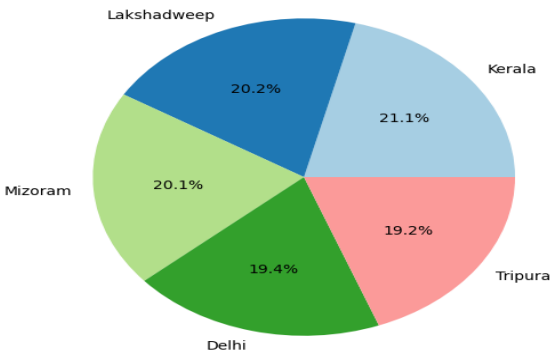


Top 10 population in 2023 State in India

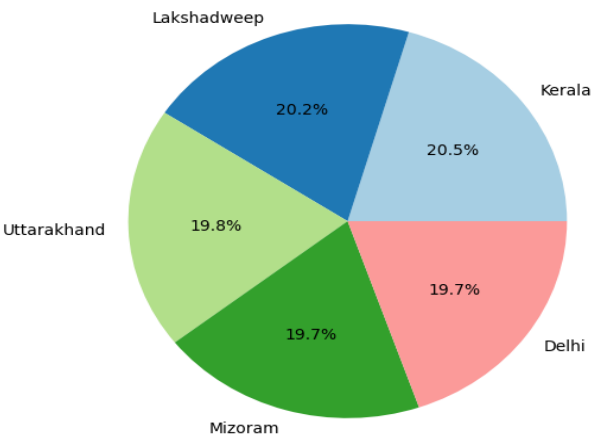


Top 5 Distribution of States literacy Rate in 2023

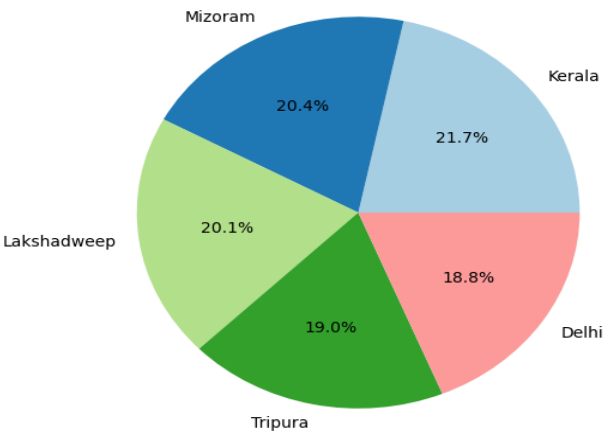
Top 5 Distribution of States with Average literacy Rate 2023



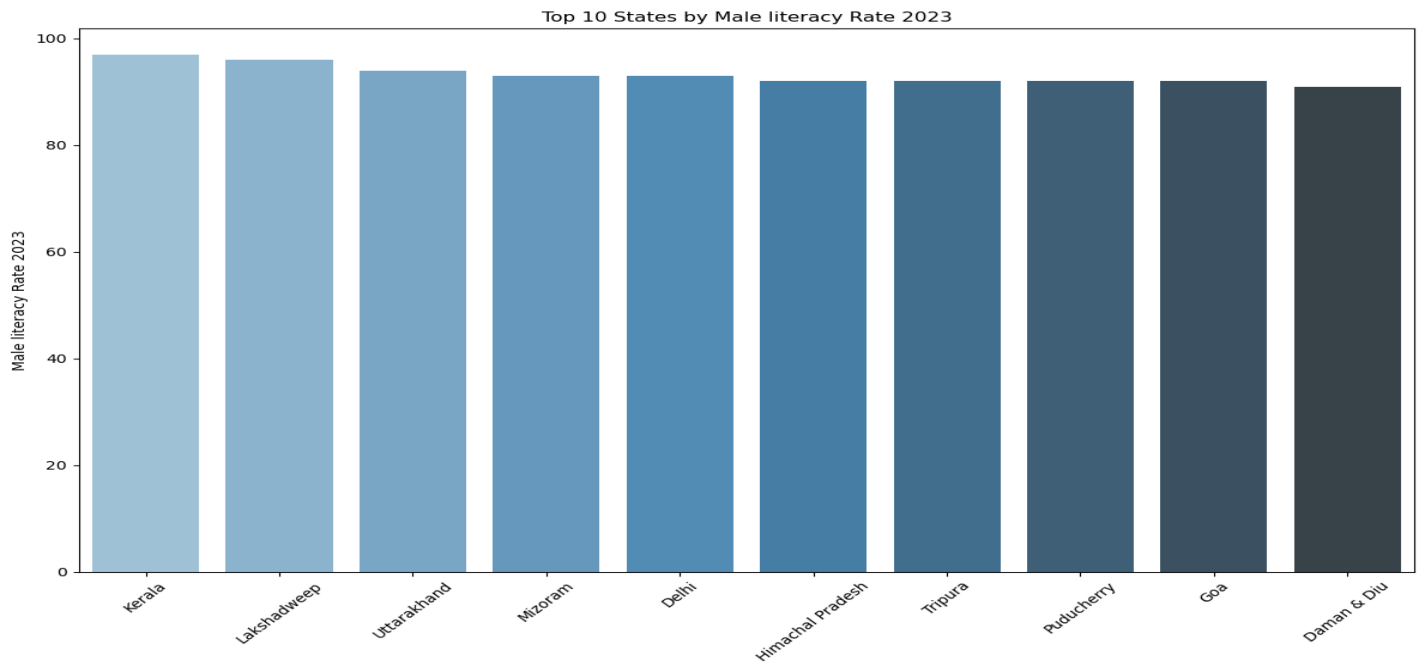
Top 5 Distribution of States with Male literacy Rate 2023



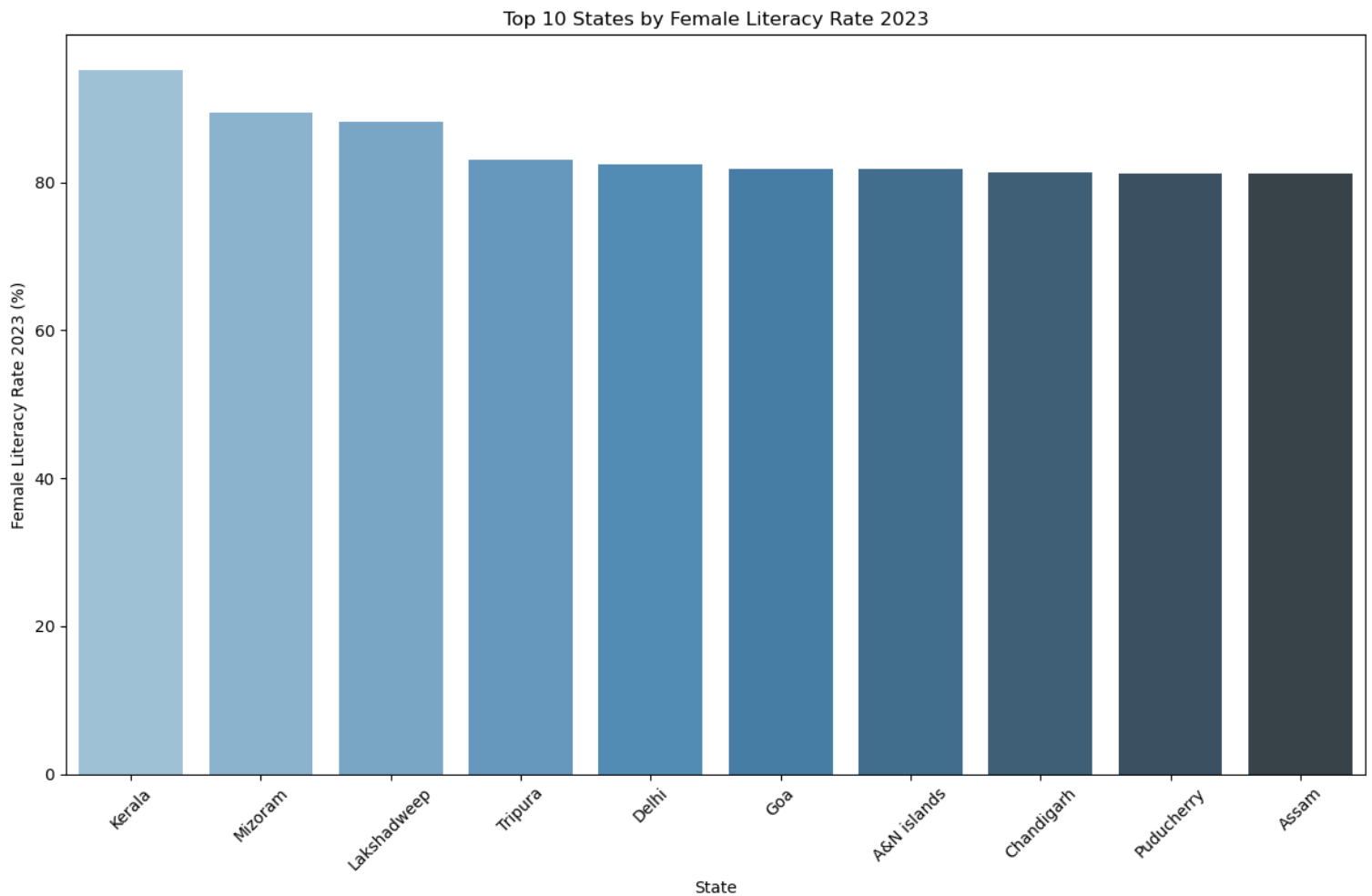
Top 5 Distribution of States with Female literacy Rate 2023



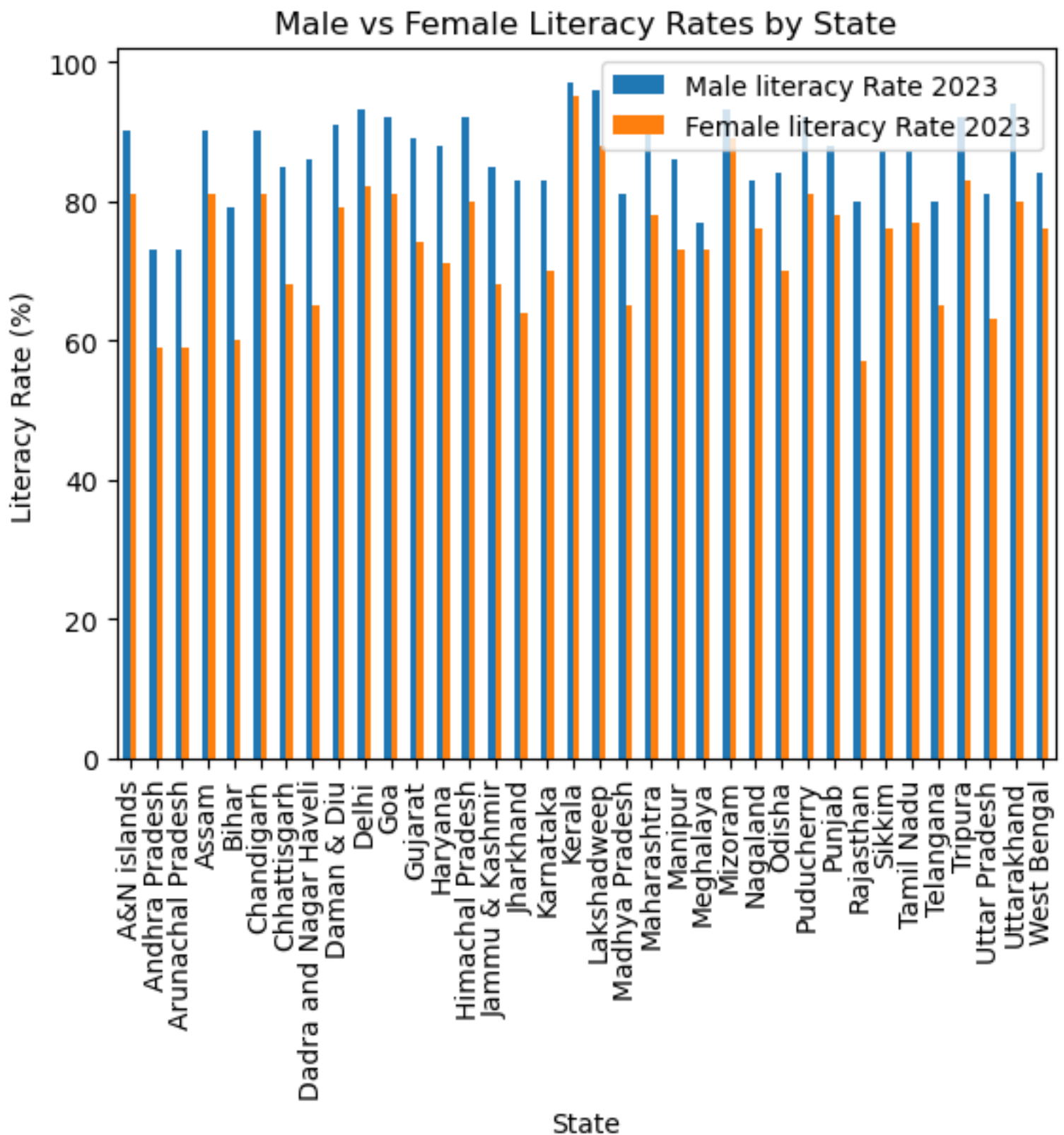
Top 10 State with high male literacy rate in 2023



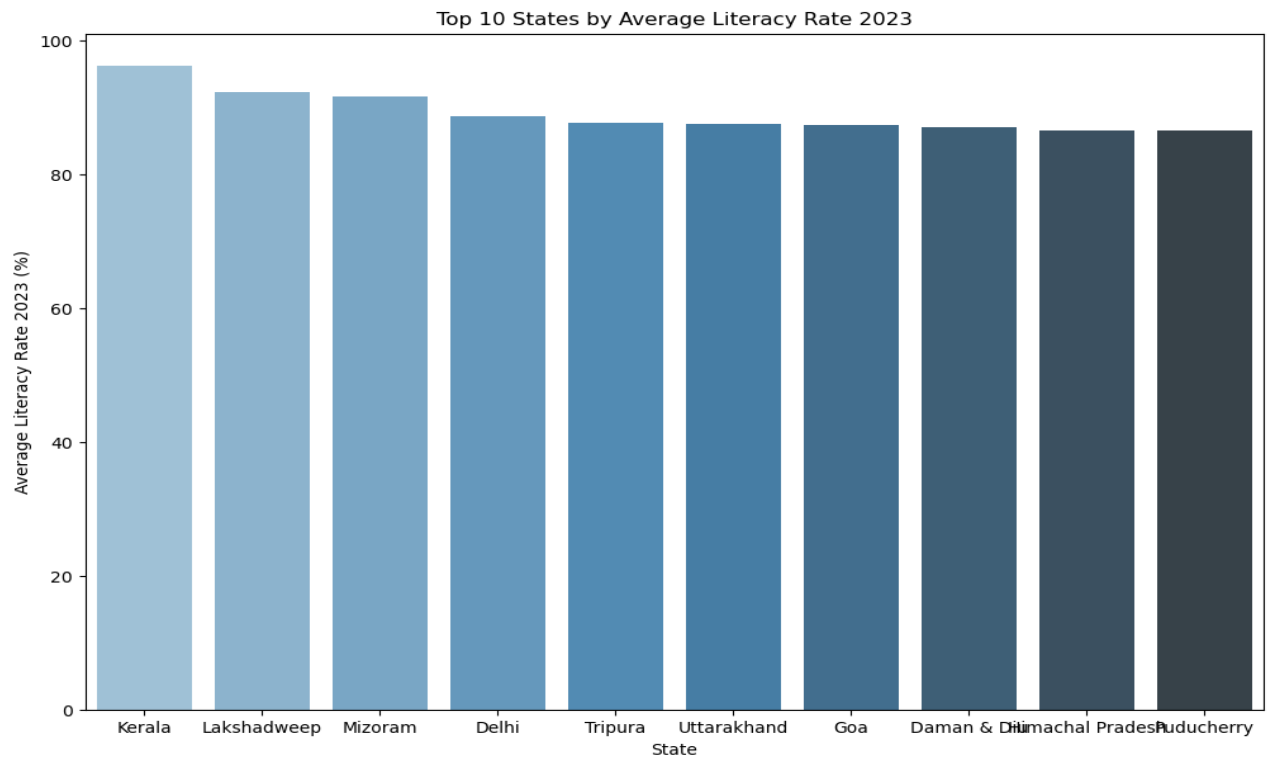
Top 10 State with high Female literacy rate in 2023



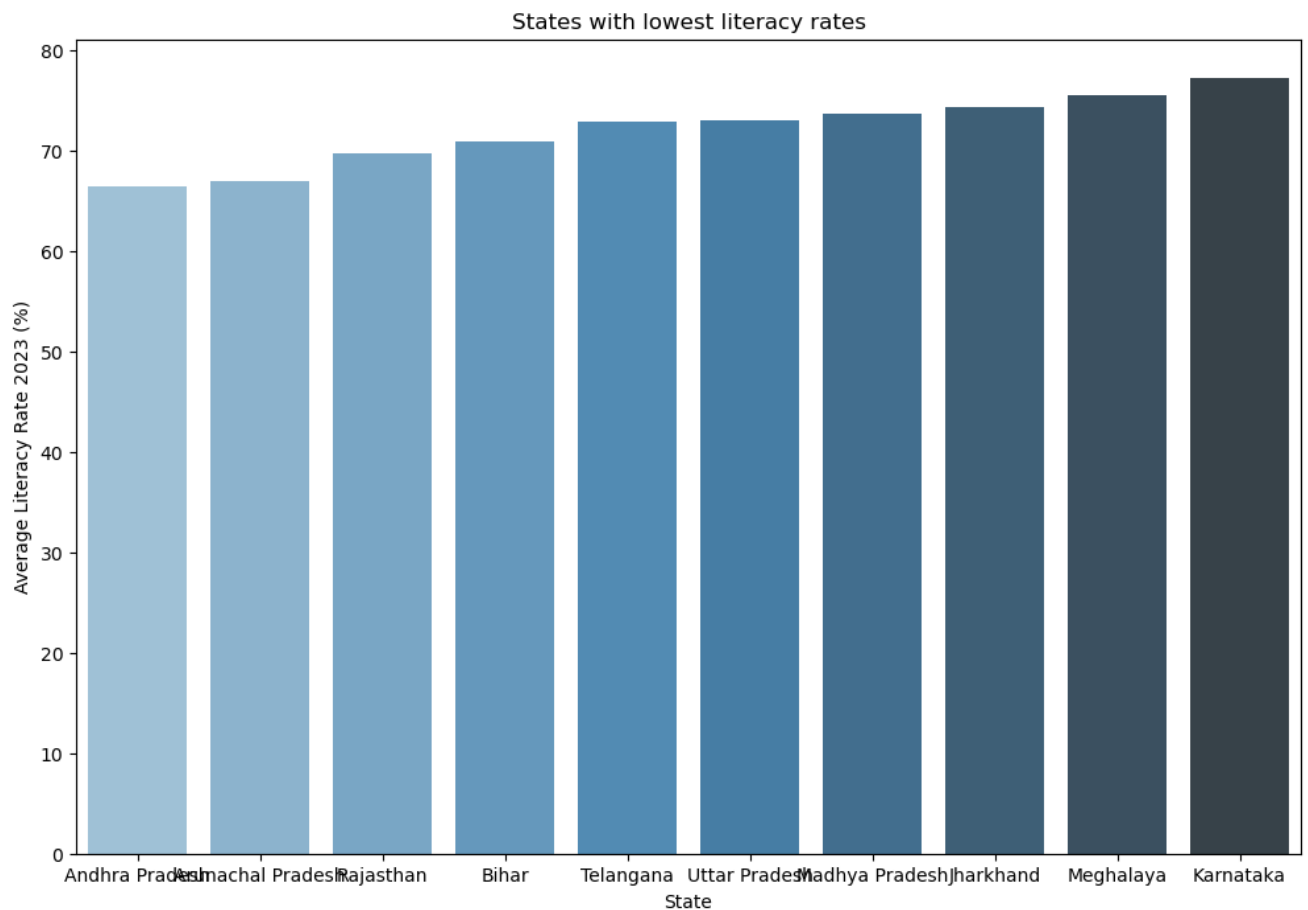
Male and female literacy rate by state wise



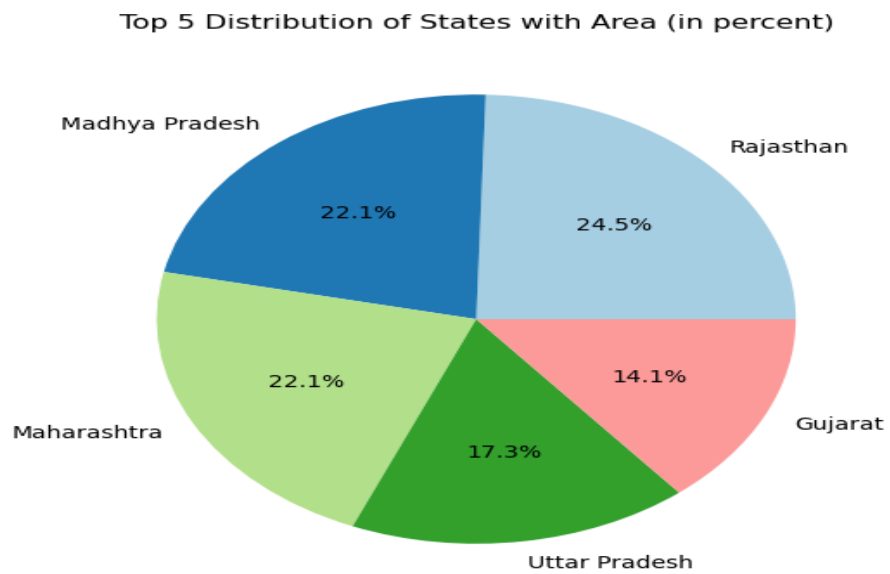
Top 10 State with high Average literacy rate in 2023



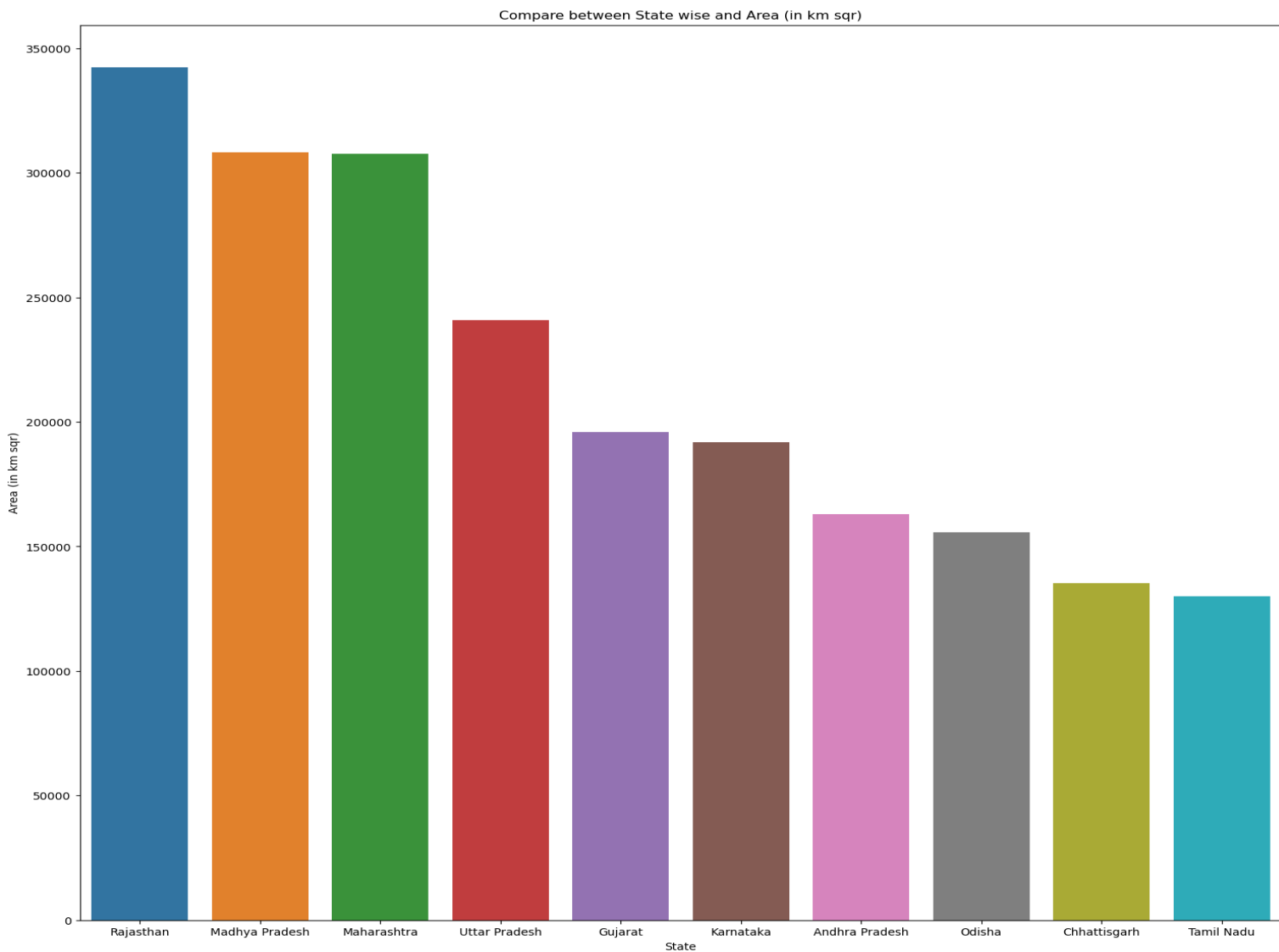
States with lowest 10 literacy rates



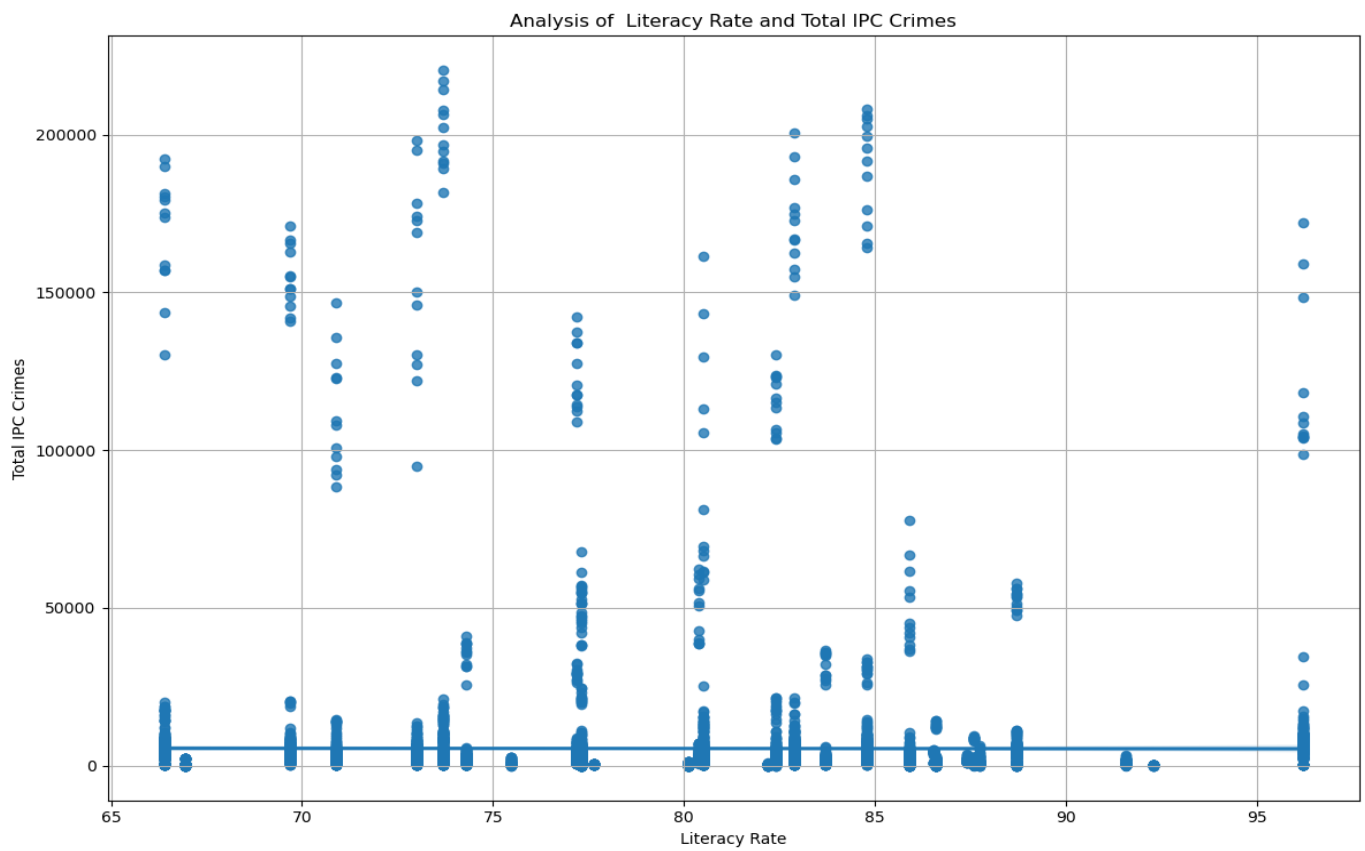
Top 5 Distribution of States with Area (in percent)



State Wise Area Analysis

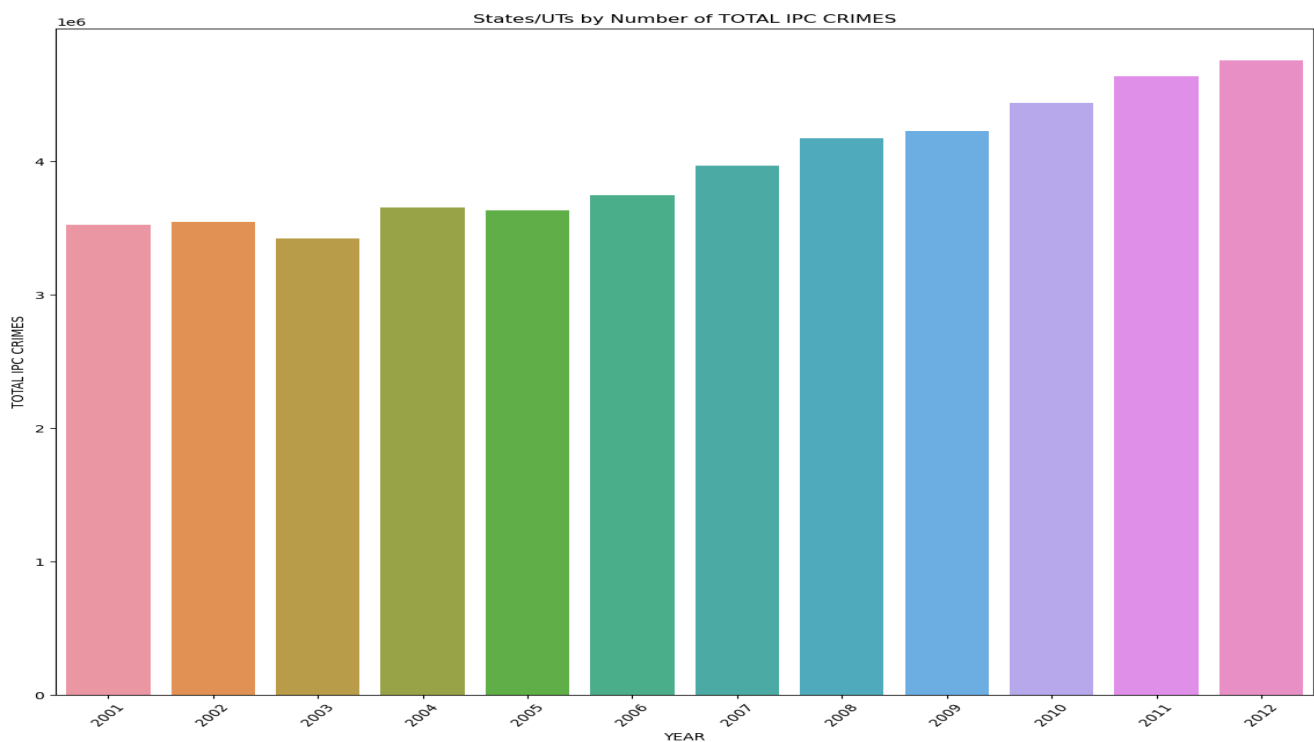


Analysis of literacy rate and total IPC crime

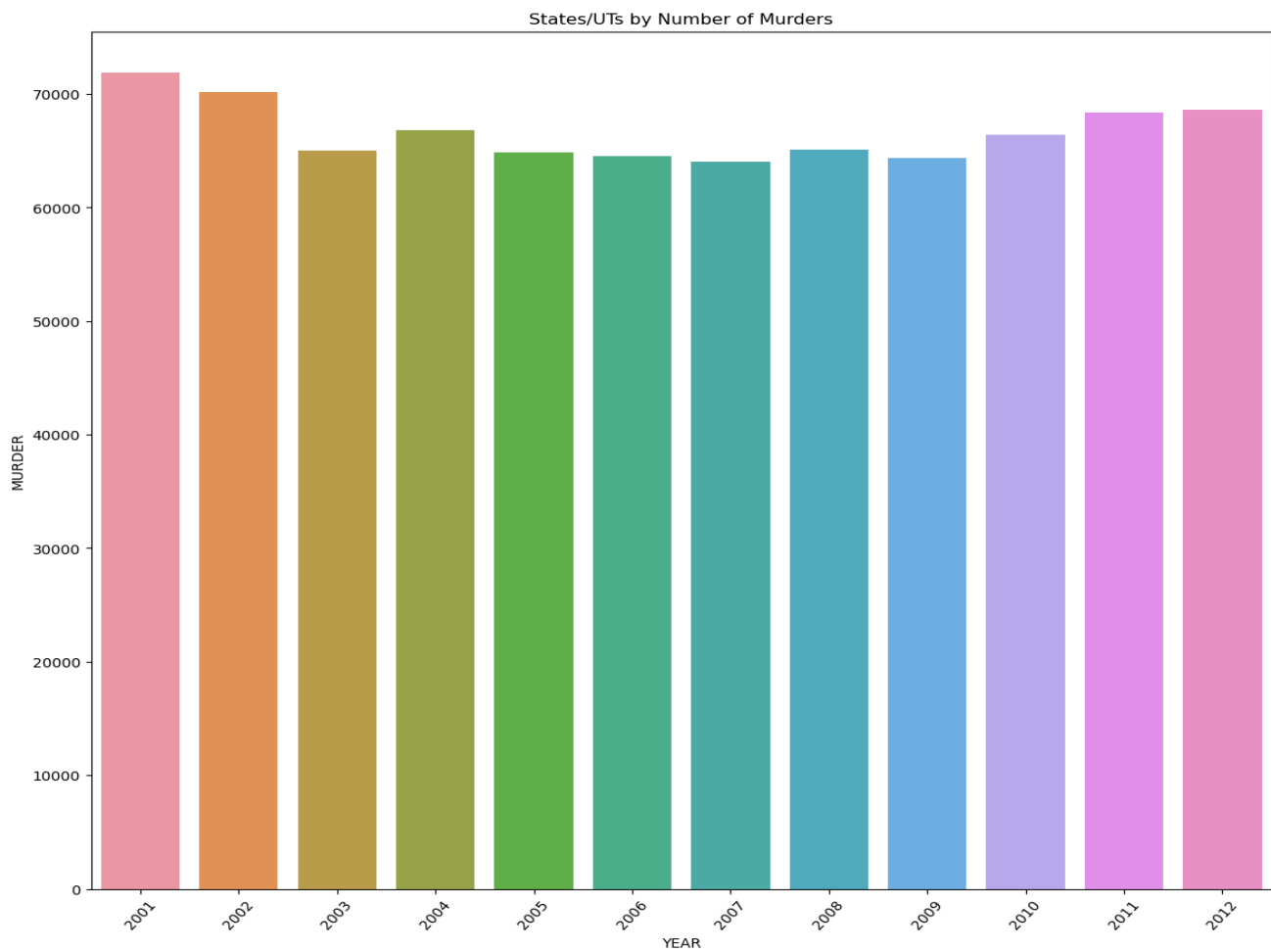


Year wise number of crimes

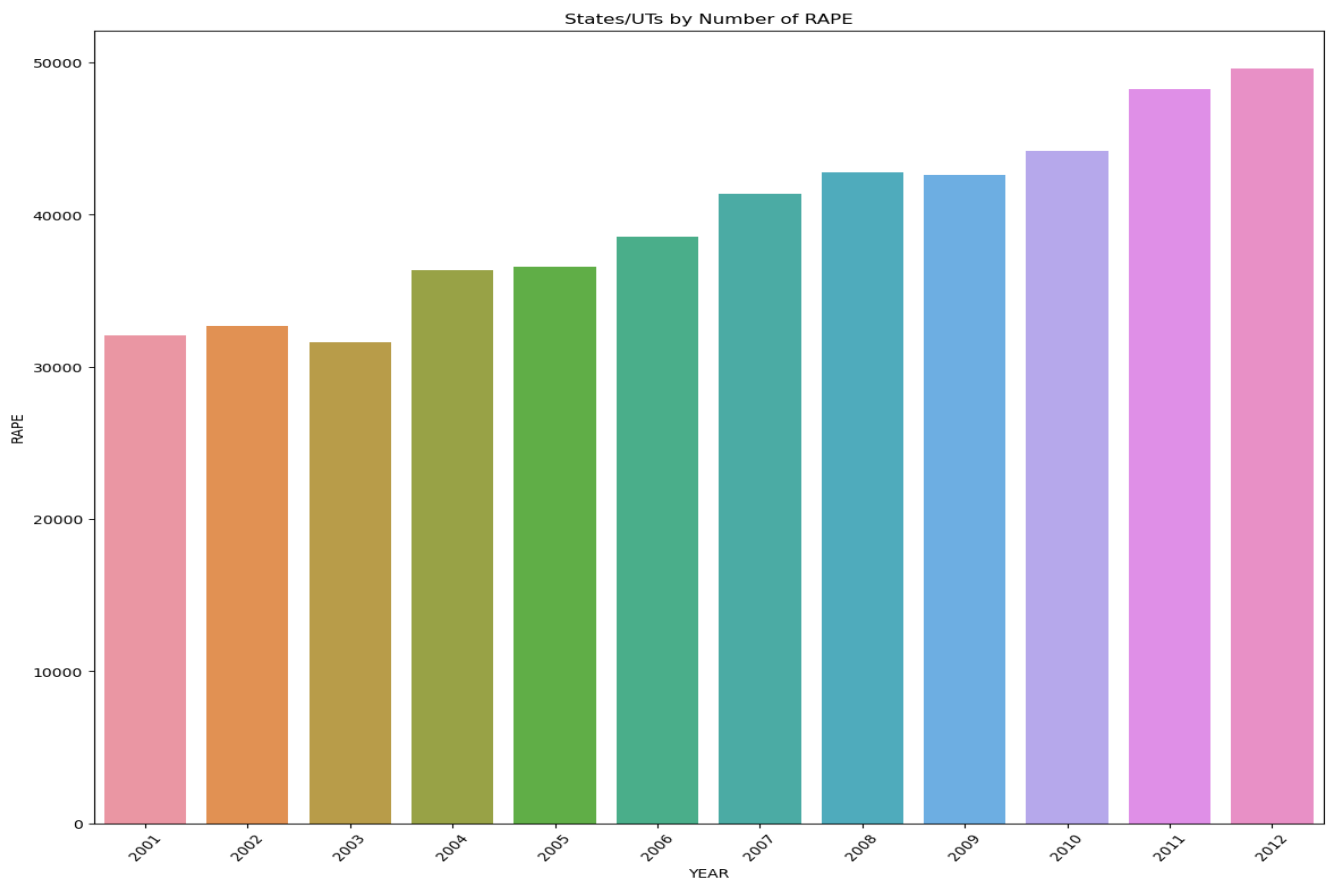
Year wise total IPC crime (in lakhs)



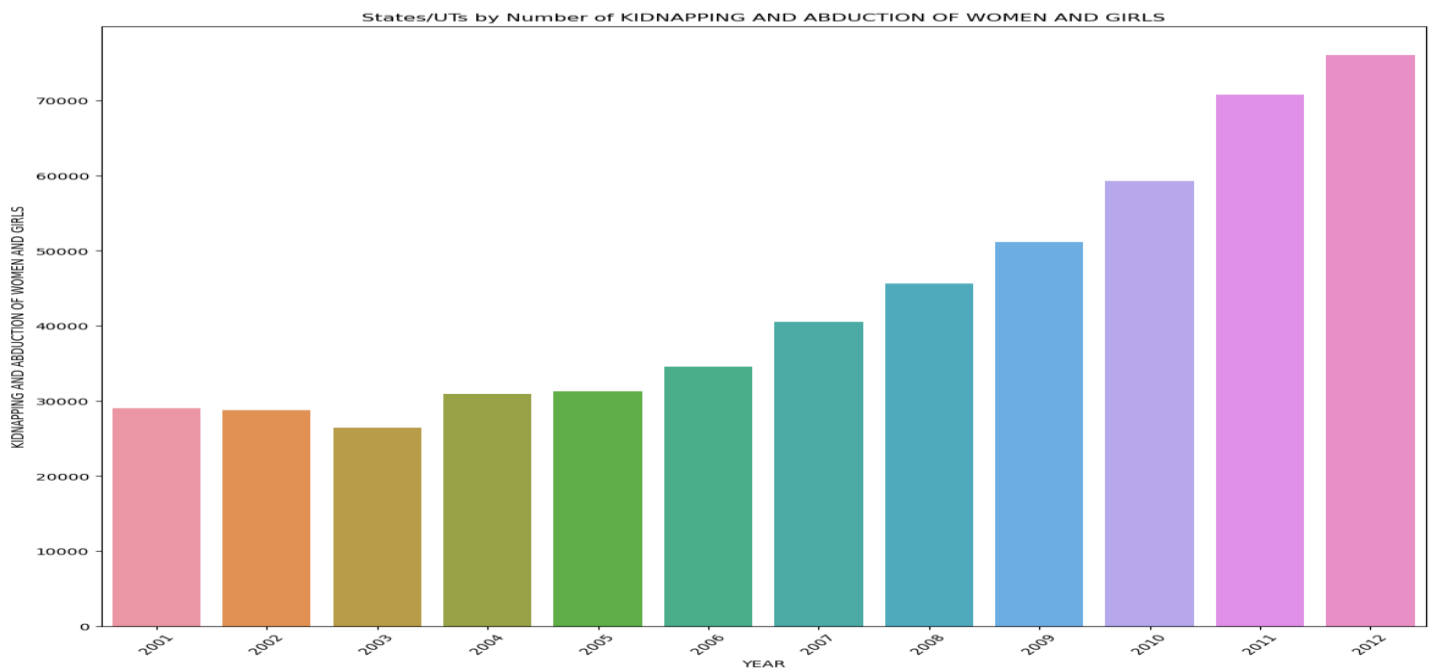
Year wise Number of Murder



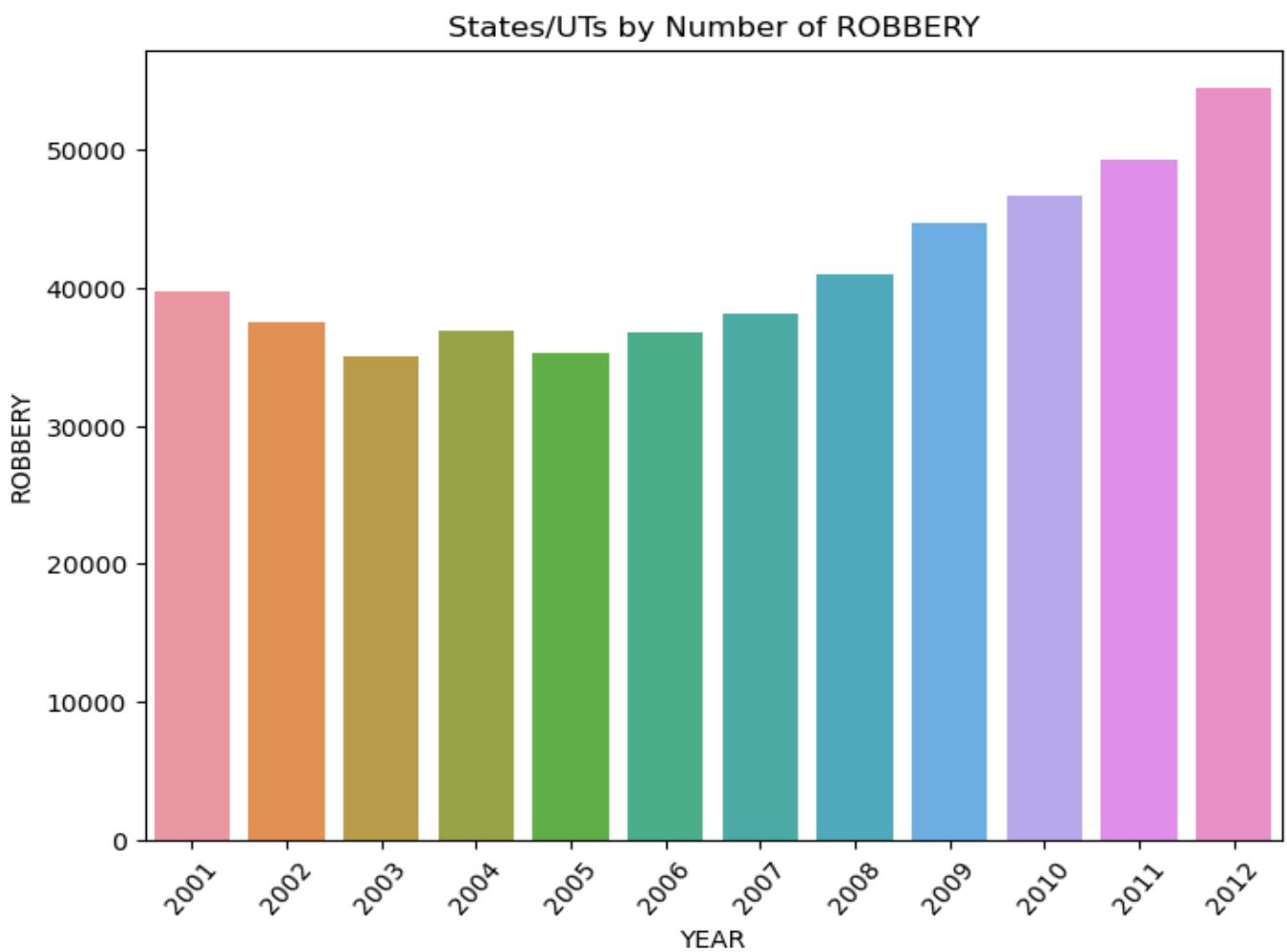
Year wise Number of Rape



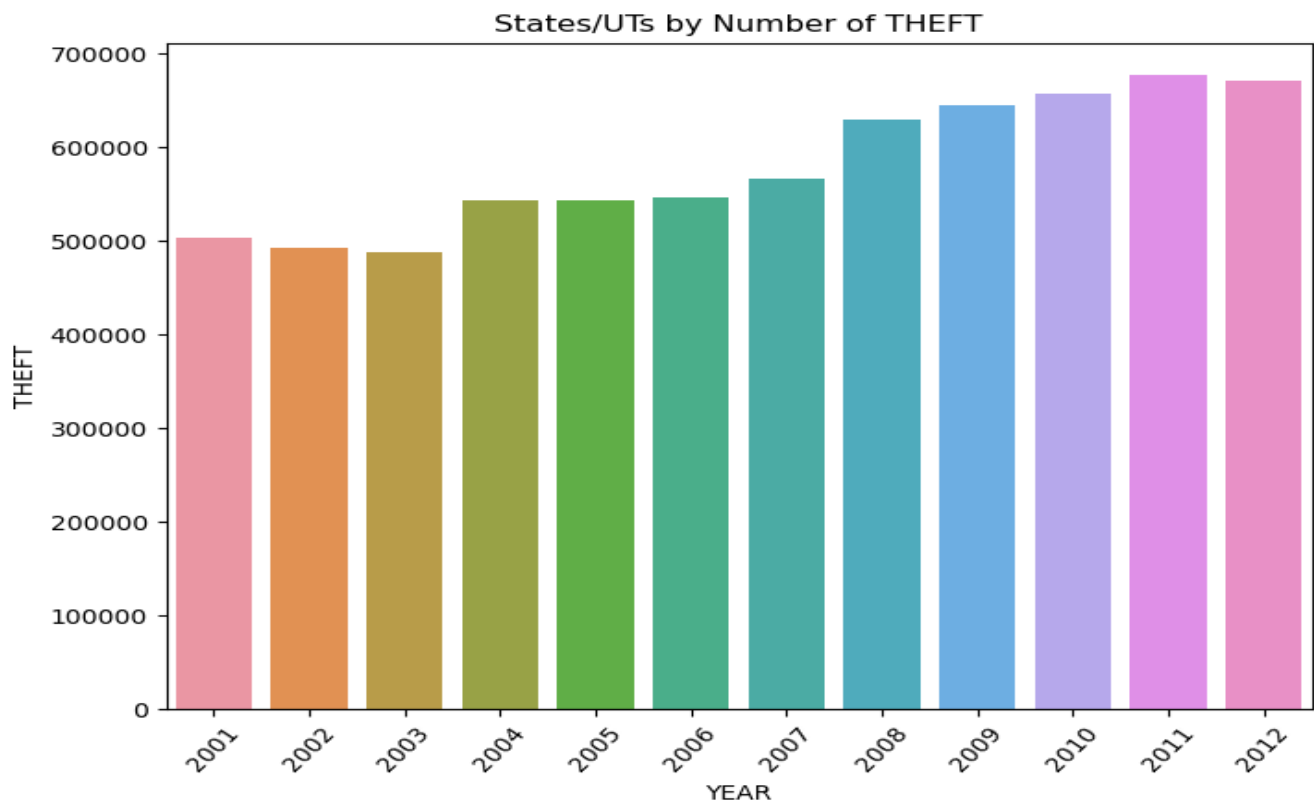
Year wise Number of KIDNAPPING



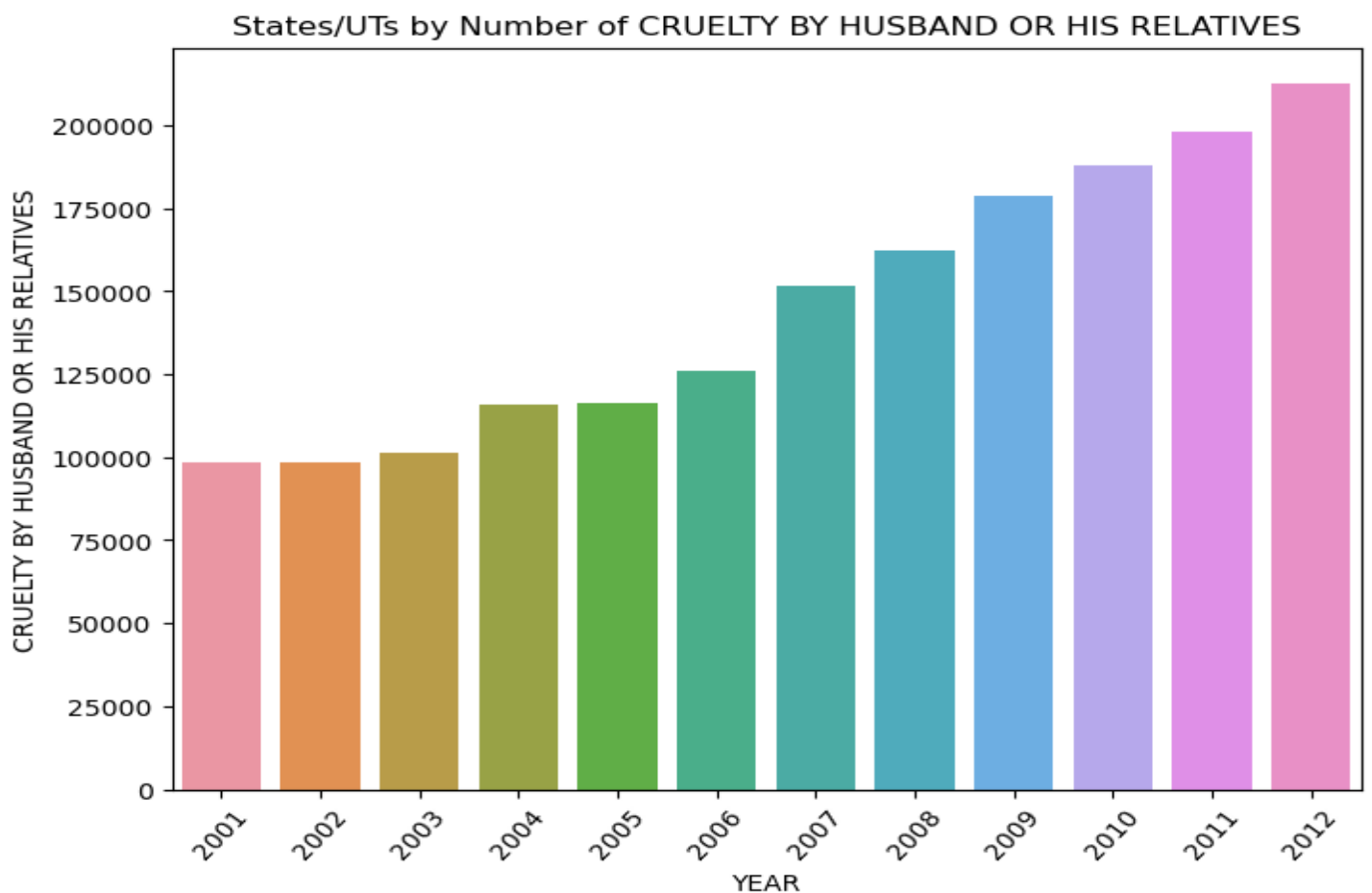
Year wise Number of Robbery



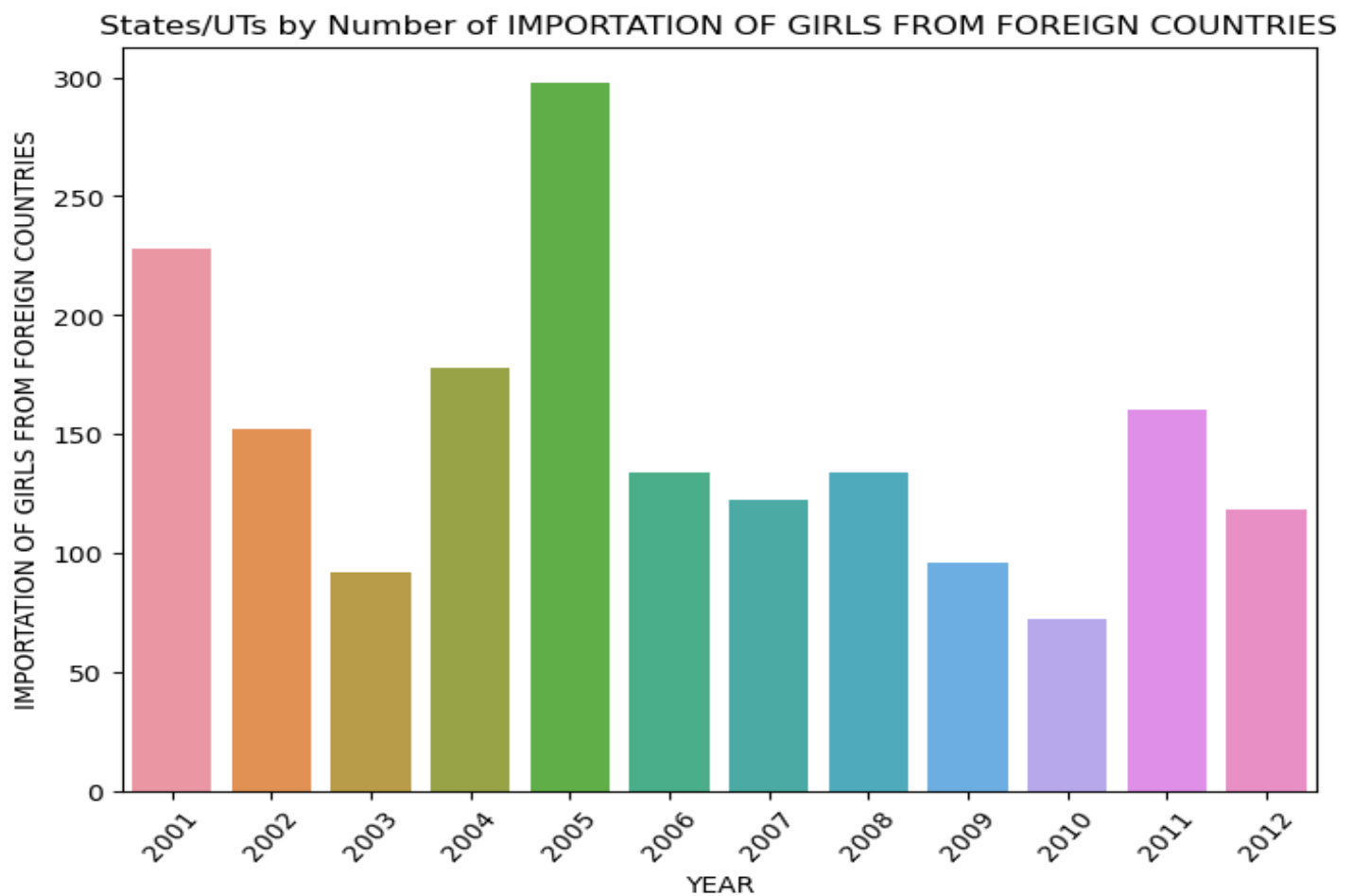
Year wise Number of Theft



Year wise Number of CRUELTY BY HUSBAND OR HIS RELATIVES

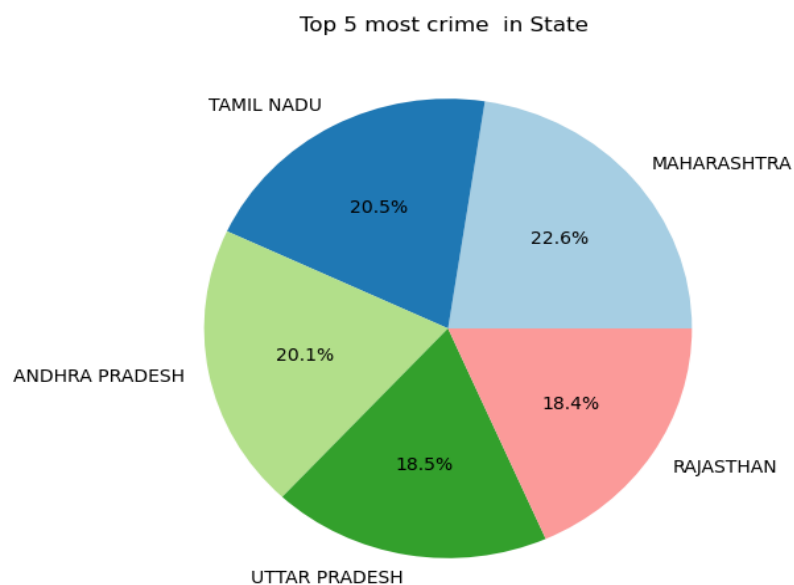


Year wise Number of IMPORTATION OF GIRLS FROM FOREIGN COUNTRIES

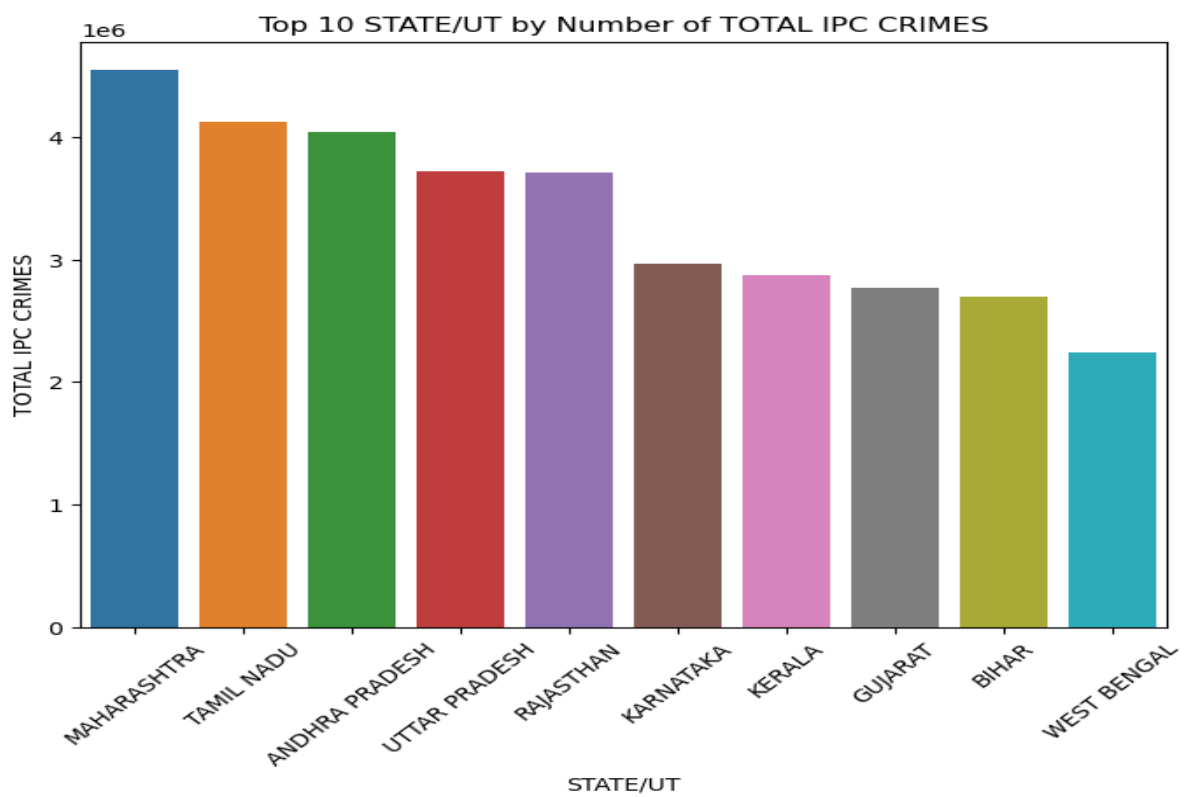


State wise crime analysis

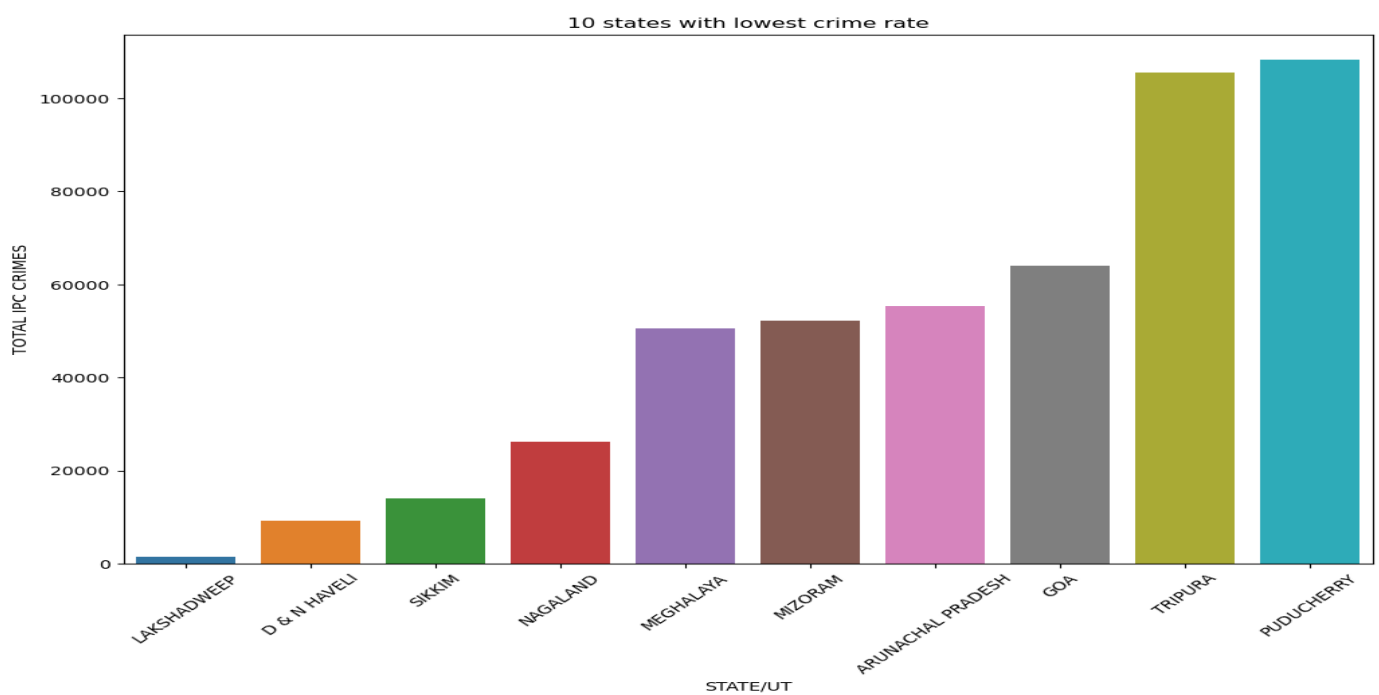
Top 5 most crime state in india through IPC crime



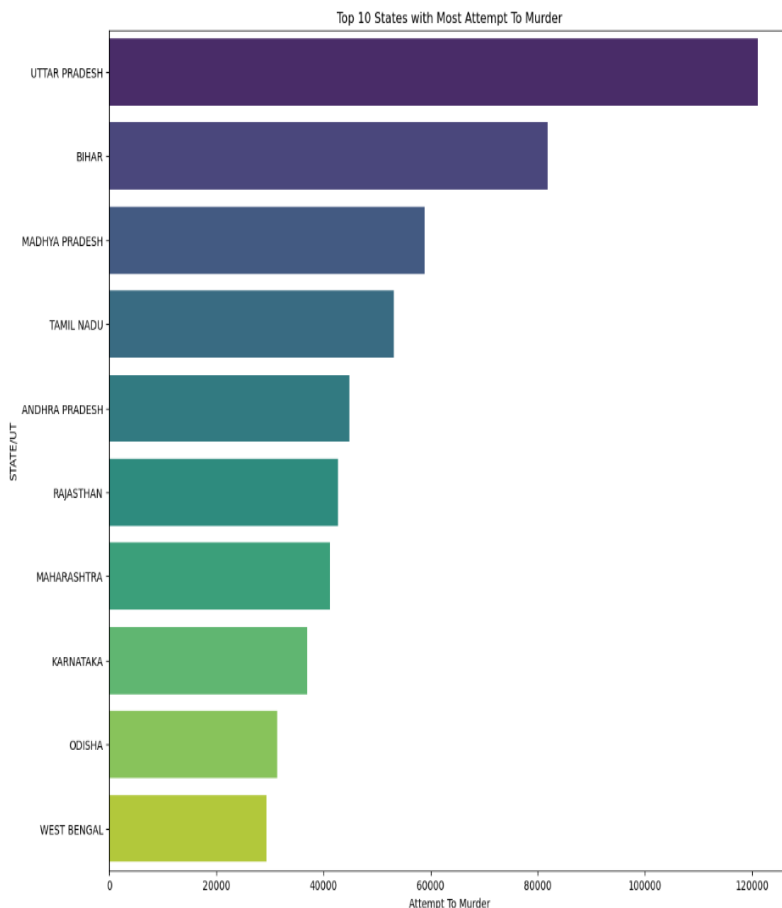
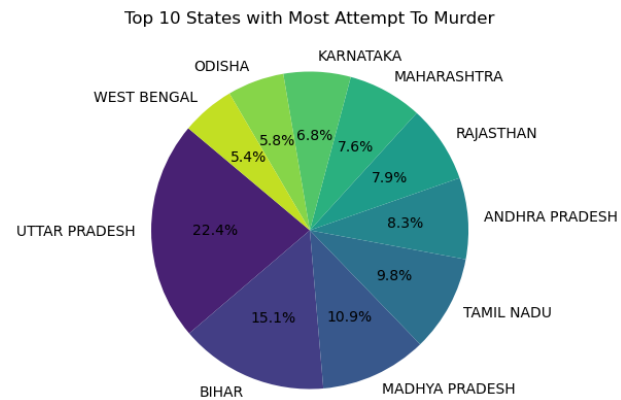
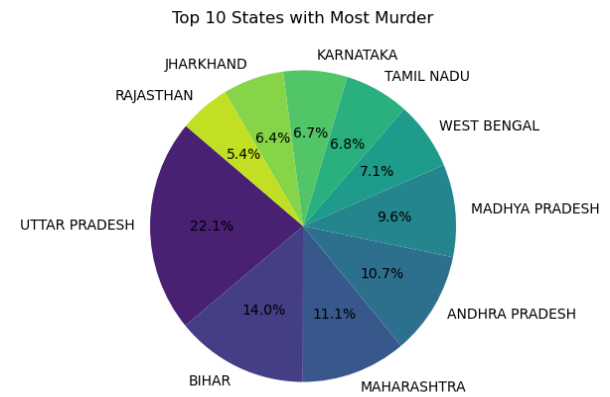
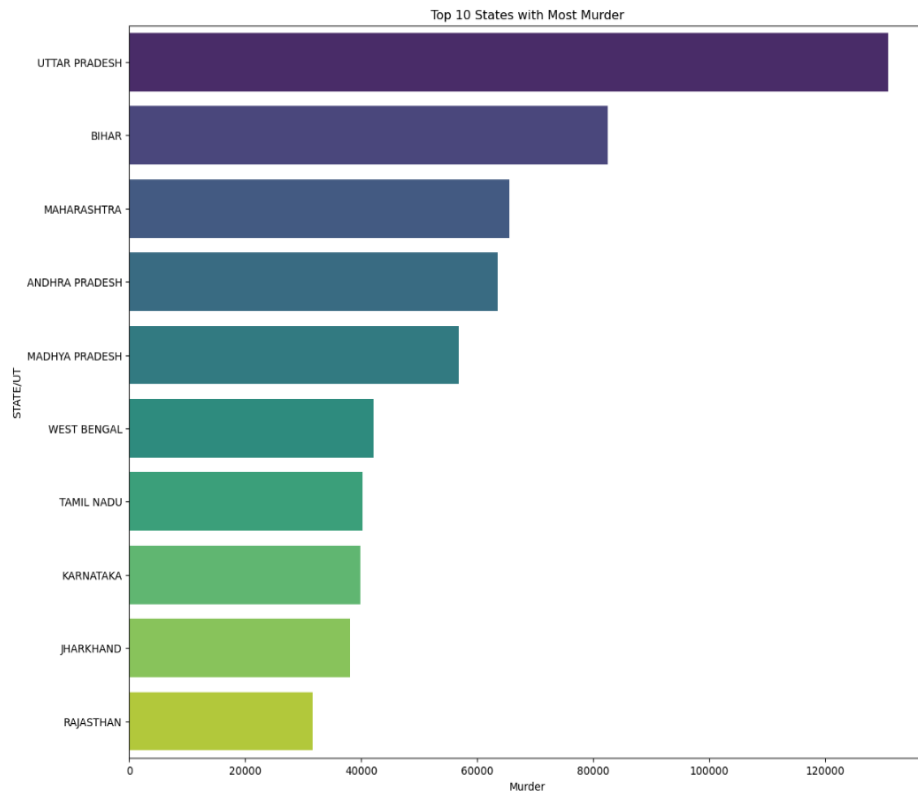
Top 10 most crime state in india through IPC crime



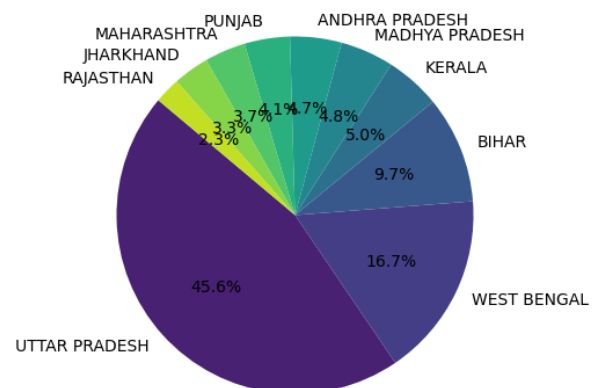
Lowest crime rate state in India



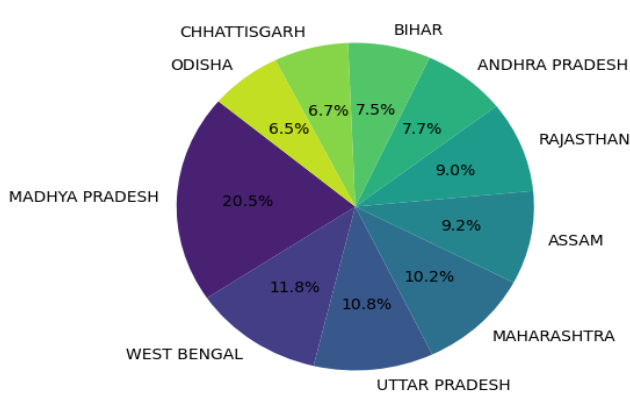
Top 10 crime category wise state



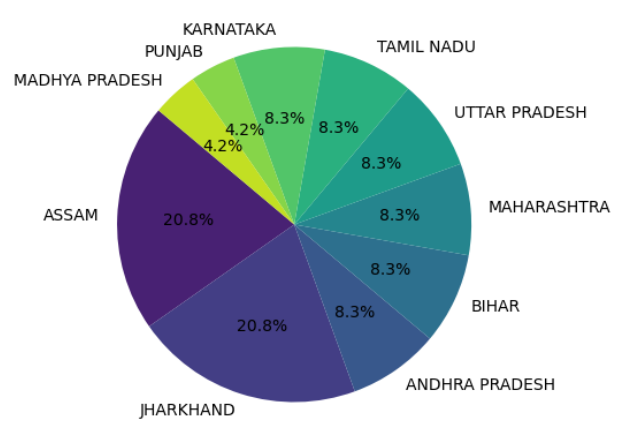
Top 10 States with Most Culpable Homicide Not Amounting To Murder



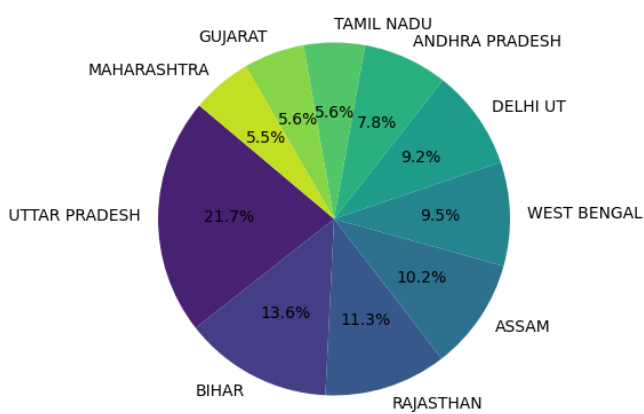
Top 10 States with Most Rape



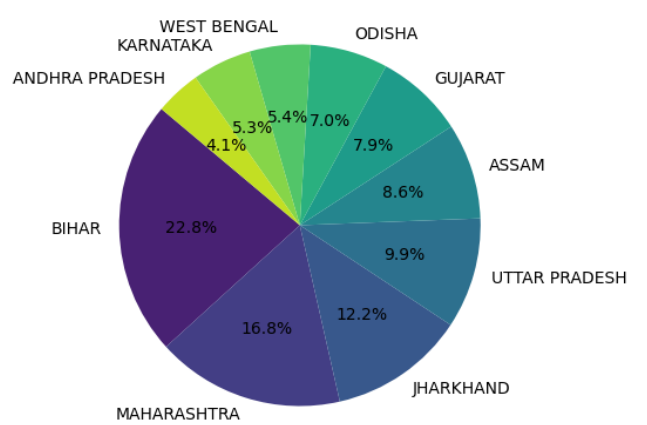
Top 10 States with Most Custodial Rape



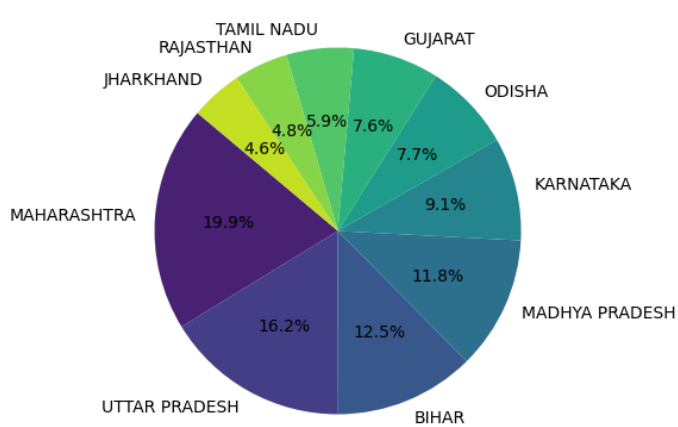
Top 10 States with Most Kidnapping And Abduction



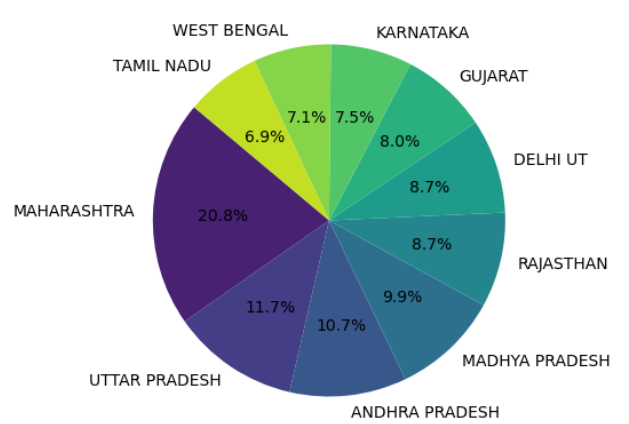
Top 10 States with Most Dacoity



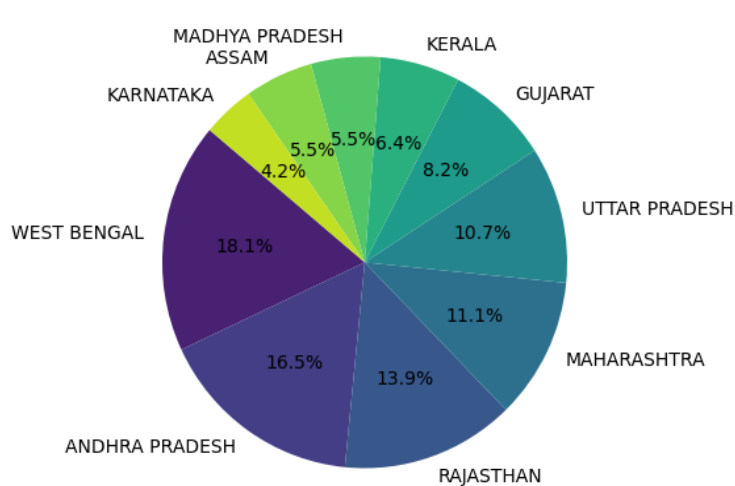
Top 10 States with Most Robbery



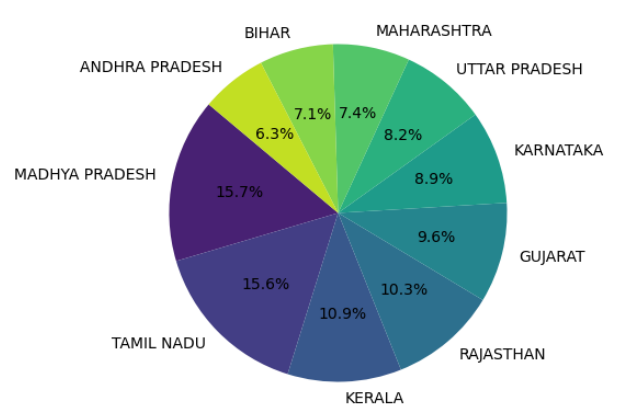
Top 10 States with Most Theft



Top 10 States with Most Cruelty By Husband Or His Relatives



Top 10 States with Most Other Ipc Crimes



Top 3 most crime state

STATE / UT	Murder	Attempt to murder	Culpable homicide	Most Rape	Most Kidnapping	Robbery	Total IPC Crimes
Madhya Pradesh	56798	58916	3668	72174	23916	5430	4827540
Maharashtra	65534	41178	2818	35972	30202	2454	4546872
Tamil Nadu	40254	53194	686	13904	30606	4875	4120352

Top 3 Low crime state

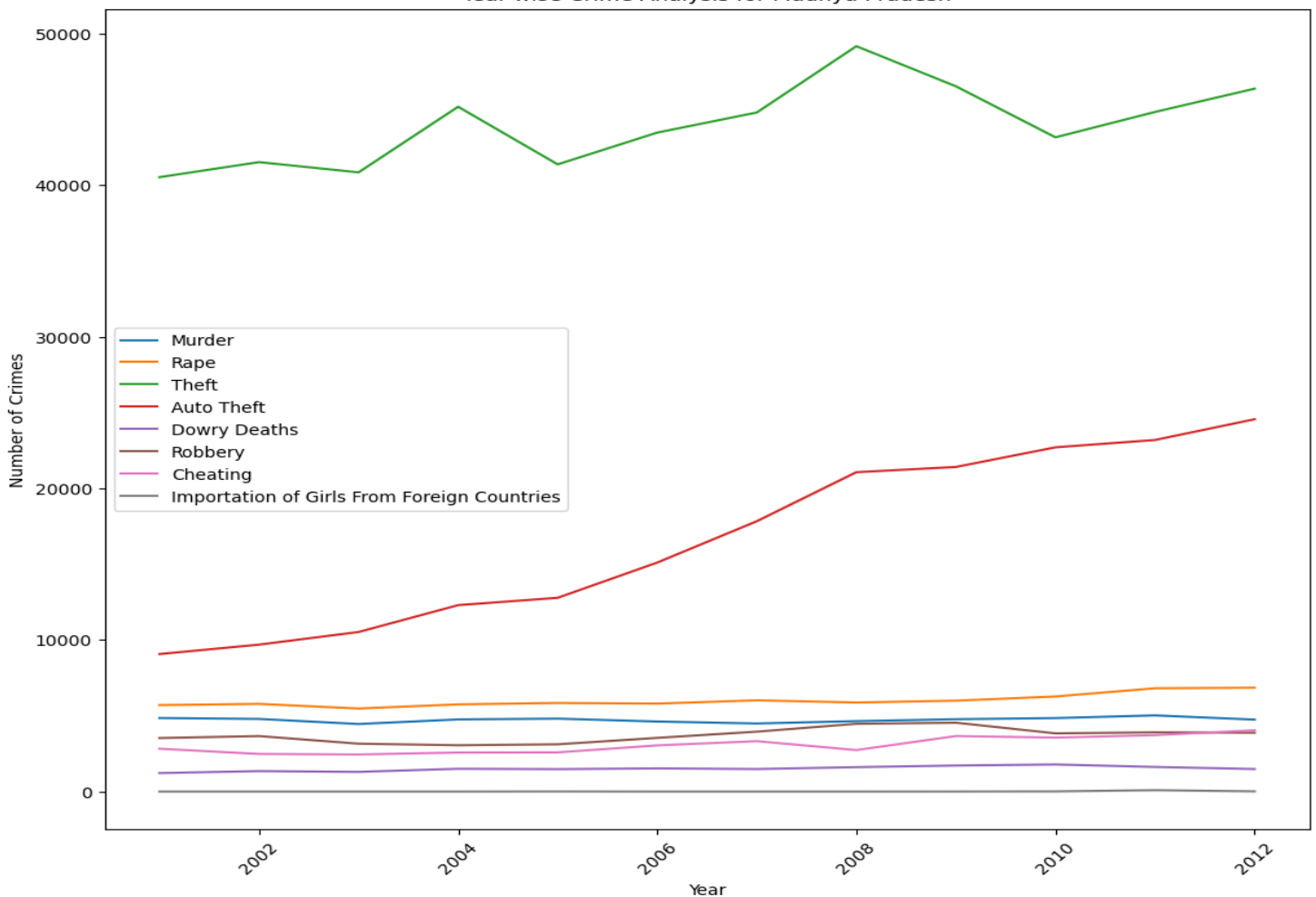
STATE / UT	Murder	Attempt to murder	Culpable homicide	Most Rape	Most Kidnapping	Robbery	Total IPC Crimes
Lakshdweep	6	12	0	14	2	20	1486
Daman & Due	216	62	6	112	282	188	9302
Sikkim	332	222	76	390	152	124	14000

Top 3 most crime state analysis

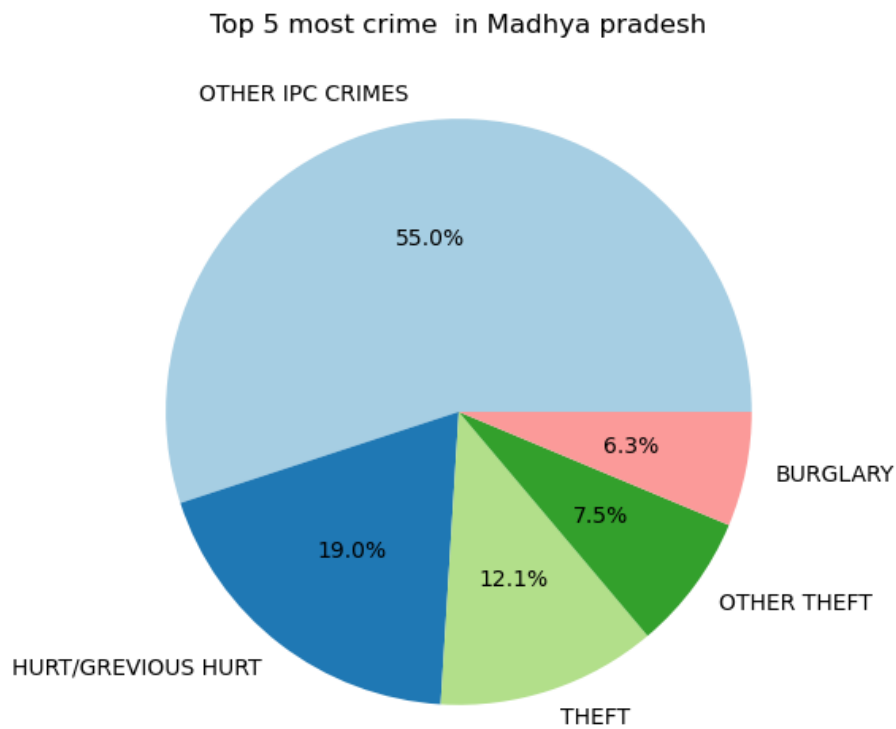
1 . Top 10 most crime in Madhya Pradesh

Crime Category	Values
1. OTHER IPC CRIMES	2393164
2. HURT/GREVIOUS HURT	825154
3. THEFT	527720
4. OTHER THEFT	327496
5. BURGLARY	274692
6. AUTO THEFT	200224
7. ASSAULT ON WOMEN	159756
8. CAUSING DEATH BY NEGLIGENCE	129938
9. CRUELTY BY HUSBAND OR HIS RELATIVES	79938
10. RAPE	72174

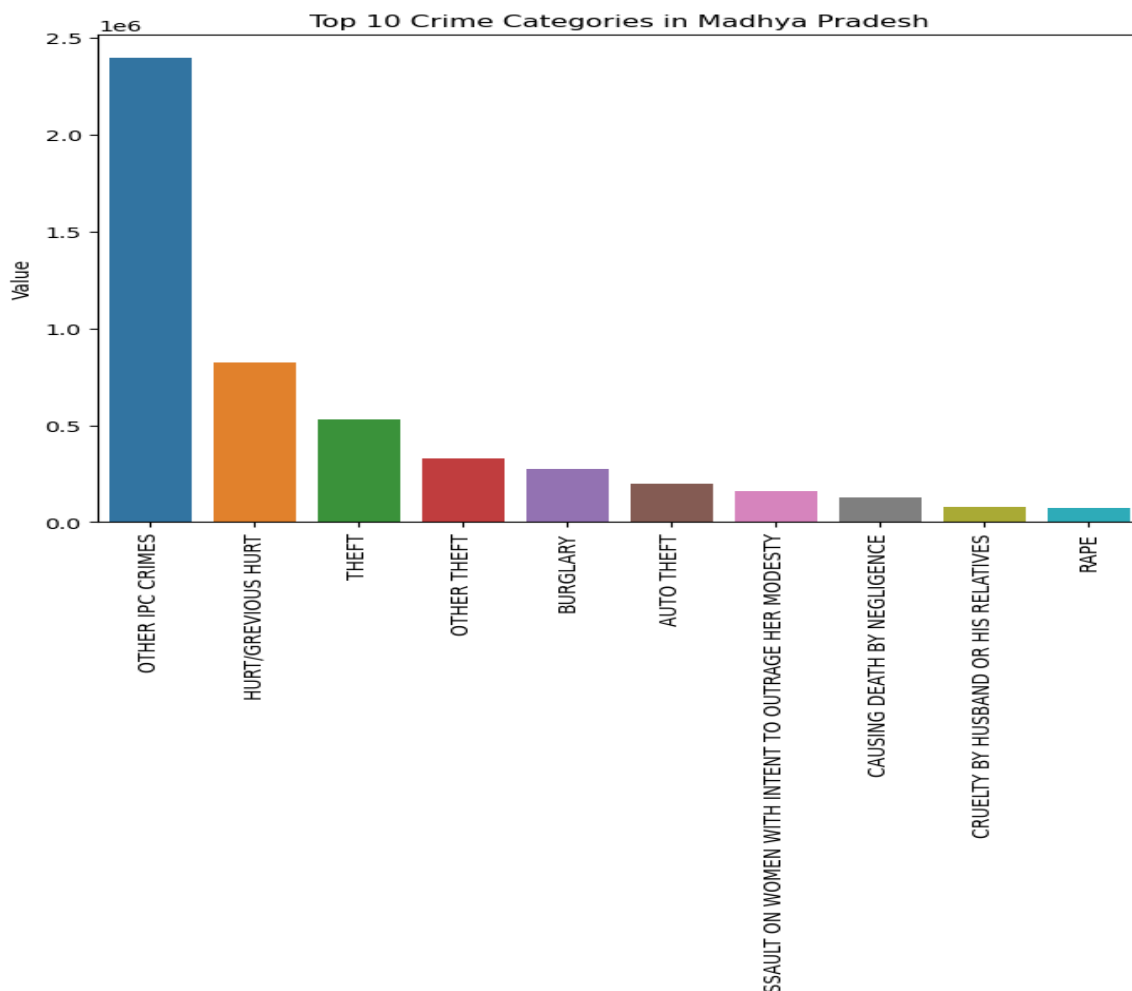
Year-wise Crime Analysis for Madhya Pradesh



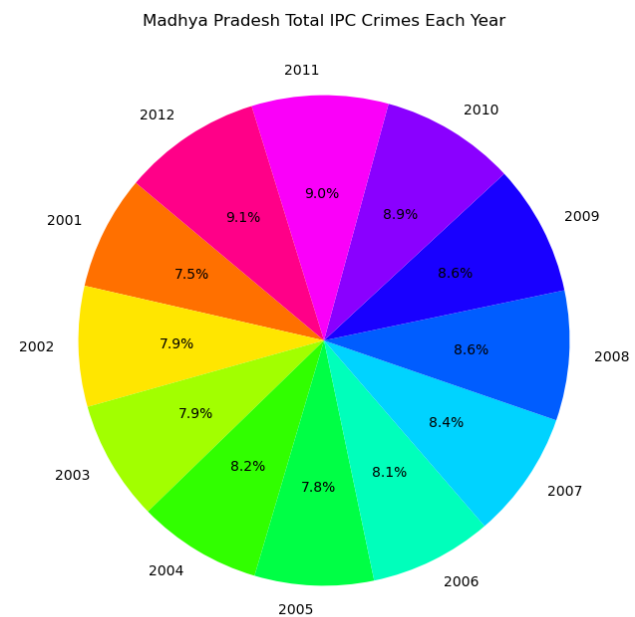
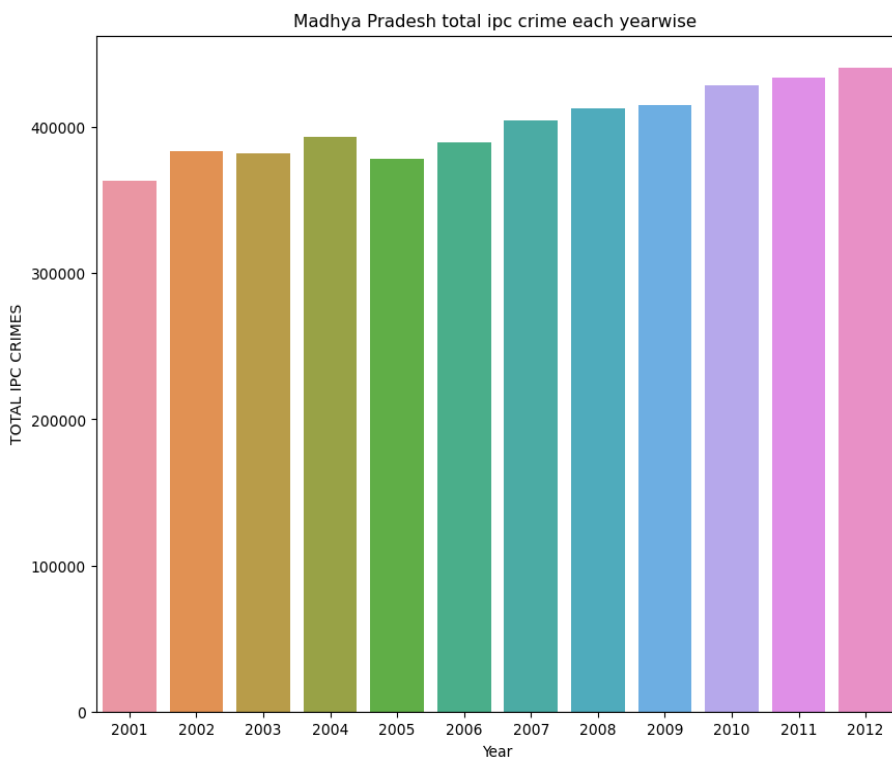
Top 5 most crime in Madhya Pradesh



Top 10 crime in Madhya Pradesh



Total IPC crime in Madhya Pradesh Year wise



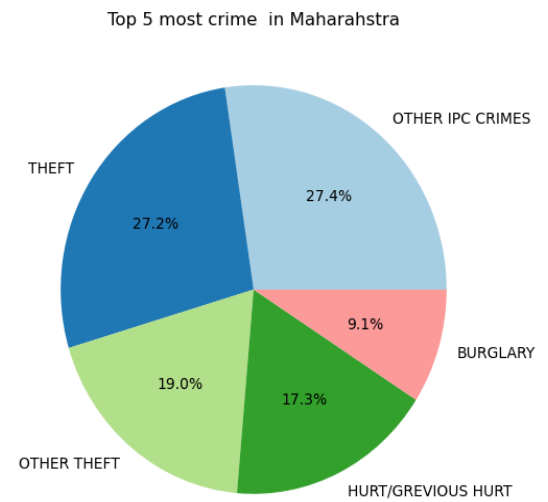
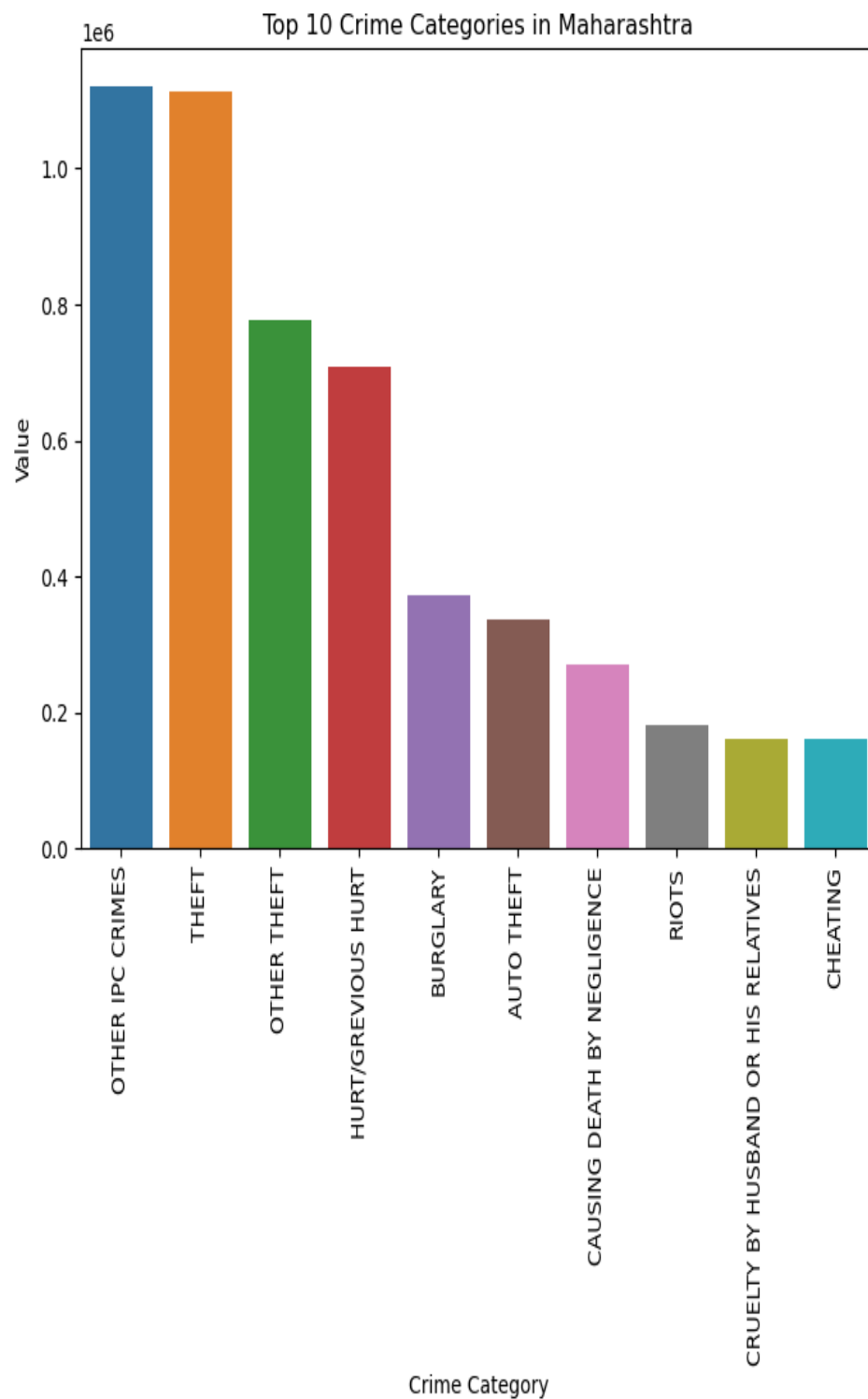
2. Top 2nd Most crime state is Maharashtra

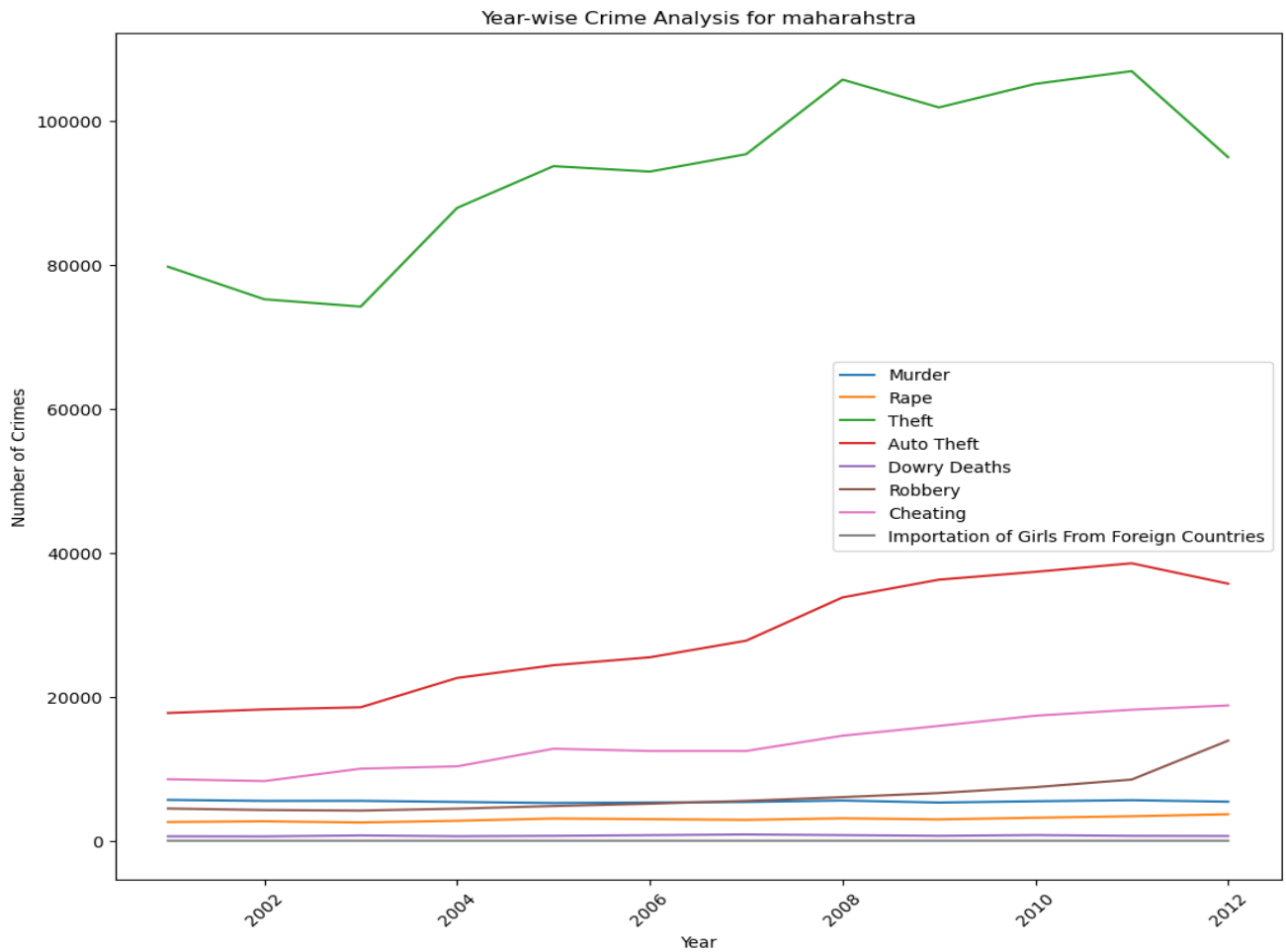
Top 10 most crime in Maharashtra

Crime Category	Values
1. OTHER IPC CRIMES	1120120
2. THEFT	1113614
3. OTHER THEFT	777150
4. HURT/GREVIOUS HURT	707520
5. BURGLARY	371234
6. AUTO THEFT	336464
7. CAUSING DEATH BY NEGLIGENCE	269226

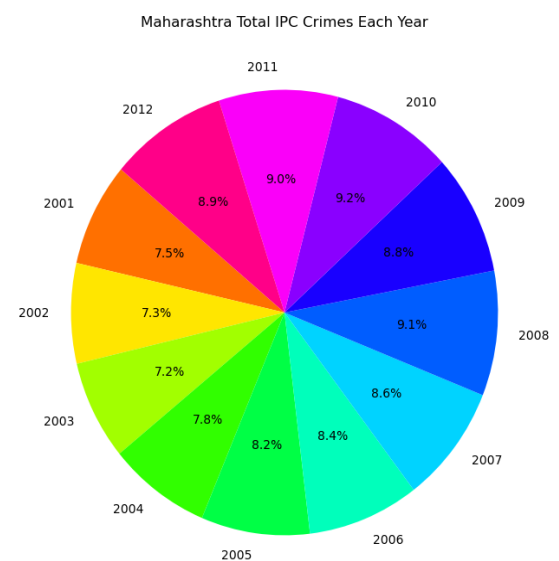
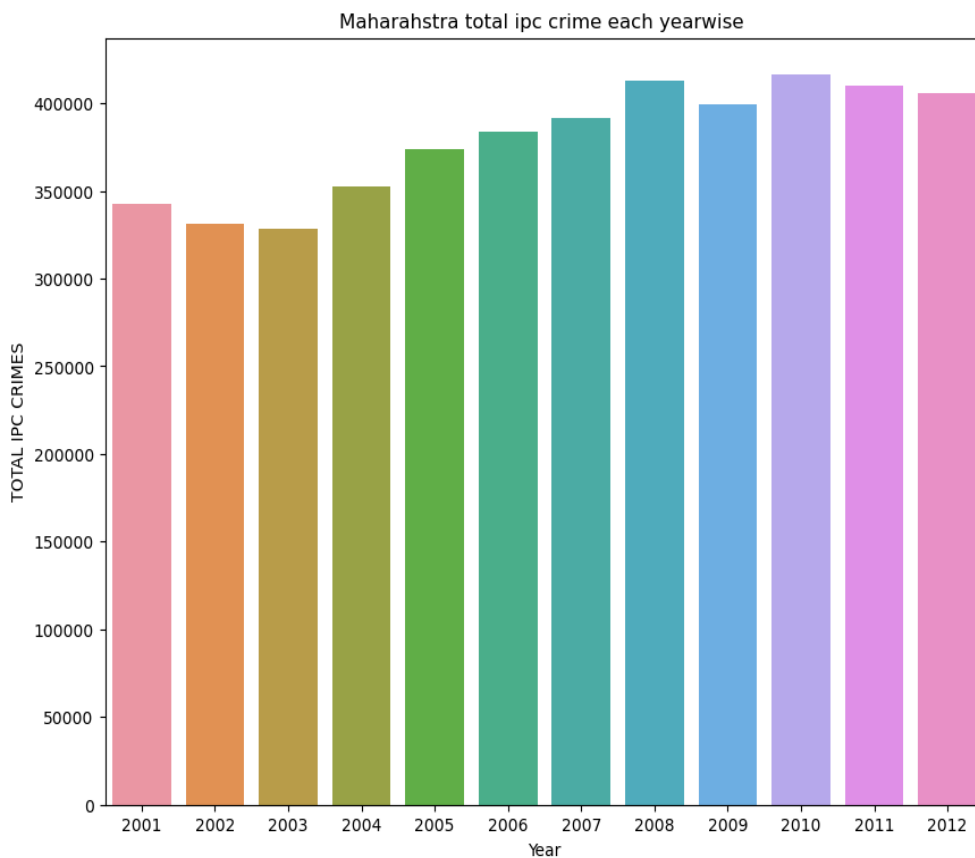
8. RIOTS	180488
9. CRUELTY BY HUSBAND OR HIS RELATIVES	160726
10. CHEATING	159804

Top 10 most crime in Maharashtra





Total IPC crimes in Maharashtra

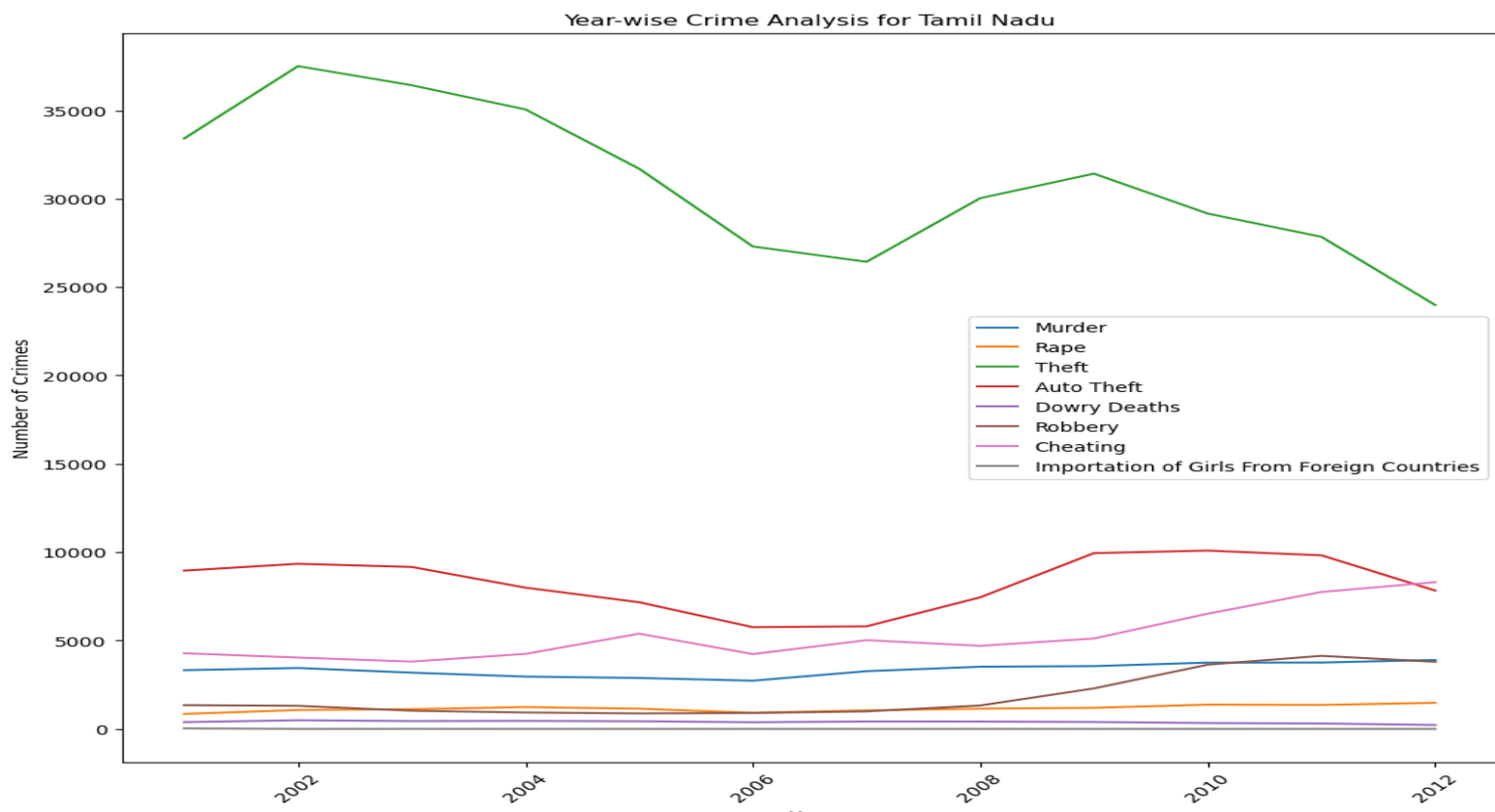


3. Top 3rd Most crime state is Tamil Nadu

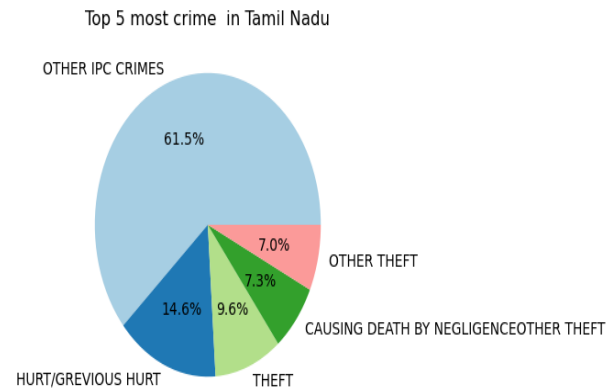
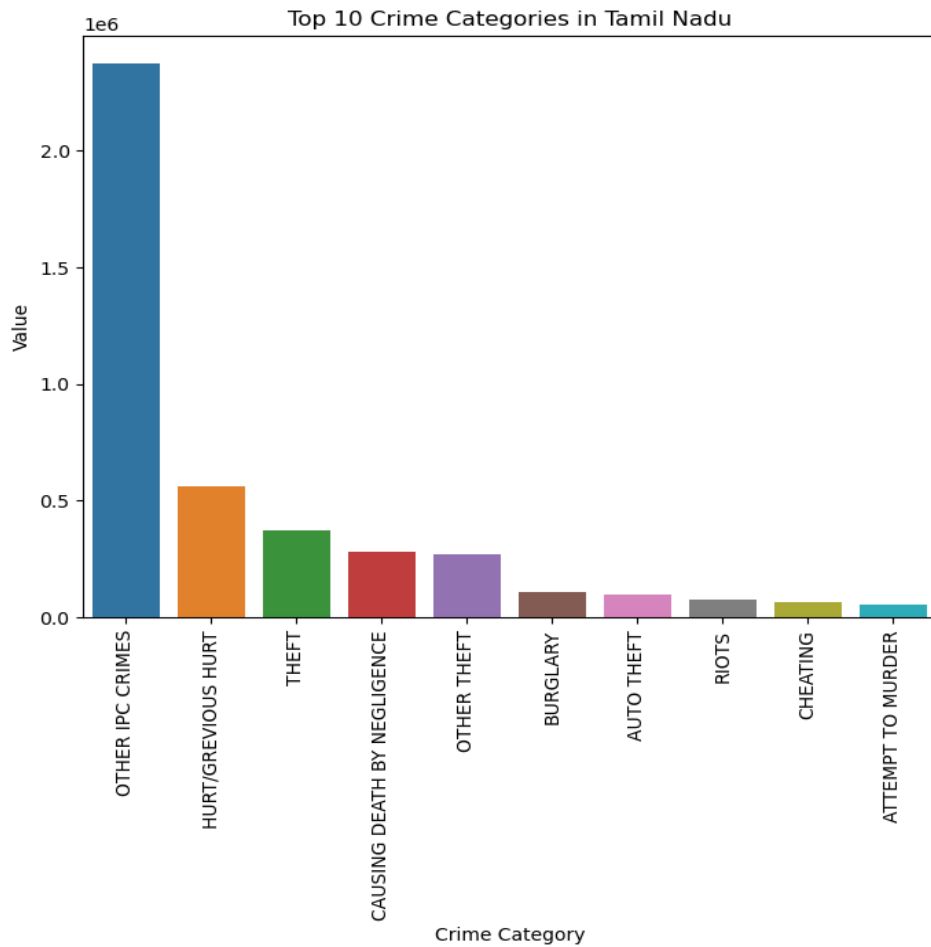
Top 10 most crime in Tamil Nadu

Crime Category	Values
1. OTHER IPC CRIMES	2372230
2. HURT/GREVIOUS HURT	561346
3. THEFT	370320
4. CAUSING DEATH BY NEGLIGENCE	280386
5. OTHER THEFT	271014
6. BURGLARY	106678
7. AUTO THEFT	99306
8. RIOTS	74736
9. CHEATING	63378
10. ATTEMPT TO MURDER	53194

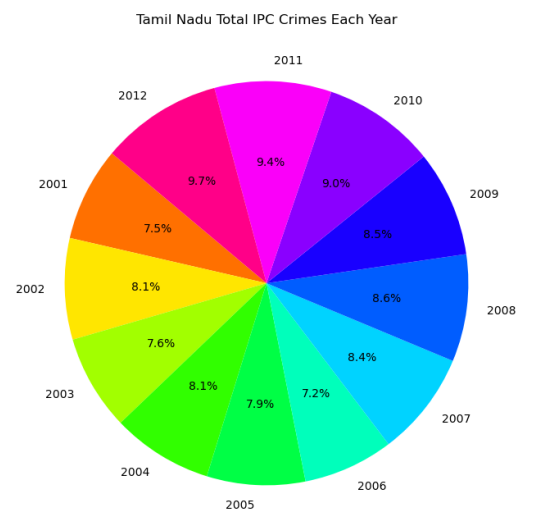
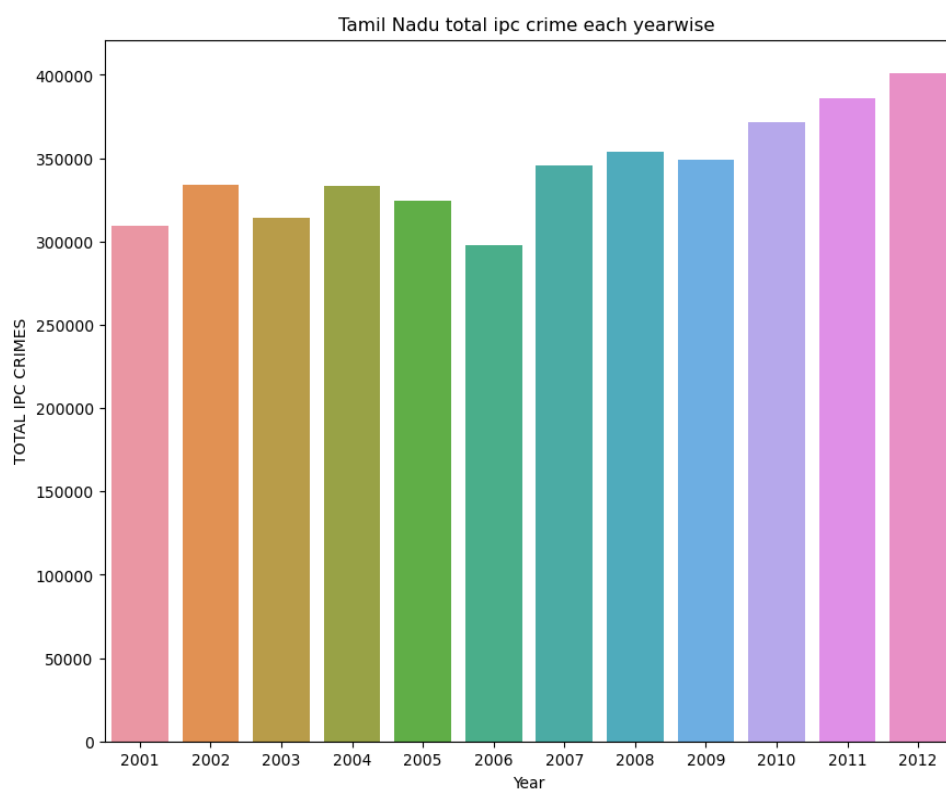
Year wise crime analysis for Tamil Nadu



Top 10 crime in Tamil Nadu

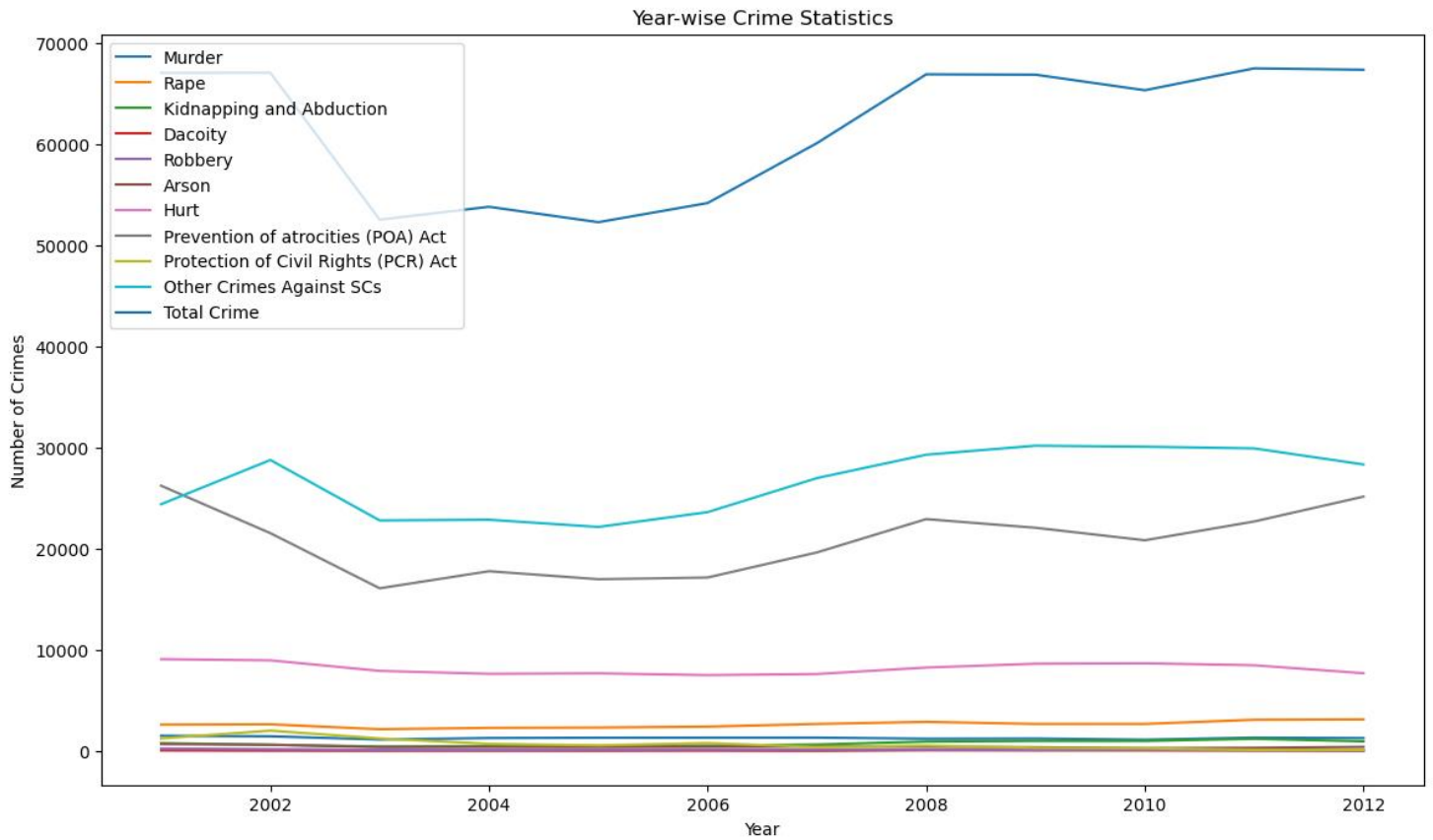


Year wise total IPC crimes in Tamil Nadu

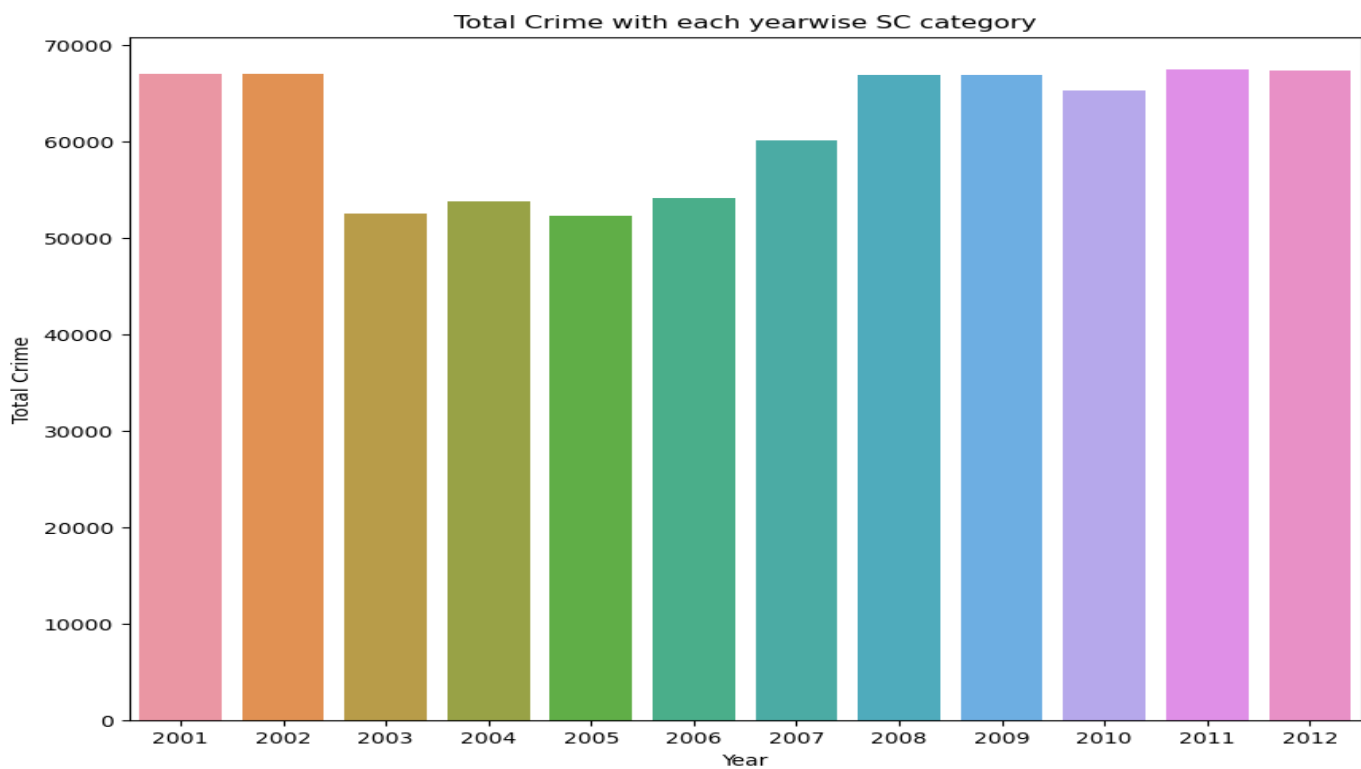


Crime Against Sc Category

Year wise Statistics

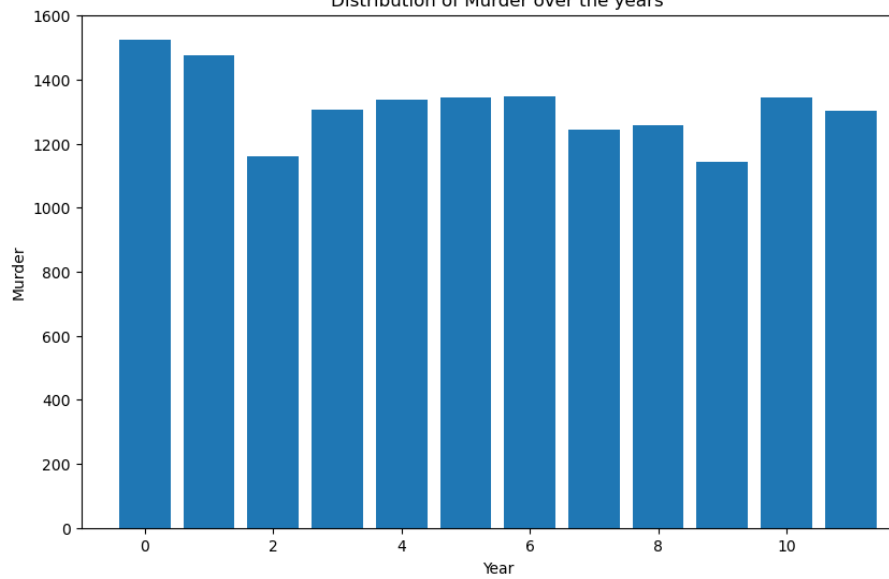


Total Crime with each Year wise total crime

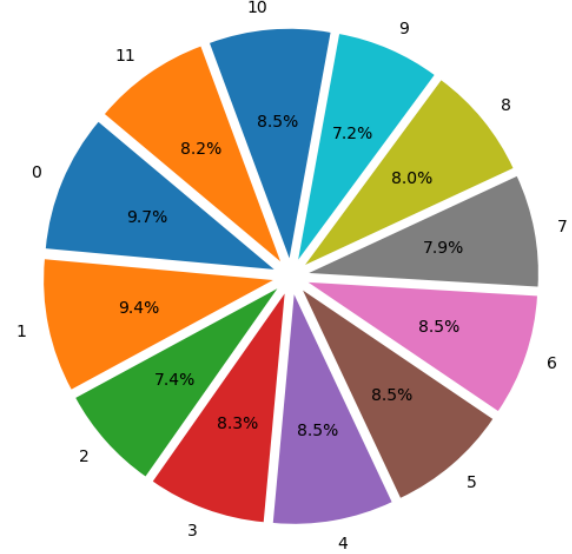


Year wise all crime distributed

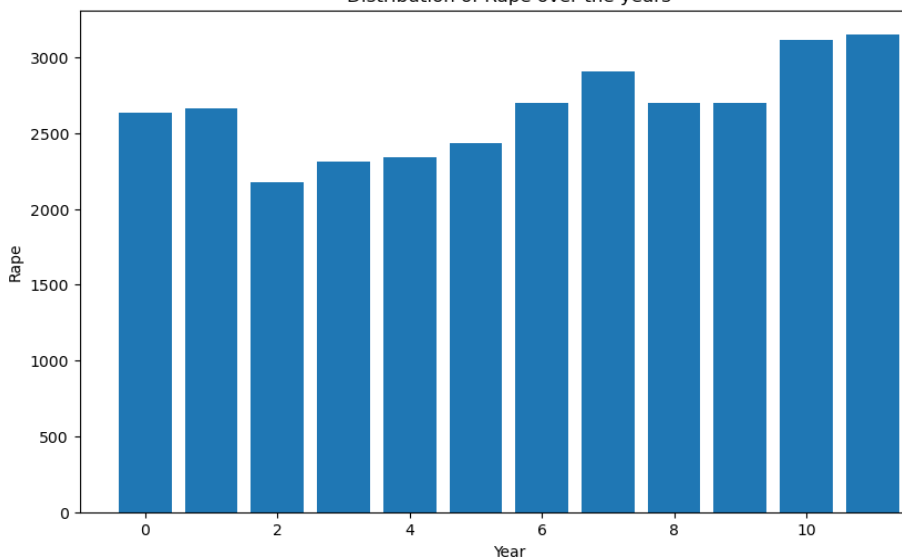
Distribution of Murder over the years



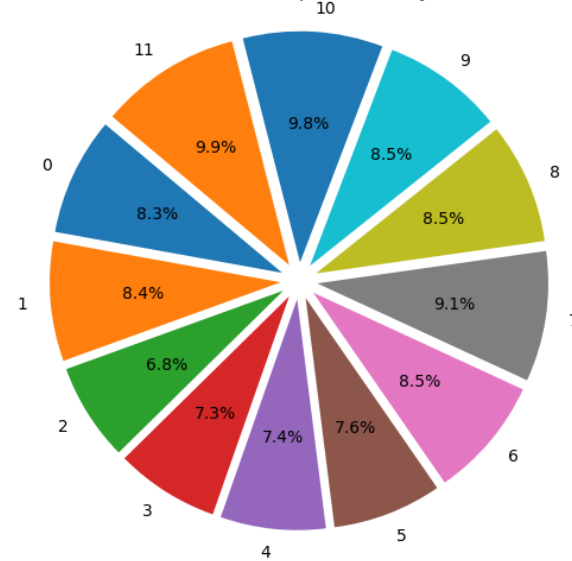
Distribution of Murder over the years



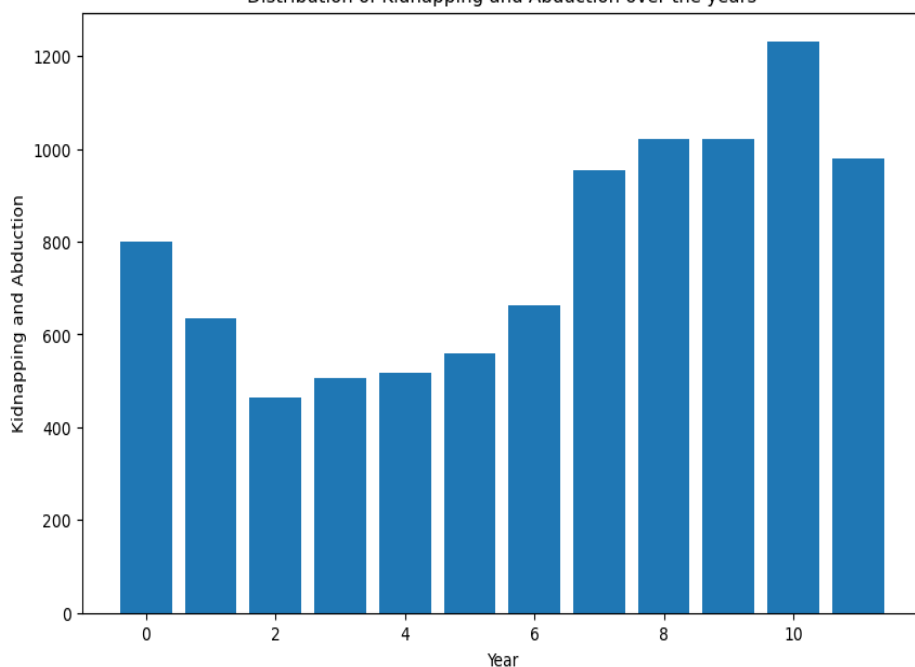
Distribution of Rape over the years



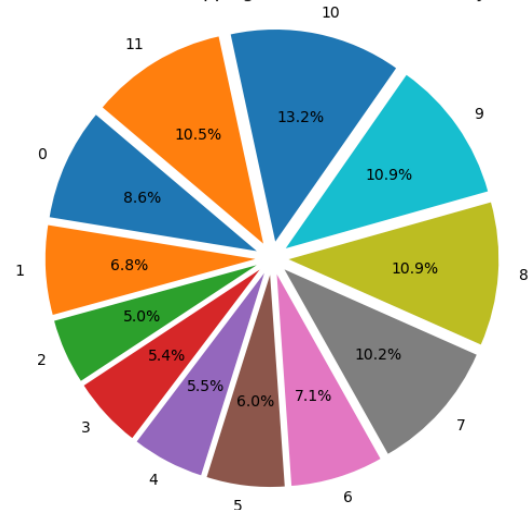
Distribution of Rape over the years



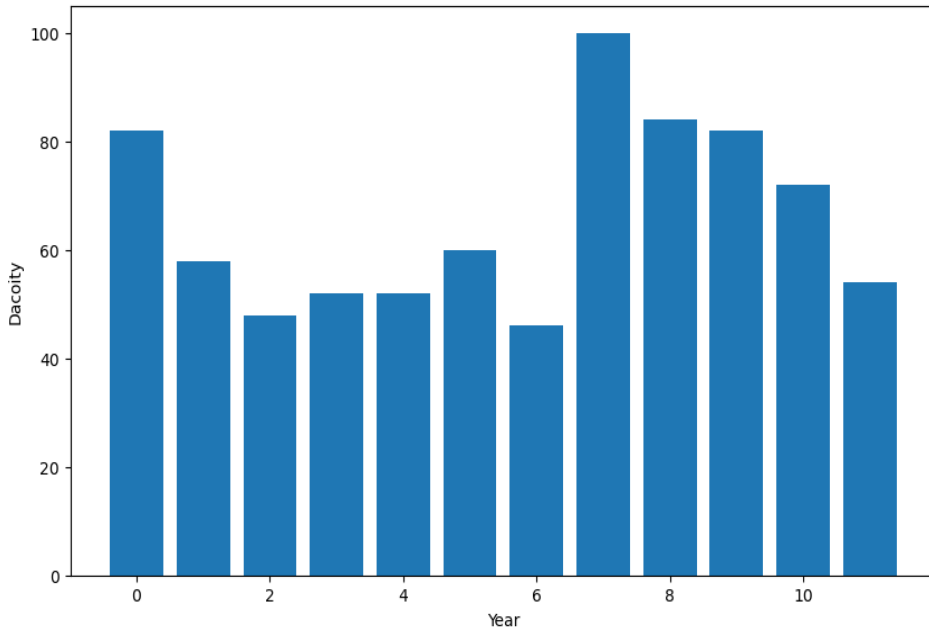
Distribution of Kidnapping and Abduction over the years



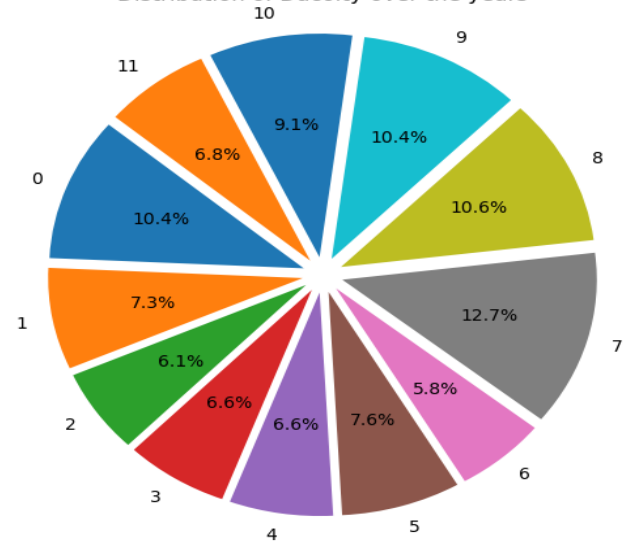
Distribution of Kidnapping and Abduction over the years



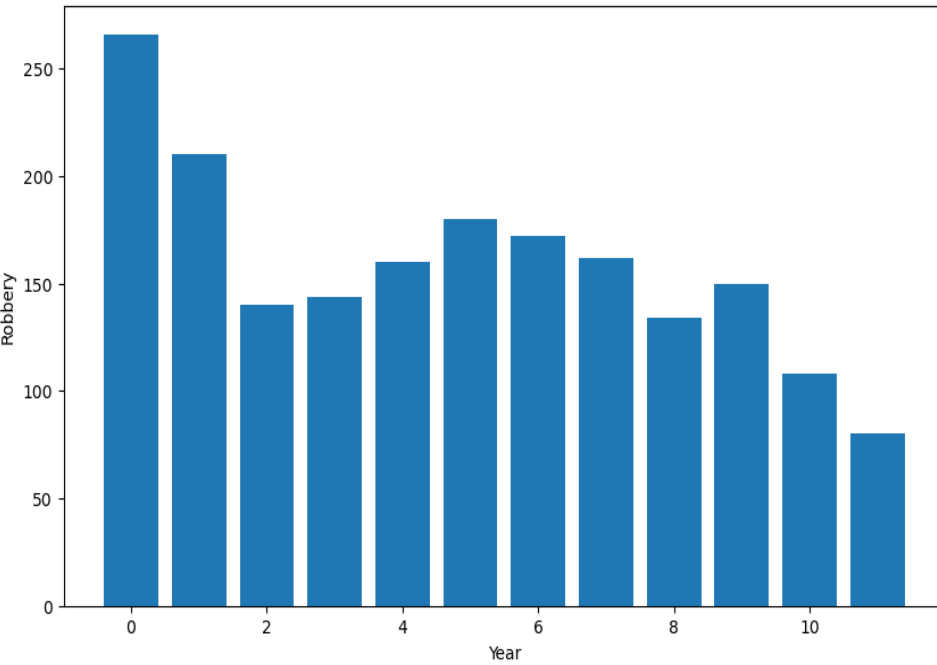
Distribution of Dacoity over the years



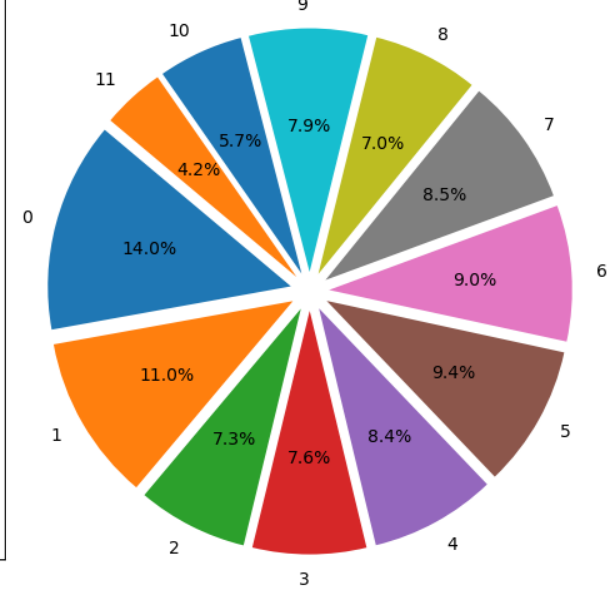
Distribution of Dacoity over the years



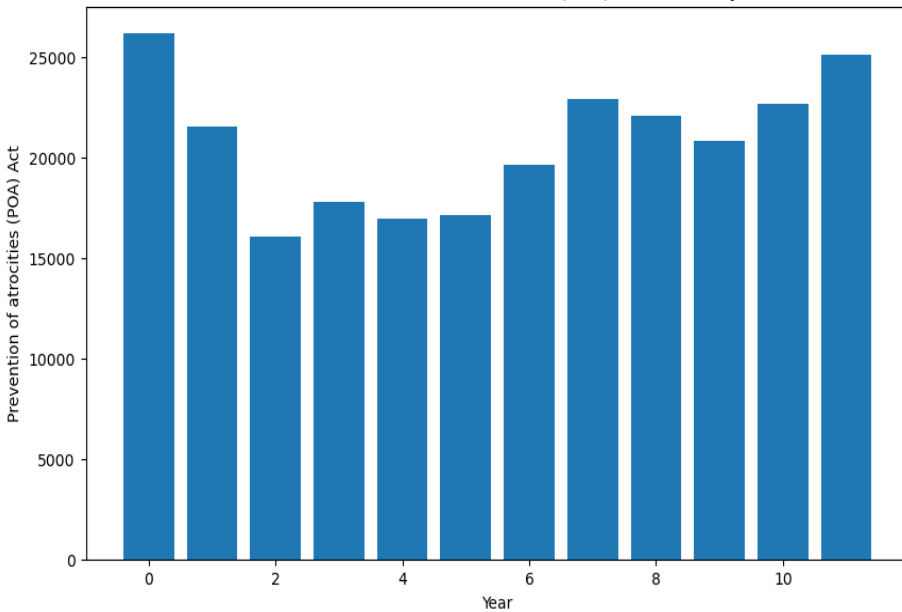
Distribution of Robbery over the years



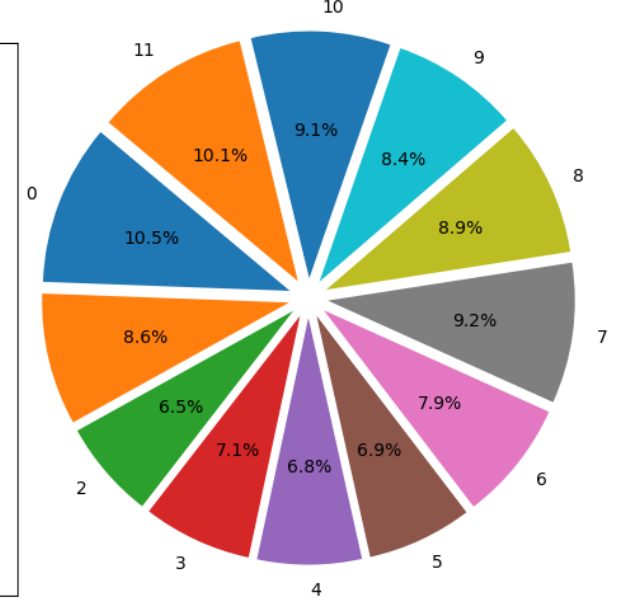
Distribution of Robbery over the years



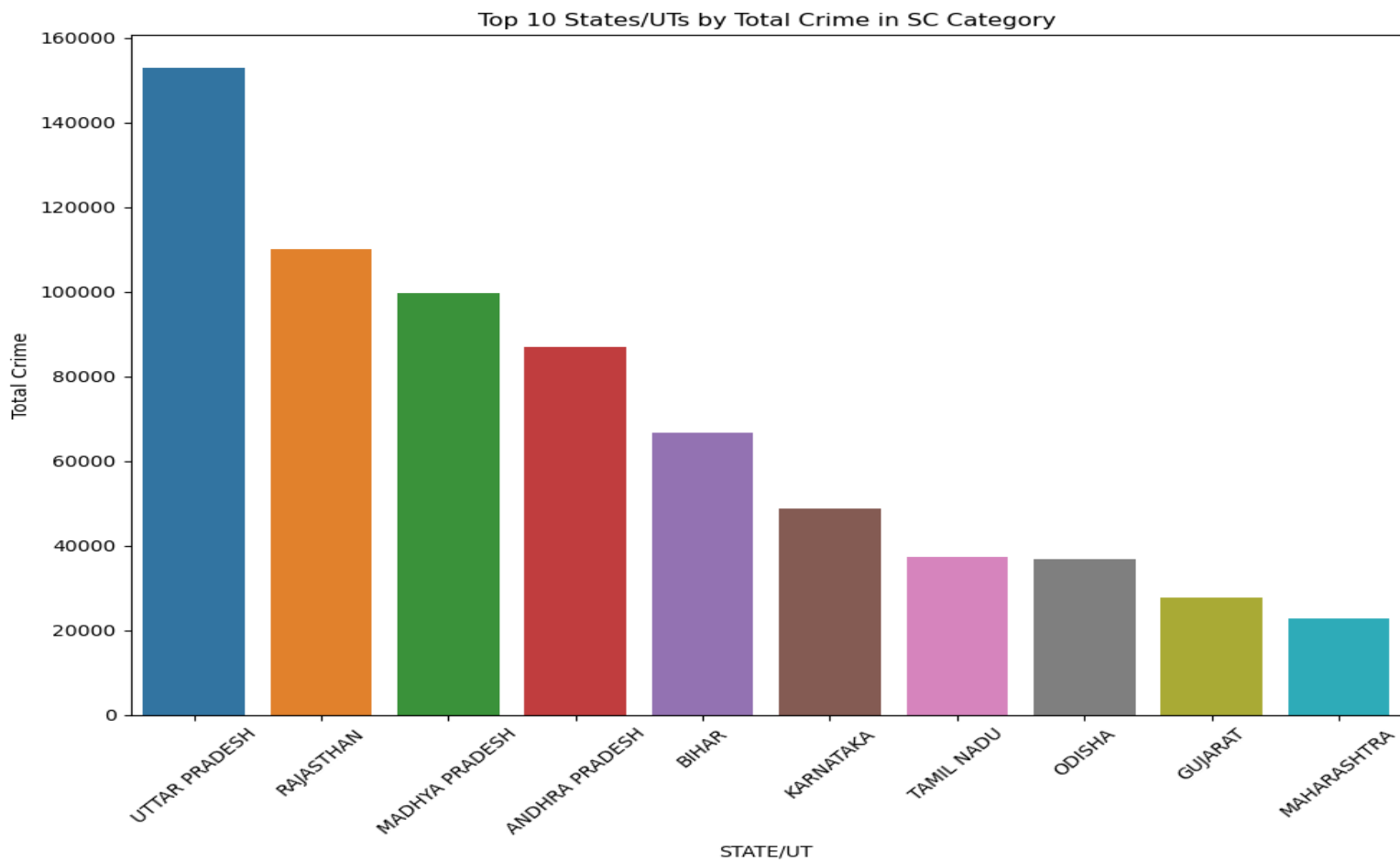
Distribution of Prevention of atrocities (POA) Act over the years



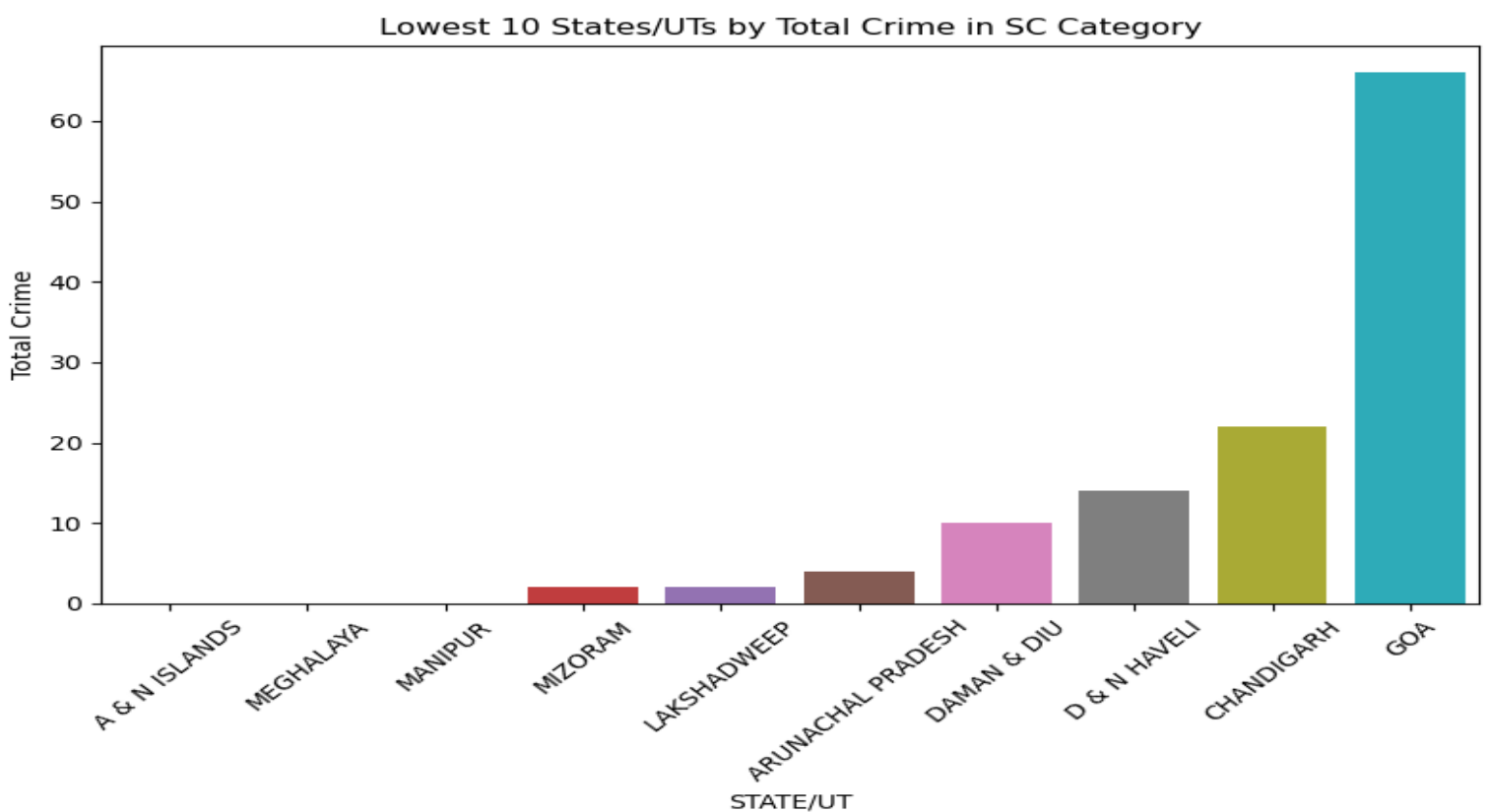
Distribution of Prevention of atrocities (POA) Act over the years



Top 10 State wise total Crime in SC Category

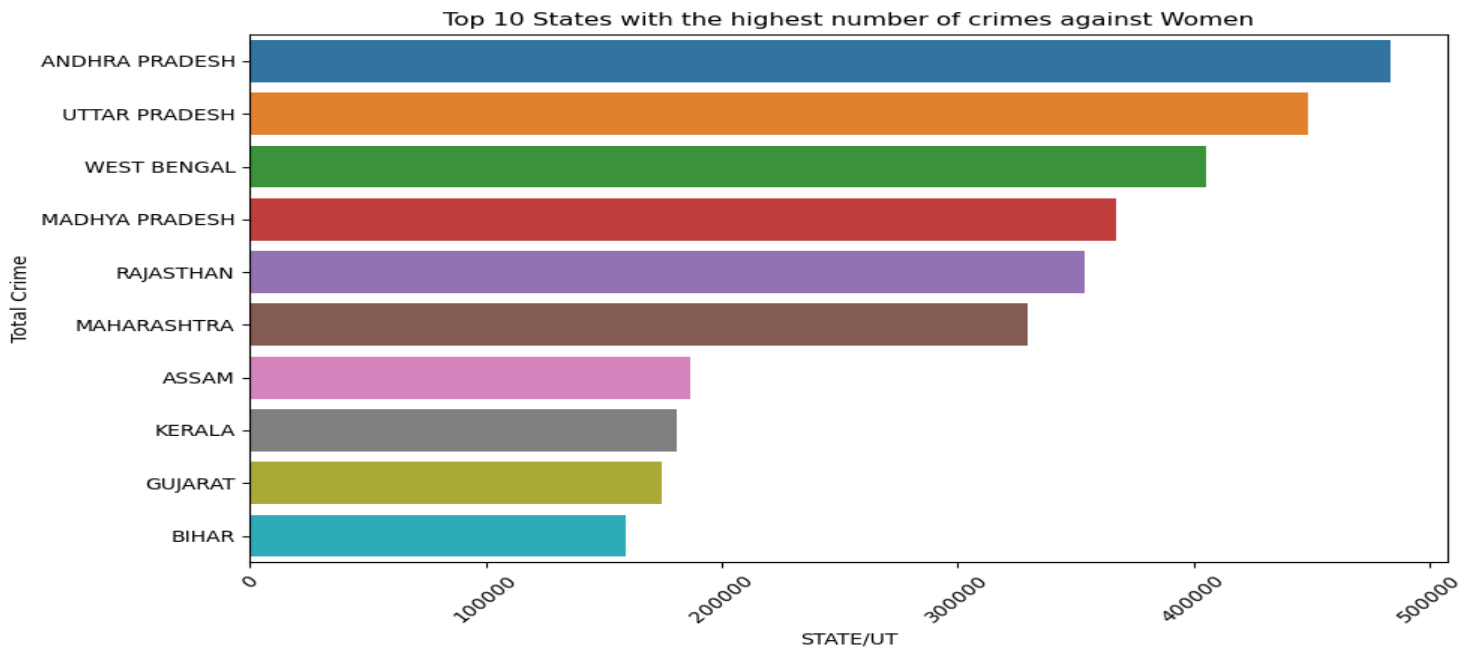


10 states with least crime

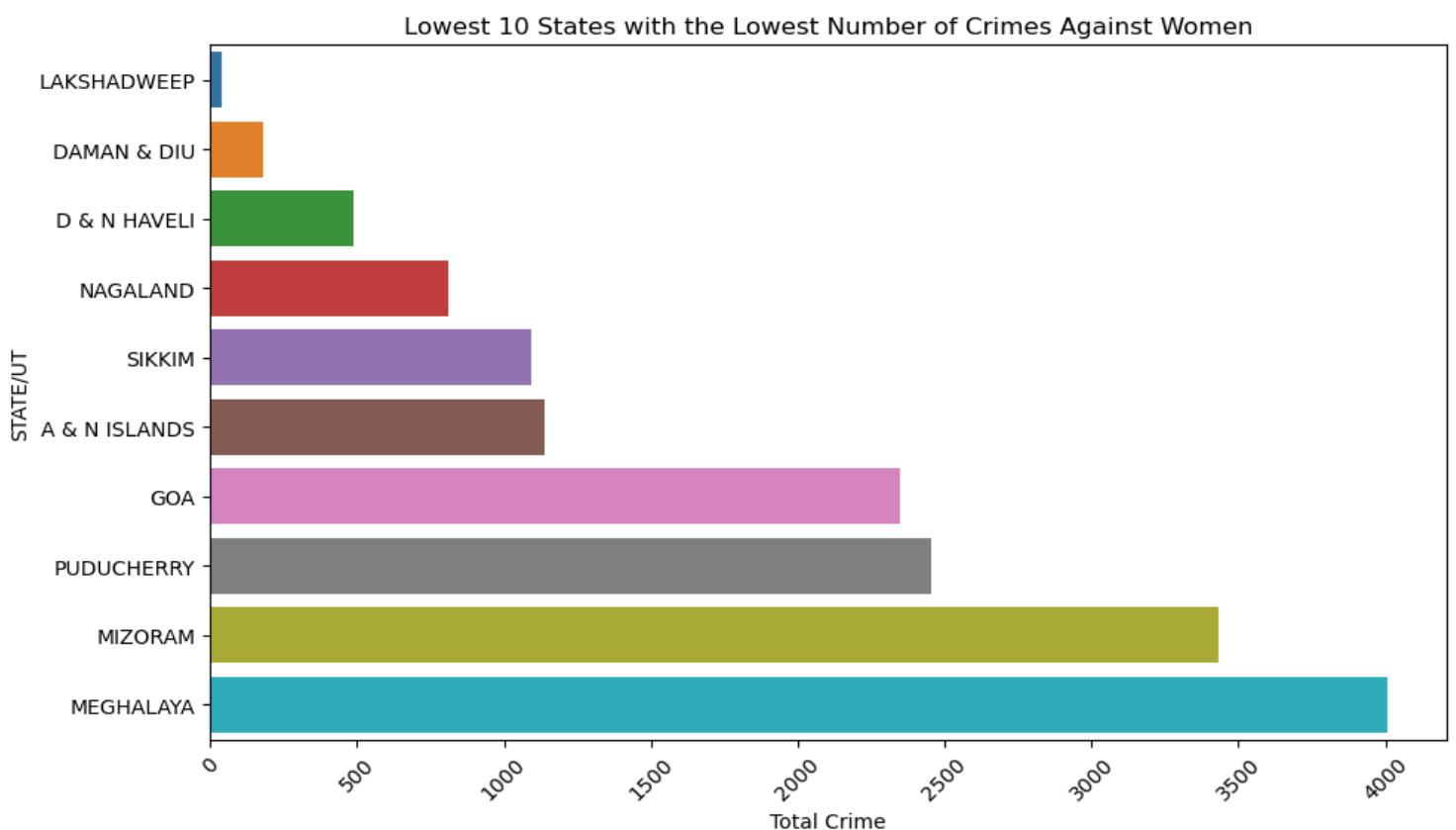


Crime Against in Women

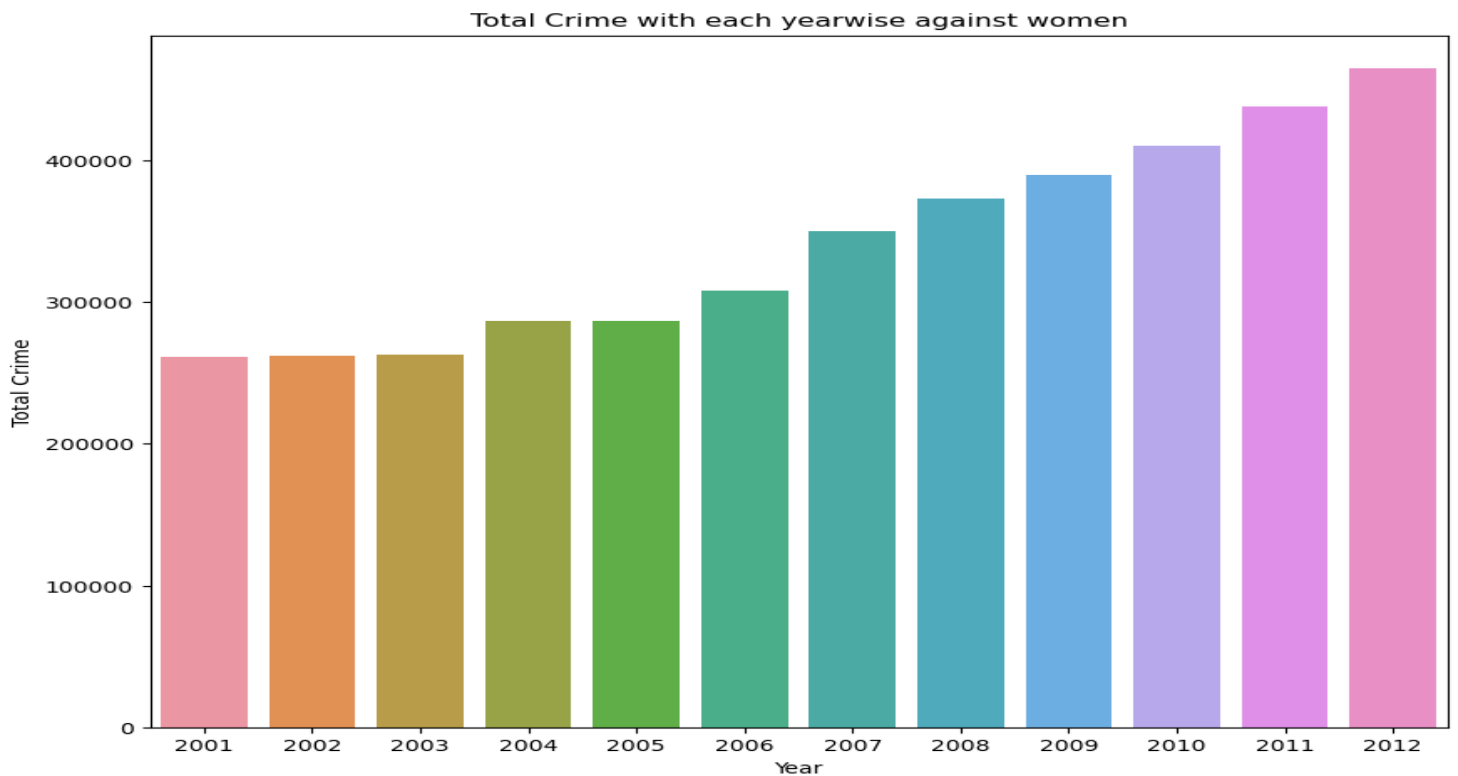
Top 10 States with the highest number of crimes against Women



Lowest 10 States with the Lowest Number of Crimes Against Women

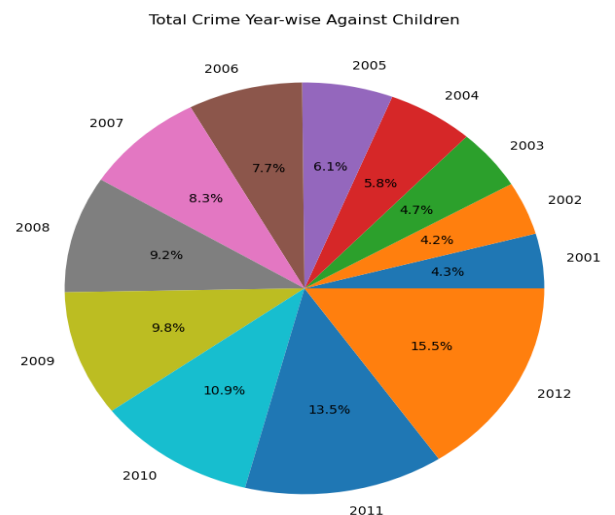
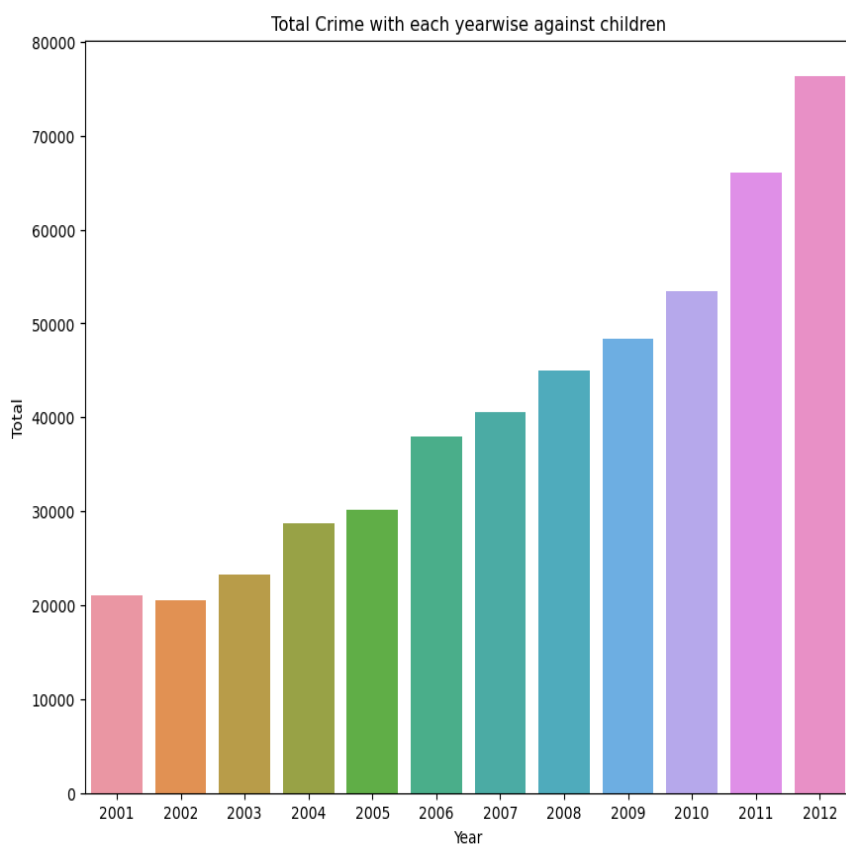


Total Crime with each yearwise against women



Crime against children

Total crimes against children each year



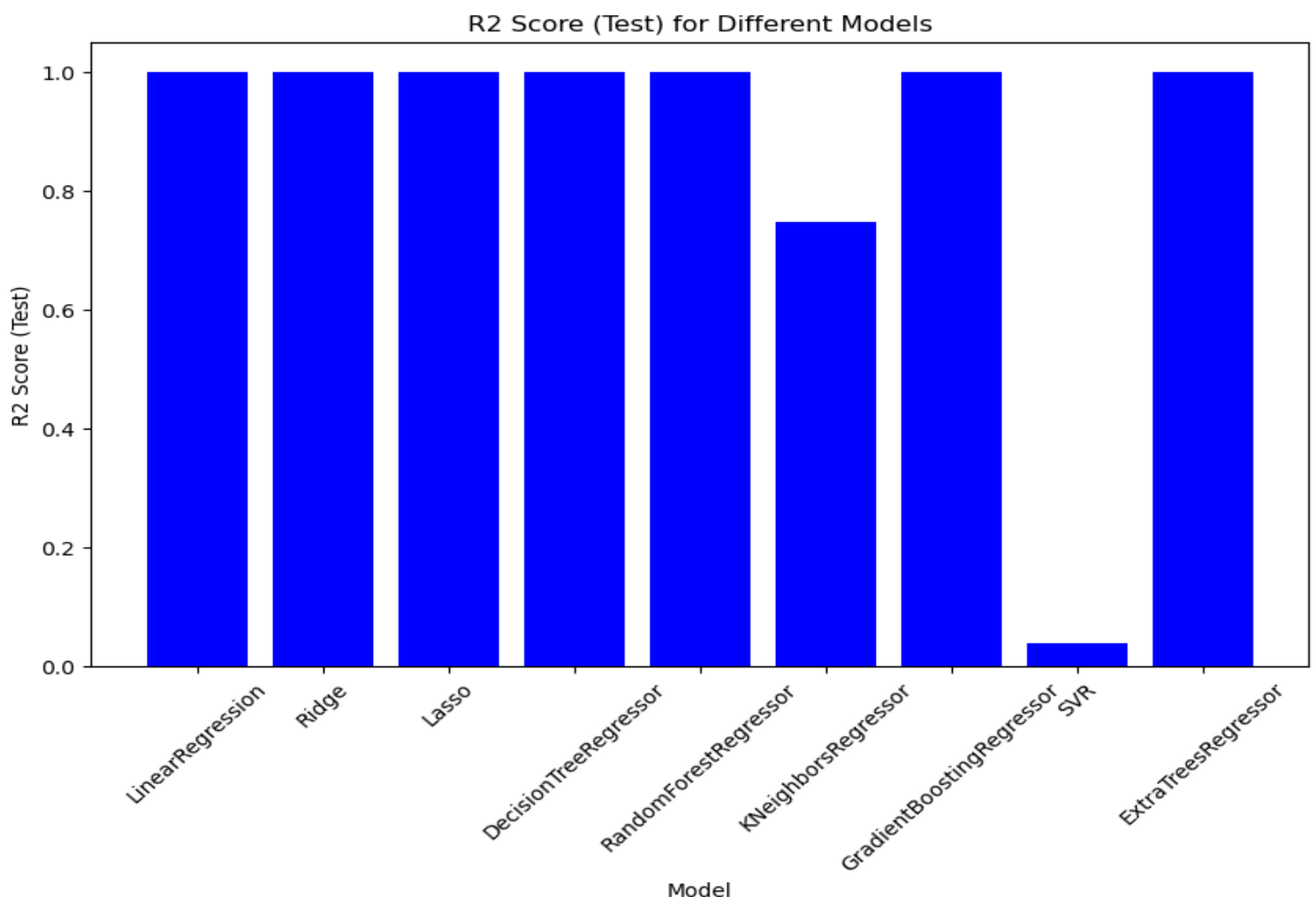
In IPC Crime Datasets Accuracy

Columns

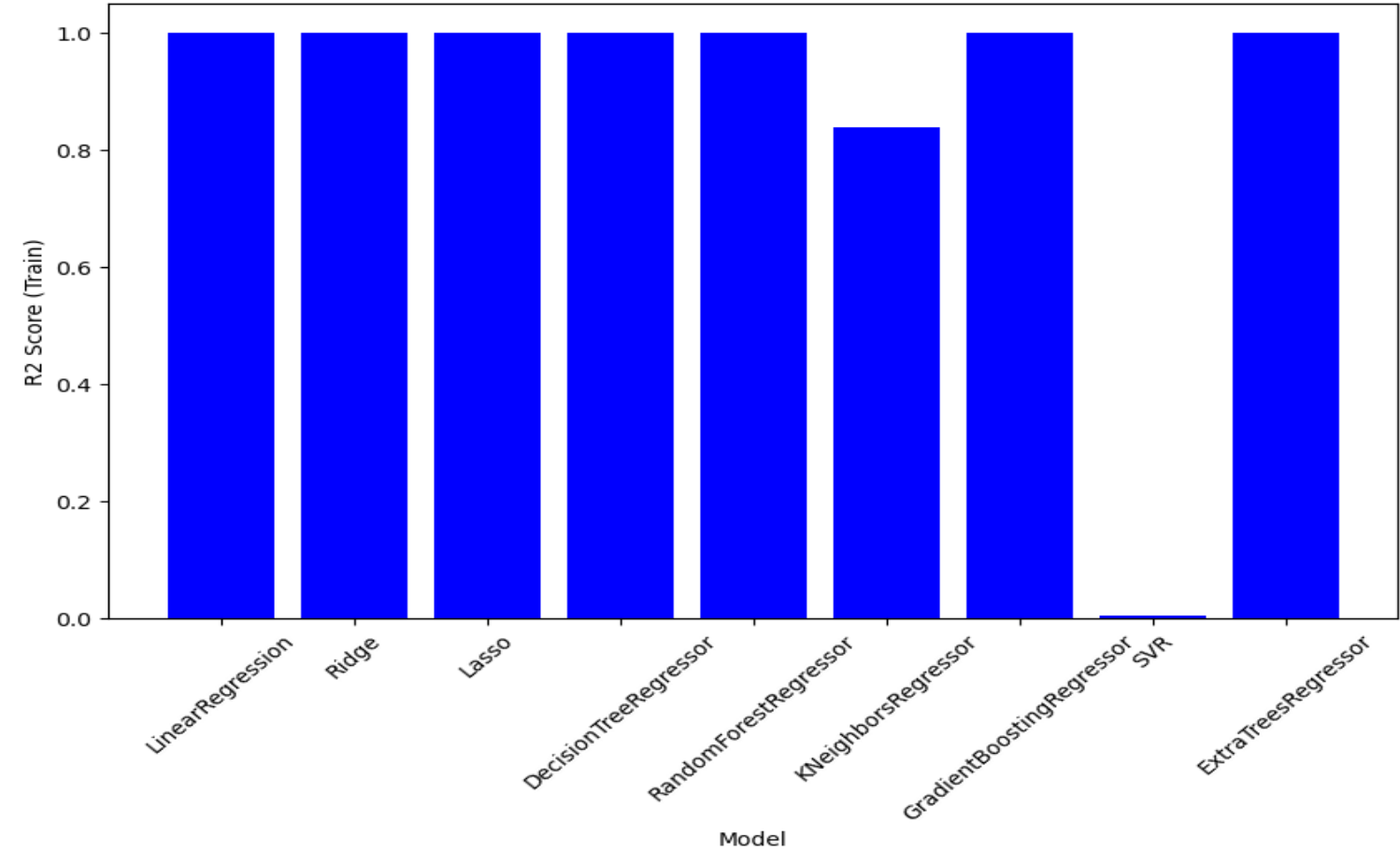
- 1 . STATE/UT
2. YEAR
3. MURDER
4. ATTEMPT TO MURDER
5. CULPABLE HOMICIDE NOT AMOUNTING TO MURDER
6. RAPE
7. CUSTODIAL RAPE
8. OTHER RAPE
9. KIDNAPPING & ABDUCTION
10. KIDNAPPING AND ABDUCTION OF WOMEN AND GIRLS
11. KIDNAPPING AND ABDUCTION OF OTHERS
12. DACOITY
13. PREPARATION AND ASSEMBLY FOR DACOITY
14. ROBBERY
15. BURGLARY
16. THEFT
17. AUTO THEFT
18. OTHER THEFT
19. RIOTS
20. CRIMINAL BREACH OF TRUST
21. CHEATING
22. COUNTERFIETING

23. ARSON
24. HURT/GREVIOUS HURT
25. DOWRY DEATHS
26. ASSAULT ON WOMEN WITH INTENT TO OUTRAGE HER MODESTY
27. INSULT TO MODESTY OF WOMEN
28. CRUELTY BY HUSBAND OR HIS RELATIVES
29. IMPORTATION OF GIRLS FROM FOREIGN COUNTRIES
30. CAUSING DEATH BY NEGLIGENCE
31. OTHER IPC CRIMES
32. TOTAL IPC CRIMES

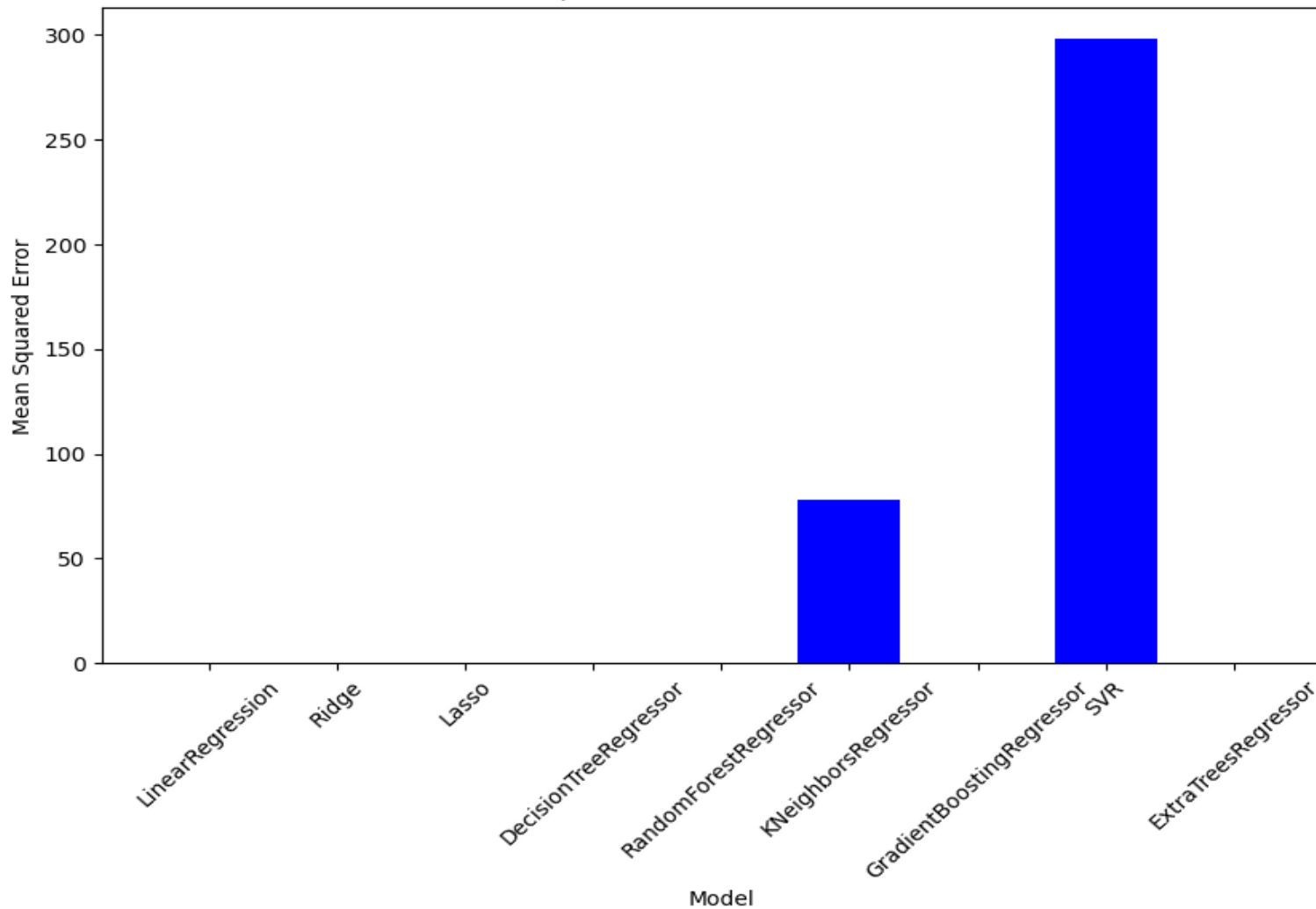
Now Check Accuracy



R2 Score (Train) for Different Models



Mean Squared Error for Different Models



Note –

1. As you can see , crime against womens and children kept increasing with time. So you can say that nothing has changed from 2001 to 2012 , crime has continued to increase over time.
2. Crime is very less in Lakshadweep , Daman and Diu and Sikkim.
3. IPC crime datasets , crime has increased every year from 2001 to 2012.
4. There is a lot of crime against womens in Andhra Pradesh and Uttar Pradesh.
5. If crime continues to increase like this every year then a very tragic situation may arise in the future.
6. So you can see if our best model for these dataset is 'Linear Regression' , 'Ridge' and 'Lasso'

THANK YOU