In [ ]:

```
# Project(Census Data Analysis)
```

In [32]:

```
import pandas as pd
```

In [33]:

```
data=pd.read_csv(r"C:\Users\User\Documents\india-districts-census-2011.csv")
data
```

Out[33]:

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate
0	1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823
1	2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741
2	3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834
3	4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301
4	5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333
...	...	...	...	...	...	...	...	...
635	636	PONDICHERRY	Mahe	41816	19143	22673	36470	16610
636	637	PONDICHERRY	Karaikal	200222	97809	102413	154916	79903
637	638	ANDAMAN AND NICOBAR ISLANDS	Nicobars	36842	20727	16115	25332	15397
638	639	ANDAMAN AND NICOBAR ISLANDS	North AND Middle Andaman	105597	54861	50736	78683	43186
639	640	ANDAMAN AND NICOBAR ISLANDS	South Andaman	238142	127283	110859	190266	105794

640 rows × 118 columns

In [34]:

```
data.head()
```

Out[34]:

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_
0	1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
1	2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
2	3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
3	4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
4	5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333	

5 rows × 118 columns

In [ ]:

```
# How will you hide the indexes of the DataFrame?
```

In [5]:

```
data.style.hide_index()
```

Out[5]:

District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_
1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333	
	JAMMU AND							

In [ ]:

```
# How will you set the caption/heading of the DataFrame?
```

In [6]:

```
data.style.set_caption('India Census 2011 Dataset')
```

Out[6]:

India Census 2011 Dataset

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Fe
0	1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
1	2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
2	3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
3	4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
	5	JAMMU AND	Punch	476835	251899	224936	261724	163333	

In [ ]:

```
# Show the records related with the district- New Delhi, Lucknow, Jaipur
```

In [9]:

```
data.head()
```

Out[9]:

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_
0	1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
1	2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
2	3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
3	4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
4	5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333	

5 rows × 118 columns

In [12]:

```
data[data['District name'].isin(['New Delhi','Lucknow','Jaipur'])]
```

Out[12]:

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Fen
93	94	NCT OF DELHI	New Delhi	142004	77942	64062	114179	65678	
109	110	RAJASTHAN	Jaipur	6626178	3468507	3157671	4300965	2554793	
156	157	UTTAR PRADESH	Lucknow	4589838	2394476	2195362	3127260	1742440	

3 rows × 118 columns

In [ ]:

```
# Calculate Statewise:

# A. Total no. of population

# B. Total no. of population with respect to religion
```

In [13]:

```
data.head()
```

Out[13]:

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_
0	1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
1	2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
2	3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
3	4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
4	5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333	

5 rows × 118 columns

In [17]:

```
data.groupby('State name')['Population'].sum().sort_values(ascending=False)
```

Out[17]:

```
State name
UTTAR PRADESH                  199812341
MAHARASHTRA                    112374333
BIHAR                          104099452
WEST BENGAL                     91276115
ANDHRA PRADESH                  84580777
MADHYA PRADESH                  72626809
TAMIL NADU                      72147030
RAJASTHAN                       68548437
KARNATAKA                       61095297
GUJARAT                         60439692
ORISSA                          41974218
KERALA                          33406061
JHARKHAND                       32988134
ASSAM                           31205576
PUNJAB                          27743338
CHHATTISGARH                    25545198
HARYANA                         25351462
NCT OF DELHI                    16787941
JAMMU AND KASHMIR               12541302
UTTARAKHAND                     10086292
HIMACHAL PRADESH                 6864602
TRIPURA                          3673917
MEGHALAYA                        2966889
MANIPUR                          2855794
NAGALAND                         1978502
GOA                              1458545
ARUNACHAL PRADESH                1383727
PONDICHERRY                      1247953
MIZORAM                          1097206
CHANDIGARH                       1055450
SIKKIM                            610577
ANDAMAN AND NICOBAR ISLANDS       380581
DADRA AND NAGAR HAVELI            343709
DAMAN AND DIU                     243247
LAKSHADWEEP                        64473
Name: Population, dtype: int64
```

In [4]:

```
data.columns
```

Out[4]:

```
Index(['District code', 'State name', 'District name', 'Population', 'Male',
       'Female', 'Literate', 'Male_Literate', 'Female_Literate', 'SC',
       ...
       'Power_Parity_Rs_90000_150000', 'Power_Parity_Rs_45000_150000',
       'Power_Parity_Rs_150000_240000', 'Power_Parity_Rs_240000_330000',
       'Power_Parity_Rs_150000_330000', 'Power_Parity_Rs_330000_425000',
       'Power_Parity_Rs_425000_545000', 'Power_Parity_Rs_330000_545000',
       'Power_Parity_Above_Rs_545000', 'Total_Power_Parity'],
      dtype='object', length=118)
```

In [8]:

```
data.groupby('State name')['Hindus','Muslims','Christians','Sikhs','Buddhists','Jains'].sum
```

```
<ipython-input-8-f9a36dd271ed>:1: FutureWarning: Indexing with multiple keys
(implicitly converted to a tuple of keys) will be deprecated, use a list ins
tead.
  data.groupby('State name')['Hindus','Muslims','Christians','Sikhs','Buddhi
sts','Jains'].sum().sort_values(by='Hindus')
```

Out[8]:

State name	Hindus	Muslims	Christians	Sikhs	Buddhists	Jains
LAKSHADWEEP	1788	62268	317	8	10	11
MIZORAM	30136	14832	956331	286	93411	376
NAGALAND	173054	48963	1739651	1890	6759	2655
DAMAN AND DIU	220150	19277	2820	172	217	287
ANDAMAN AND NICOBAR ISLANDS	264296	32413	80984	1286	338	31
DADRA AND NAGAR HAVELI	322857	12922	5113	217	634	1186
MEGHALAYA	342078	130399	2213027	3045	9864	627
SIKKIM	352662	9867	60522	1868	167216	314
ARUNACHAL PRADESH	401876	27045	418732	3287	162815	771
CHANDIGARH	852574	51447	8720	138329	1160	1960
GOA	963877	121564	366130	1473	1095	1109
PONDICHERRY	1089409	75556	78550	297	451	1400
MANIPUR	1181876	239836	1179043	1527	7084	1692
TRIPURA	3063903	316042	159882	1070	125385	860
JAMMU AND KASHMIR	3566674	8567485	35631	234848	112584	2490
HIMACHAL PRADESH	6532765	149881	12646	79896	78659	1805
UTTARAKHAND	8368636	1406825	37781	236340	14926	9183
PUNJAB	10678138	535489	348230	16004754	33237	45040
NCT OF DELHI	13712100	2158684	146093	570581	18449	166231
KERALA	18282492	8873472	6141269	3814	4752	4489
ASSAM	19180759	10679345	1165867	20672	54993	25949
HARYANA	22171128	1781342	50353	1243752	7514	52613
JHARKHAND	22376051	4793994	1418608	71422	8956	14974
CHHATTISGARH	23819789	514998	490542	70036	70467	61510
ORISSA	39300341	911670	1161708	21991	13852	9420
KARNATAKA	51317472	7893065	1142647	28773	95710	440280
GUJARAT	53533988	5846761	316178	58246	30483	579654
RAJASTHAN	60657103	6215377	96430	872930	12185	622023

State name	Hindus	Muslims	Christians	Sikhs	Buddhists	Jains
TAMIL NADU	63188168	4229479	4418331	14601	11186	89265
WEST BENGAL	64385546	24654825	658618	63523	282898	60141
MADHYA PRADESH	66007121	4774695	213282	151412	216052	567028
ANDHRA PRADESH	74824149	8082412	1129784	40244	36692	53849
BIHAR	86078686	17557809	129247	23779	25453	18914
MAHARASHTRA	89703057	12971152	1080073	223247	6531200	1400349
UTTAR PRADESH	159312654	38483967	356448	643500	206285	213267

In [ ]:

```
# How many male workers/male were there in Maharashtra State?
```

In [15]:

```
data[data['State name']=='Maharshtra']['Male'].sum()
```

Out[15]:

```
0
```

In [ ]:

```
# How to set a column as index of DataFrame
```

In [35]:

```
data=data.set_index('District code')
data
```

Out[35]:

District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Fema
1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	439654	282823	
2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	335649	207741	
3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	93770	62834	
4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	86236	56301	
5	JAMMU AND KASHMIR	Punch	476835	251899	224936	261724	163333	
...	...	...	...	...	...	...	...	
636	PONDICHERRY	Mahe	41816	19143	22673	36470	16610	
637	PONDICHERRY	Karaikal	200222	97809	102413	154916	79903	
638	ANDAMAN AND NICOBAR ISLANDS	Nicobars	36842	20727	16115	25332	15397	
639	ANDAMAN AND NICOBAR ISLANDS	North AND Middle Andaman	105597	54861	50736	78683	43186	
640	ANDAMAN AND NICOBAR ISLANDS	South Andaman	238142	127283	110859	190266	105794	

640 rows × 117 columns

In [ ]:

```
# Add a suffix to column names
```

In [36]:

```
data=data.add_suffix('_rightone')
```

In [37]:

```
data
```

Out[37]:

District code	State name_rightone	District name_rightone	Population_rightone	Male_rightone	Female_rightone	L
1	JAMMU AND KASHMIR	Kupwara	870354	474190	396164	
2	JAMMU AND KASHMIR	Badgam	753745	398041	355704	
3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	54516	
4	JAMMU AND KASHMIR	Kargil	140802	77785	63017	
5	JAMMU AND KASHMIR	Punch	476835	251899	224936	
...	...	...	...	...	...	
636	PONDICHERRY	Mahe	41816	19143	22673	
637	PONDICHERRY	Karaikal	200222	97809	102413	
638	ANDAMAN AND NICOBAR ISLANDS	Nicobars	36842	20727	16115	
639	ANDAMAN AND NICOBAR ISLANDS	North AND Middle Andaman	105597	54861	50736	
640	ANDAMAN AND NICOBAR ISLANDS	South Andaman	238142	127283	110859	

640 rows × 117 columns

In [ ]:

```
# Add a prefix to columns names
```

In [38]:

```
data=data.add_prefix('leftone_')
data
```

Out[38]:

District code	leftone_State name_rightone	leftone_District name_rightone	leftone_Population_rightone	leftone_Male_rightone	left
1	JAMMU AND KASHMIR	Kupwara	870354	474190	
2	JAMMU AND KASHMIR	Badgam	753745	398041	
3	JAMMU AND KASHMIR	Leh(Ladakh)	133487	78971	
4	JAMMU AND KASHMIR	Kargil	140802	77785	
5	JAMMU AND KASHMIR	Punch	476835	251899	
...	...	...	...	...	
636	PONDICHERRY	Mahe	41816	19143	
637	PONDICHERRY	Karaikal	200222	97809	
638	ANDAMAN AND NICOBAR ISLANDS	Nicobars	36842	20727	
639	ANDAMAN AND NICOBAR ISLANDS	North AND Middle Andaman	105597	54861	
640	ANDAMAN AND NICOBAR ISLANDS	South Andaman	238142	127283	

640 rows × 117 columns

In [ ]: