

```
import pandas as pd
data = pd.read_csv('India-Census-2020.csv')
```

data



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	91920
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	75140
2	35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	138700
3	55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	58610
4	88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	110740
5	99	RAJASTHAN	Ganganagar	17722512	9390060	8332452	10740087	6398172	4341915	8214048	5366880	2847168	6125067	2088981	95080
6	132	UTTAR PRADESH	Saharanpur	31197438	16506954	14690484	18693972	10981026	7712946	9336096	8200224	1135872	7944309	1391787	218610
7	248	ARUNACHAL PRADESH	Papum Pare	1589157	802638	786519	1089432	592146	497286	591948	371367	220581	460413	131535	9970
8	265	NAGALAND	Dimapur	3409299	1776546	1632753	2502333	1351278	1151055	1362150	896805	465345	1101222	260928	20470
9	277	MANIPUR	Imphal West	4661928	2295486	2366442	3533634	1853865	1679769	1920483	1156860	763623	1494081	426402	27410
10	283	MIZORAM	Aizawl	3602781	1793430	1809351	3065355	1525923	1539432	1571724	941787	629937	1362690	209034	20310
11	289	TRIPURA	West Tripura	15531651	7914852	7616799	12252186	6506982	5745204	6283602	4503654	1779948	4717782	1565820	92480
12	298	MEGHALAYA	East Khasi Hills	7433298	3696741	3736557	5202270	2585430	2616840	2941074	1838727	1102347	2606184	334890	44920
13	305	ASSAM	Nagaon	25413912	12952008	12461904	15396444	8296650	7099794	8819982	6900552	1919430	6614937	2205045	165930
14	328	WEST BENGAL	Jalpaiguri	34855614	17847576	17008038	22489020	12569598	9919422	13616190	9822249	3793941	10383885	3232305	212390
15	364	JHARKHAND	Ranchi	26228277	13454433	12773844	17202897	9767196	7435701	10285803	6695703	3590100	6805584	3480219	159420
16	388	ORISSA	Ganjam	31761279	16012962	15748317	19890450	11363868	8526582	13515948	8910243	4605705	8106696	5409252	182450
17	410	CHHATTISGARH	Raipur	36574848	18433674	18141174	23667741	13438422	10229319	15818976	9899676	5919300	11332242	4486734	207550
18	439	MADHYA PRADESH	Indore	29490273	15296643	14193630	20782170	11606679	9175491	11413755	8451495	2962260	10235259	1178496	180760
19	585	GOA	North Goa	7362072	3750093	3611979	5967540	3165642	2801898	2948922	2152125	796797	2424933	523989	44130
20	592	KERALA	Malappuram	37016280	17642952	19373328	29801835	14376636	15425199	9561816	8083413	1478403	7668423	1893393	274540
21	602	TAMIL NADU	Thiruvallur	33552936	16884558	16668378	25125489	13461399	11664090	13842486	9932067	3910419	11231262	2611224	197100

```
data.columns
```

```
Index(['District code', 'State name', 'District name', 'Population', 'Male',  
      'Female', 'Literate', 'Male_Literate', 'Female_Literate', 'Workers',  
      'Male_Workers', 'Female_Workers', 'Main_Workers', 'Marginal_Workers',  
      'Non_Workers', 'Age_Group_0_29', 'Age_Group_30_49', 'Age_Group_50',  
      'Age not stated'],  
      dtype='object')
```

```
data.shape
```

(22, 19)

```
data.describe()
```

	District code	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age not stated
count	22.000000	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	2.200000e+01	
mean	278.500000	1.914706e+07	9.789356e+06	9.357708e+06	1.324668e+07	7.274894e+06	5.971784e+06	7.198348e+06	5.204520e+06	1.993828e+06	5.486205e+06	1.712143e+06	1.194872e+07	
std	181.829525	1.203184e+07	6.056076e+06	5.996345e+06	8.179365e+06	4.418227e+06	3.826579e+06	4.576422e+06	3.242102e+06	1.555079e+06	3.422104e+06	1.494624e+06	7.785999e+06	
min	21.000000	1.589157e+06	8.026380e+05	7.865190e+05	1.089432e+06	5.921460e+05	4.972860e+05	5.919480e+05	3.713670e+05	2.205810e+05	4.604130e+05	1.315350e+05	9.972090e+05	
25%	107.250000	7.949736e+06	4.119062e+06	3.870688e+06	6.287890e+06	3.421260e+06	2.866630e+06	3.120998e+06	2.352452e+06	8.027212e+05	2.660947e+06	4.507988e+05	4.834624e+06	
50%	286.000000	1.700505e+07	9.042525e+06	7.974626e+06	1.185342e+07	6.560721e+06	5.330488e+06	6.548922e+06	4.935267e+06	1.307138e+06	5.174892e+06	1.287014e+06	1.029150e+07	
75%	382.000000	3.077065e+07	1.583388e+07	1.456627e+07	1.959133e+07	1.126816e+07	8.323173e+06	1.010481e+07	8.171021e+06	2.933487e+06	7.875338e+06	2.509679e+06	1.820313e+07	
max	602.000000	3.701628e+07	1.843367e+07	1.937333e+07	2.980184e+07	1.437664e+07	1.542520e+07	1.581898e+07	9.932067e+06	5.919300e+06	1.133224e+07	5.409252e+06	2.745446e+07	

```
data.isnull()
```



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29
0	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
5	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
6	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
7	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
8	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
9	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
10	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
11	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
12	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
13	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
14	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
15	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
16	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
17	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
18	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
19	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
20	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
21	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False

```
data.isnull().sum()
```



District code	0
State name	0
District name	0
Population	0
Male	0
Female	0
Literate	0
Male_Literate	0
Female_Literate	0
Workers	0
Male_Workers	0
Female_Workers	0

```
Main_Workers      0
Marginal_Workers  0
Non_Workers       0
Age_Group_0_29    0
Age_Group_30_49   0
Age_Group_50      0
Age not stated    0
dtype: int64
```

data.notnull()



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29
0	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
1	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
2	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
3	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
4	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
5	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
6	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
7	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
8	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
9	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
10	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
11	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
12	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
13	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
14	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
15	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
16	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
17	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
18	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
19	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
20	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True
21	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True	True

data.notnull().sum()

```

District code      22
State name         22
District name      22
Population         22
Male              22
Female            22
Literate          22
Male_Literate      22
Female_Literate    22
Workers           22
Male_Workers       22
Female_Workers     22
Main_Workers       22
Marginal_Workers   22
Non_Workers        22
Age_Group_0_29     22
Age_Group_30_49    22
Age_Group_50       22
Age not stated     22
dtype: int64

```

```
data.info()
```

```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 22 entries, 0 to 21
Data columns (total 19 columns):
 #   Column              Non-Null Count  Dtype
---  -
 0   District code       22 non-null    int64
 1   State name          22 non-null    object
 2   District name       22 non-null    object
 3   Population          22 non-null    int64
 4   Male               22 non-null    int64
 5   Female              22 non-null    int64
 6   Literate            22 non-null    int64
 7   Male_Literate       22 non-null    int64
 8   Female_Literate     22 non-null    int64
 9   Workers             22 non-null    int64
10   Male_Workers        22 non-null    int64
11   Female_Workers      22 non-null    int64
12   Main_Workers        22 non-null    int64
13   Marginal_Workers    22 non-null    int64
14   Non_Workers         22 non-null    int64
15   Age_Group_0_29      22 non-null    int64
16   Age_Group_30_49     22 non-null    int64
17   Age_Group_50        22 non-null    int64
18   Age not stated      22 non-null    int64
dtypes: int64(17), object(2)
memory usage: 3.4+ KB

```

✓ 1) How will you hide the indexes of the Dataframe

```
data.head(5)
```



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29	Age_Group_30_59
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024	7351443	3923055
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145	6899229	3772548
2	35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	13870665	11352789	5502177
3	55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	5861826	5421699	2733732
4	88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	11074536	9860418	4331862

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



C:\Users\SANTHOSHRAJ E\AppData\Local\Temp\ipykernel_21336\1655106480.py:1: FutureWarning: this method is deprecated in favour of `Styler.hide(axis="index")`
data.style.hide_index()

District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29	Age_Group_30_59
21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024	7351443	3923055
24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145	6899229	3772548
35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	13870665	11352789	5502177
55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	5861826	5421699	2733732
88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	11074536	9860418	4331862
99	RAJASTHAN	Ganganagar	17722512	9390060	8332452	10740087	6398172	4341915	8214048	5366880	2847168	6125067	2088981	9508464	10511001	4519899
132	UTTAR PRADESH	Saharanpur	31197438	16506954	14690484	18693972	10981026	7712946	9336096	8200224	1135872	7944309	1391787	21861342	20058201	6927624
248	ARUNACHAL PRADESH	Papum Pare	1589157	802638	786519	1089432	592146	497286	591948	371367	220581	460413	131535	997209	1085328	394308
265	NAGALAND	Dimapur	3409299	1776546	1632753	2502333	1351278	1151055	1362150	896805	465345	1101222	260928	2047149	2190528	887409
277	MANIPUR	Imphal West	4661928	2295486	2366442	3533634	1853865	1679769	1920483	1156860	763623	1494081	426402	2741445	2510460	1333314
283	MIZORAM	Aizawl	3602781	1793430	1809351	3065355	1525923	1539432	1571724	941787	629937	1362690	209034	2031057	2123028	972846
289	TRIPURA	West Tripura	15531651	7914852	7616799	12252186	6506982	5745204	6283602	4503654	1779948	4717782	1565820	9248049	8463816	4497471
298	MEGHALAYA	East Khasi Hills	7433298	3696741	3736557	5202270	2585430	2616840	2941074	1838727	1102347	2606184	334890	4492224	4913649	1731852
305	ASSAM	Nagaon	25413912	12952008	12461904	15396444	8296650	7099794	8819982	6900552	1919430	6614937	2205045	16593930	16004493	6102306
328	WEST BENGAL	Jalpaiguri	34855614	17847576	17008038	22489020	12569598	9919422	13616190	9822249	3793941	10383885	3232305	21239424	20335563	9319041
364	JHARKHAND	Ranchi	26228277	13454433	12773844	17202897	9767196	7435701	10285803	6695703	3590100	6805584	3480219	15942474	15680637	6533442
388	ORISSA	Ganjam	31761279	16012962	15748317	19890450	11363868	8526582	13515948	8910243	4605705	8106696	5409252	18245331	17822088	8322804
410	CHHATTISGARH	Raipur	36574848	18433674	18141174	23667741	13438422	10229319	15818976	9899676	5919300	11332242	4486734	20755872	22088691	9343395
439	MADHYA PRADESH	Indore	29490273	15296643	14193630	20782170	11606679	9175491	11413755	8451495	2962260	10235259	1178496	18076518	16895430	8050176
585	GOA	North Goa	7362072	3750093	3611979	5967540	3165642	2801898	2948922	2152125	796797	2424933	523989	4413150	3428334	2344797
592	KERALA	Malappuram	37016280	17642952	19373328	29801835	14376636	15425199	9561816	8083413	1478403	7668423	1893393	27454464	21654045	9372249
602	TAMIL NADU	Thiruvallur	33552936	16884558	16668378	25125489	13461399	11664090	13842486	9932067	3910419	11231262	2611224	19710450	17327664	1039297

2)How can we set the caption / heading on the dataframe?

```
data.head(2)
```

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Grc
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024	
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145	

```
data.style.set_caption('Caption')
```



Caption

	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29	Age_Group_30_59
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024	7351443	39236
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145	6899229	37725
2	35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	13870665	11352789	55027
3	55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	5861826	5421699	27333
4	88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	11074536	9860418	43318
5	99	RAJASTHAN	Ganganagar	17722512	9390060	8332452	10740087	6398172	4341915	8214048	5366880	2847168	6125067	2088981	9508464	10511001	45198
6	132	UTTAR PRADESH	Saharanpur	31197438	16506954	14690484	18693972	10981026	7712946	9336096	8200224	1135872	7944309	1391787	21861342	20058201	69276
7	248	ARUNACHAL PRADESH	Papum Pare	1589157	802638	786519	1089432	592146	497286	591948	371367	220581	460413	131535	997209	1085328	39430
8	265	NAGALAND	Dimapur	3409299	1776546	1632753	2502333	1351278	1151055	1362150	896805	465345	1101222	260928	2047149	2190528	88740
9	277	MANIPUR	Imphal West	4661928	2295486	2366442	3533634	1853865	1679769	1920483	1156860	763623	1494081	426402	2741445	2510460	13333
10	283	MIZORAM	Aizawl	3602781	1793430	1809351	3065355	1525923	1539432	1571724	941787	629937	1362690	209034	2031057	2123028	97284
11	289	TRIPURA	West Tripura	15531651	7914852	7616799	12252186	6506982	5745204	6283602	4503654	1779948	4717782	1565820	9248049	8463816	44974
12	298	MEGHALAYA	East Khasi Hills	7433298	3696741	3736557	5202270	2585430	2616840	2941074	1838727	1102347	2606184	334890	4492224	4913649	17318
13	305	ASSAM	Nagaon	25413912	12952008	12461904	15396444	8296650	7099794	8819982	6900552	1919430	6614937	2205045	16593930	16004493	61023
14	328	WEST BENGAL	Jalpaiguri	34855614	17847576	17008038	22489020	12569598	9919422	13616190	9822249	3793941	10383885	3232305	21239424	20335563	93190
15	364	JHARKHAND	Ranchi	26228277	13454433	12773844	17202897	9767196	7435701	10285803	6695703	3590100	6805584	3480219	15942474	15680637	65334
16	388	ORISSA	Ganjam	31761279	16012962	15748317	19890450	11363868	8526582	13515948	8910243	4605705	8106696	5409252	18245331	17822088	83228
17	410	CHHATTISGARH	Raipur	36574848	18433674	18141174	23667741	13438422	10229319	15818976	9899676	5919300	11332242	4486734	20755872	22088691	93433
18	439	MADHYA PRADESH	Indore	29490273	15296643	14193630	20782170	11606679	9175491	11413755	8451495	2962260	10235259	1178496	18076518	16895430	80507
19	585	GOA	North Goa	7362072	3750093	3611979	5967540	3165642	2801898	2948922	2152125	796797	2424933	523989	4413150	3428334	23447
20	592	KERALA	Malappuram	37016280	17642952	19373328	29801835	14376636	15425199	9561816	8083413	1478403	7668423	1893393	27454464	21654045	93722
21	602	TAMIL NADU	Thiruvallur	33552936	16884558	16668378	25125489	13461399	11664090	13842486	9932067	3910419	11231262	2611224	19710450	17327664	10392

3) Show the records related with the districts - Assam,West bengal,Madhya pradesh.

```
data[data['State name'].isin(['ASSAM','WEST BENGAL','MADHYA PRADESH'])]
```



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	Age_Group_0_29	Age_Group_30_59
13	305	ASSAM	Nagaon	25413912	12952008	12461904	15396444	8296650	7099794	8819982	6900552	1919430	6614937	2205045	16593930		
14	328	WEST BENGAL	Jalpaiguri	34855614	17847576	17008038	22489020	12569598	9919422	13616190	9822249	3793941	10383885	3232305	21239424		
18	439	MADHYA PRADESH	Indore	29490273	15296643	14193630	20782170	11606679	9175491	11413755	8451495	2962260	10235259	1178496	18076518		

4) Calculate State-Wise

✓ a) Total Number of Population

```
data.groupby(['State name']).Population.sum()
```

```
↗ State name
ARUNACHAL PRADESH    1589157
ASSAM                25413912
CHANDIGARH           9499050
CHHATTISGARH         36574848
GOA                  7362072
HARYANA              16287597
HIMACHAL PRADESH     13590675
JAMMU AND KASHMIR    13769622
JHARKHAND            26228277
KERALA               37016280
MADHYA PRADESH       29490273
MANIPUR              4661928
MEGHALAYA            7433298
MIZORAM              3602781
NAGALAND             3409299
ORISSA               31761279
PUNJAB              20684907
RAJASTHAN            17722512
TAMIL NADU           33552936
TRIPURA             15531651
UTTAR PRADESH        31197438
WEST BENGAL          34855614
Name: Population, dtype: int64
```


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

```
↗ State name
KERALA               37016280
CHHATTISGARH         36574848
WEST BENGAL          34855614
TAMIL NADU           33552936
ORISSA               31761279
UTTAR PRADESH        31197438
MADHYA PRADESH       29490273
JHARKHAND            26228277
ASSAM                25413912
PUNJAB              20684907
RAJASTHAN            17722512
HARYANA              16287597
TRIPURA             15531651
JAMMU AND KASHMIR    13769622
HIMACHAL PRADESH     13590675
CHANDIGARH           9499050
MEGHALAYA            7433298
GOA                  7362072
MANIPUR              4661928
MIZORAM              3602781
NAGALAND             3409299
```

ARUNACHAL PRADESH 1589157
Name: Population, dtype: int64

▼ b) Total number of Literate.

```
data.head()
```



	District code	State name	District name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers	A
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024	
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145	
2	35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	13870665	
3	55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	5861826	
4	88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	11074536	

```
data.groupby('District name').Literate.sum().sort_values(ascending = False)
```



District name	
Malappuram	29801835
Thiruvallur	25125489
Raipur	23667741
Jalpaiguri	22489020
Indore	20782170
Ganjam	19890450
Saharanpur	18693972
Ranchi	17202897
Nagaon	15396444
Gurdaspur	14712471
West Tripura	12252186
Faridabad	11454651
Ganganagar	10740087
Kangra	10373760
Jammu	10234215
Chandigarh	7248942
North Goa	5967540
East Khasi Hills	5202270
Imphal West	3533634
Aizawl	3065355
Dimapur	2502333
Papum Pare	1089432
Name: Literate, dtype: int64	

▼ 5) How many Male workers in the Haryana?

```
data[data['State name'] == 'HARYANA']['Male_Workers'].sum()
```

 4292397

✓ 6) How to Set a columns as index of the dataframe?

```
df = data.set_index('District name')
```

df



	District code	State name	Population	Male	Female	Literate	Male_Literate	Female_Literate	Workers	Male_Workers	Female_Workers	Main_Workers	Marginal_Workers	Non_Workers
District name														
Jammu	21	JAMMU AND KASHMIR	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	9192024
Kangra	24	HIMACHAL PRADESH	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	7514145
Gurdaspur	35	PUNJAB	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	13870665
Chandigarh	55	CHANDIGARH	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	5861826
Faridabad	88	HARYANA	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	11074536
Ganganagar	99	RAJASTHAN	17722512	9390060	8332452	10740087	6398172	4341915	8214048	5366880	2847168	6125067	2088981	9508464
Saharanpur	132	UTTAR PRADESH	31197438	16506954	14690484	18693972	10981026	7712946	9336096	8200224	1135872	7944309	1391787	21861342
Papum Pare	248	ARUNACHAL PRADESH	1589157	802638	786519	1089432	592146	497286	591948	371367	220581	460413	131535	997209
Dimapur	265	NAGALAND	3409299	1776546	1632753	2502333	1351278	1151055	1362150	896805	465345	1101222	260928	2047149
Imphal West	277	MANIPUR	4661928	2295486	2366442	3533634	1853865	1679769	1920483	1156860	763623	1494081	426402	2741445
Aizawl	283	MIZORAM	3602781	1793430	1809351	3065355	1525923	1539432	1571724	941787	629937	1362690	209034	2031057
West Tripura	289	TRIPURA	15531651	7914852	7616799	12252186	6506982	5745204	6283602	4503654	1779948	4717782	1565820	9248049
East Khasi Hills	298	MEGHALAYA	7433298	3696741	3736557	5202270	2585430	2616840	2941074	1838727	1102347	2606184	334890	4492224
Nagaon	305	ASSAM	25413912	12952008	12461904	15396444	8296650	7099794	8819982	6900552	1919430	6614937	2205045	16593930
Jalpaiguri	328	WEST BENGAL	34855614	17847576	17008038	22489020	12569598	9919422	13616190	9822249	3793941	10383885	3232305	21239424
Ranchi	364	JHARKHAND	26228277	13454433	12773844	17202897	9767196	7435701	10285803	6695703	3590100	6805584	3480219	15942474
Ganjam	388	ORISSA	31761279	16012962	15748317	19890450	11363868	8526582	13515948	8910243	4605705	8106696	5409252	18245331
Raipur	410	CHHATTISGARH	36574848	18433674	18141174	23667741	13438422	10229319	15818976	9899676	5919300	11332242	4486734	20755872
Indore	439	MADHYA PRADESH	29490273	15296643	14193630	20782170	11606679	9175491	11413755	8451495	2962260	10235259	1178496	18076518
North Goa	585	GOA	7362072	3750093	3611979	5967540	3165642	2801898	2948922	2152125	796797	2424933	523989	4413150
Malappuram	592	KERALA	37016280	17642952	19373328	29801835	14376636	15425199	9561816	8083413	1478403	7668423	1893393	27454464
Thiruvallur	602	TAMIL NADU	33552936	16884558	16668378	25125489	13461399	11664090	13842486	9932067	3910419	11231262	2611224	19710450

7) Add the Suffix of the column

```
df = data.add_suffix('s')
df
```

	District codes	State names	District names	Populations	Males	Females	Literates	Male_Literates	Female_Literates	Workersss	Male_Workersss	Female_Workersss	Main_Workersss	Marginal_Workersss	
0	21	JAMMU AND KASHMIR	Jammu	13769622	7324389	6445233	10234215	5777244	4456971	4577598	3757104	820494	3693096	884502	
1	24	HIMACHAL PRADESH	Kangra	13590675	6755319	6835356	10373760	5457987	4915773	6076530	3633804	2442726	2825235	3251295	
2	35	PUNJAB	Gurdaspur	20684907	10913553	9771354	14712471	8168940	6543531	6814242	5738868	1075374	5632002	1182240	
3	55	CHANDIGARH	Chandigarh	9499050	5225967	4273083	7248942	4188114	3060828	3637224	2953431	683793	3473361	163863	
4	88	HARYANA	Faridabad	16287597	8694990	7592607	11454651	6614460	4840191	5213061	4292397	920664	4457844	755217	
5	99	RAJASTHAN	Ganganagar	17722512	9390060	8332452	10740087	6398172	4341915	8214048	5366880	2847168	6125067	2088981	
6	132	UTTAR PRADESH	Saharanpur	31197438	16506954	14690484	18693972	10981026	7712946	9336096	8200224	1135872	7944309	1391787	
-	210	ARUNACHAL PRADESH	Itanagar	1500157	800000	700150	1000100	500110	400000	501010	371007	200501	100110	101505	