MiniProject - 2

Use the following covid_vaccine_statewise.csv dataset and perform following analytics on given dataset.

https://www.kaggle.com/sudalairajkumar/covid19-in-india?select=covid_vaccine_statewise.csv a. Describe the dataset b. Number of persons statewise vaccinated for first dose in India c. Number of persons statewise vaccinated for second dose in India d. Number of Males vaccinated e. Number of Females vaccinated

In [10]:
```
import pandas as pd
```

In [11]:
```
df = pd.read_csv('covid.csv')
```

In [12]:
```
df
```

Out[12]:

	State/UTs	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18	Do 1
0	Andaman And Nicobar	991264	313284	320383	19208	18860	15
1	Andhra Pradesh	110957430	40645695	43555744	2535344	2527613	152
2	Arunachal Pradesh	1924584	861396	748505	59100	44869	4(
3	Assam	50335778	22550941	20575569	1262520	972402	99
4	Bihar	157293015	62956601	59160917	6240650	5348480	428
5	Chandigarh	2291937	1090035	921251	57708	43907	3
6	Chhattisgarh	49167939	18956734	18537851	1234990	1053338	107
7	Dadra And Nagar Haveli And Daman And Diu	1580060	730855	595090	31509	26943	1
8	Delhi	37409355	16605099	14356077	1008977	870793	68
9	Goa	2874477	1355046	1224544	51734	44551	3
10	Gujarat	128105565	49324964	49448078	3131906	2906693	194
11	Haryana	45546800	21963352	18749584	1158529	771892	55
12	Himachal Pradesh	15325484	6042660	5783693	331826	309613	27
13	Jammu And Kashmir	24782265	9942707	10388596	876049	861731	55
14	Jharkhand	43875944	21310378	16112704	1596112	1125458	106
15	Karnataka	122152396	50032922	50520795	2816444	2719866	232
16	Kerala	57511593	27017714	23803189	1322849	957271	81
17	Ladakh	567133	219604	187095	10072	9261	8
18	Lakshadweep	145313	56914	56019	2911	2782	1
19	Madhya Pradesh	133940196	54143863	54061656	4194628	3472824	241
20	Maharashtra	177977996	84665105	71650189	4119145	3108854	289
21	Manipur	3269105	1464399	1226336	109652	68555	7
22	Meghalaya	2626010	1332466	1025463	77151	42858	3
23	Mizoram	1793298	785860	669572	60098	47010	4
24	Nagaland	1739837	837969	684747	59974	40347	2
25	Odisha	81545960	31454279	29961065	2195563	1844432	160
26	Puducherry	2274059	913046	802234	50694	44614	3

	State/UTs	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18	Do 1
27	Punjab	47051166	22361633	19621018	1117510	878056	684
28	Rajasthan	115721511	51115413	46586810	3576045	2955043	234
29	Sikkim	1360477	539929	509134	30049	26515	21
30	Tamil Nadu	127533904	56671366	53532301	2627751	2224043	191
31	Telangana	77627542	29616909	29076857	1724095	1582421	110
32	Tripura	5918997	2659018	2328968	144833	115278	11
33	Uttar Pradesh	392011174	154096960	147866674	14193665	13227415	870
34	Uttarakhand	20143654	8183361	7949246	532982	467836	40
35	West Bengal	156100370	67305396	61606895	3599987	3041540	262

In [13]:
```
df.columns
```

Out[13]:
```
Index(['State/UTs', 'Total Vaccination Doses', 'Dose1', 'Dose 2',
       'Dose 1 15-18', 'Dose 2 15-18', 'Dose 1 12-14', 'Dose 2 12-14',
       'Precaution 18-59', 'Population'],
      dtype='object')
```

In [14]:
```
df.describe()
```

Out[14]:

	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18
count	3.600000e+01	3.600000e+01	3.600000e+01	3.600000e+01	3.600000e+01
mean	6.115204e+07	2.555900e+07	2.400569e+07	1.726729e+06	1.494555e+06
std	7.945565e+07	3.235136e+07	3.065844e+07	2.643017e+06	2.410739e+06
min	1.453130e+05	5.691400e+04	5.601900e+04	2.911000e+03	2.782000e+03
25%	2.287468e+06	1.045788e+06	8.914968e+05	5.975550e+04	4.459825e+04
50%	4.064265e+07	1.778092e+07	1.523439e+07	1.063244e+06	8.662620e+05
75%	1.121485e+08	4.281551e+07	4.431351e+07	2.558446e+06	2.299936e+06
max	3.920112e+08	1.540970e+08	1.478667e+08	1.419366e+07	1.322742e+07

In [16]:
```
df[df['State/UTs']=='India']
```

Out[16]:

	State/UTs	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18	Dose 1 12-14	Dose 2 12-14	Precaution 18-59

In [17]:
```
import numpy as np
```

In [18]:
```
states = np.unique(df['State/UTs'])
```

In [19]:
```
mh = df[df['State/UTs']=='Goa']
```

In [20]:
```
mh['Dose1'].sum()
```

Out[20]: 1355046

In [21]:
```
for state in states:
    temp=df[df['State/UTs']==state]
    print(state,temp['Dose1'].sum())
```

```
Andaman And Nicobar 313284
Andhra Pradesh 40645695
Arunachal Pradesh 861396
Assam 22550941
Bihar 62956601
Chandigarh 1090035
Chhattisgarh 18956734
Dadra And Nagar Haveli And Daman And Diu 730855
Delhi 16605099
Goa 1355046
Gujarat 49324964
Haryana 21963352
Himachal Pradesh 6042660
Jammu And Kashmir 9942707
Jharkhand 21310378
Karnataka 50032922
Kerala 27017714
Ladakh 219604
Lakshadweep 56914
Madhya Pradesh 54143863
Maharashtra 84665105
Manipur 1464399
Meghalaya 1332466
Mizoram 785860
Nagaland 837969
Odisha 31454279
Puducherry 913046
Punjab 22361633
Rajasthan 51115413
Sikkim 539929
Tamil Nadu 56671366
Telangana 29616909
Tripura 2659018
Uttar Pradesh 154096960
Uttarakhand 8183361
West Bengal 67305396
```

In [24]:
```
# First dose vaccinated statewise
first_dose = df[["State/UTs", "Dose1"]]
print(first_dose)
```

	State/UTs	Dose1
0	Andaman And Nicobar	313284
1	Andhra Pradesh	40645695
2	Arunachal Pradesh	861396
3	Assam	22550941
4	Bihar	62956601
5	Chandigarh	1090035
6	Chhattisgarh	18956734
7	Dadra And Nagar Haveli And Daman And Diu	730855
8	Delhi	16605099
9	Goa	1355046
10	Gujarat	49324964
11	Haryana	21963352
12	Himachal Pradesh	6042660
13	Jammu And Kashmir	9942707
14	Jharkhand	21310378
15	Karnataka	50032922
16	Kerala	27017714
17	Ladakh	219604
18	Lakshadweep	56914
19	Madhya Pradesh	54143863
20	Maharashtra	84665105
21	Manipur	1464399
22	Meghalaya	1332466
23	Mizoram	785860
24	Nagaland	837969
25	Odisha	31454279
26	Puducherry	913046
27	Punjab	22361633
28	Rajasthan	51115413
29	Sikkim	539929
30	Tamil Nadu	56671366
31	Telangana	29616909
32	Tripura	2659018
33	Uttar Pradesh	154096960
34	Uttarakhand	8183361
35	West Bengal	67305396

In [25]:
```
# Second dose vaccinated statewise
second_dose = df[["State/UTs", "Dose 2"]]
print(second_dose)
```

	State/UTs	Dose 2
0	Andaman And Nicobar	320383
1	Andhra Pradesh	43555744
2	Arunachal Pradesh	748505
3	Assam	20575569
4	Bihar	59160917
5	Chandigarh	921251
6	Chhattisgarh	18537851
7	Dadra And Nagar Haveli And Daman And Diu	595090
8	Delhi	14356077
9	Goa	1224544
10	Gujarat	49448078
11	Haryana	18749584
12	Himachal Pradesh	5783693
13	Jammu And Kashmir	10388596
14	Jharkhand	16112704
15	Karnataka	50520795
16	Kerala	23803189
17	Ladakh	187095
18	Lakshadweep	56019
19	Madhya Pradesh	54061656
20	Maharashtra	71650189
21	Manipur	1226336
22	Meghalaya	1025463
23	Mizoram	669572
24	Nagaland	684747
25	Odisha	29961065
26	Puducherry	802234
27	Punjab	19621018
28	Rajasthan	46586810
29	Sikkim	509134
30	Tamil Nadu	53532301
31	Telangana	29076857
32	Tripura	2328968
33	Uttar Pradesh	147866674
34	Uttarakhand	7949246
35	West Bengal	61606895

In [26]:
```
df.head(4)
```

Out[26]:

	State/UTs	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18	Dose 1 12-14	D
0	Andaman And Nicobar	991264	313284	320383	19208	18860	15124	
1	Andhra Pradesh	110957430	40645695	43555744	2535344	2527613	1523375	14
2	Arunachal Pradesh	1924584	861396	748505	59100	44869	40852	
3	Assam	50335778	22550941	20575569	1262520	972402	999552	6

In [27]:
```
df.tail(3)
```

Out[27]:

	State/UTs	Total Vaccination Doses	Dose1	Dose 2	Dose 1 15-18	Dose 2 15-18	Dos 12
33	Uttar Pradesh	392011174	154096960	147866674	14193665	13227415	8709
34	Uttarakhand	20143654	8183361	7949246	532982	467836	402
35	West Bengal	156100370	67305396	61606895	3599987	3041540	2622

In [ ]:

This notebook was converted with convert.ploomber.io