

assignment1

August 30, 2023

```
[1]: import pandas as pd
```

```
[2]: df = pd.read_csv('./dataset.csv')
```

```
[3]: df.info
```

```
[3]: <bound method DataFrame.info of          Class  Year      Region  Status  CTSA
GOVT  GOVT AIDED  INDEPENDENT  \
0      12  2023      Ajmer  Regd      0    4533      0      86178
1      12  2023      Ajmer  Appd      0    4524      0      85839
2      12  2023  Bhubaneswar  Regd    103    7746      0      69835
3      12  2023  Bhubaneswar  Appd    101    7688      0      69506
4      12  2023  Chandigarh  Regd      0   13060     55      89637
5      12  2023  Chandigarh  Appd      0   13025     55      89317
6      12  2023  Delhi East  Regd      0  100216   6420      64953
7      12  2023  Delhi East  Appd      0   99566   6393      64774
8      12  2023      Pune  Regd      0    1535      0      22801
9      12  2023      Pune  Appd      0    1534      0      22742
10     12  2023   Guwahati  Regd      0   20672   102      20768
11     12  2023   Guwahati  Appd      0   20518   101      20601
12     12  2023   Panchkula  Regd     38     357      0     118675
13     12  2023   Panchkula  Appd     38     357      0     118046
14     12  2023   Bengaluru  Regd     93      70      0     12262
15     12  2023   Bengaluru  Appd     92      70      0     12214
16     12  2023     Bhopal  Regd      0    3180      0     60352
17     12  2023     Bhopal  Appd      0    3138      0     60136
18     12  2023     Chennai  Regd      0    3565      0     67799
19     12  2023     Chennai  Appd      0    3552      0     67700
20     12  2023     Noida  Regd      0     278     921    100688
21     12  2023     Noida  Appd      0     272     920     99746
22     12  2023     Patna  Regd      0      84      0     84716
23     12  2023     Patna  Appd      0      83      0     83962
24     12  2023  Prayagraj  Regd      0   1336      0    131729
25     12  2023  Prayagraj  Appd      0   1272      0    130263
26     12  2023  Trivandrum  Regd      0      82      0     33500
27     12  2023  Trivandrum  Appd      0      82      0     33462
28     12  2023   Dehradun  Regd    164   1555     22     62473
```

29	12	2023	Dehradun	Appd	162	1552	22	62094
30	12	2023	Delhi West	Regd	0	69504	7775	40461
31	12	2023	Delhi West	Appd	0	69109	7743	40291

	JNV	KV
0	3741	7736
1	3730	7725
2	3823	11465
3	3809	11431
4	2549	5861
5	2537	5844
6	81	6669
7	81	6661
8	1673	4859
9	1662	4849
10	4536	6071
11	4481	6047
12	2231	3615
13	2225	3607
14	1901	2363
15	1894	2361
16	3640	7807
17	3629	7794
18	1646	6713
19	1642	6701
20	1069	4480
21	1060	4471
22	3714	5409
23	3669	5398
24	3184	8680
25	3152	8666
26	973	3666
27	972	3661
28	1120	4312
29	1117	4307
30	65	2872
31	65	2872 >

```
[4]: df.describe
```

```
[4]: <bound method NDFrame.describe of
GOVT GOVT AIDED INDEPENDENT \
0 12 2023 Ajmer Regd 0 4533 0 86178
1 12 2023 Ajmer Appd 0 4524 0 85839
2 12 2023 Bhubaneswar Regd 103 7746 0 69835
3 12 2023 Bhubaneswar Appd 101 7688 0 69506
4 12 2023 Chandigarh Regd 0 13060 55 89637
```

5	12	2023	Chandigarh	Appd	0	13025	55	89317
6	12	2023	Delhi East	Regd	0	100216	6420	64953
7	12	2023	Delhi East	Appd	0	99566	6393	64774
8	12	2023	Pune	Regd	0	1535	0	22801
9	12	2023	Pune	Appd	0	1534	0	22742
10	12	2023	Guwahati	Regd	0	20672	102	20768
11	12	2023	Guwahati	Appd	0	20518	101	20601
12	12	2023	Panchkula	Regd	38	357	0	118675
13	12	2023	Panchkula	Appd	38	357	0	118046
14	12	2023	Bengaluru	Regd	93	70	0	12262
15	12	2023	Bengaluru	Appd	92	70	0	12214
16	12	2023	Bhopal	Regd	0	3180	0	60352
17	12	2023	Bhopal	Appd	0	3138	0	60136
18	12	2023	Chennai	Regd	0	3565	0	67799
19	12	2023	Chennai	Appd	0	3552	0	67700
20	12	2023	Noida	Regd	0	278	921	100688
21	12	2023	Noida	Appd	0	272	920	99746
22	12	2023	Patna	Regd	0	84	0	84716
23	12	2023	Patna	Appd	0	83	0	83962
24	12	2023	Prayagraj	Regd	0	1336	0	131729
25	12	2023	Prayagraj	Appd	0	1272	0	130263
26	12	2023	Trivandrum	Regd	0	82	0	33500
27	12	2023	Trivandrum	Appd	0	82	0	33462
28	12	2023	Dehradun	Regd	164	1555	22	62473
29	12	2023	Dehradun	Appd	162	1552	22	62094
30	12	2023	Delhi West	Regd	0	69504	7775	40461
31	12	2023	Delhi West	Appd	0	69109	7743	40291

	JNV	KV
0	3741	7736
1	3730	7725
2	3823	11465
3	3809	11431
4	2549	5861
5	2537	5844
6	81	6669
7	81	6661
8	1673	4859
9	1662	4849
10	4536	6071
11	4481	6047
12	2231	3615
13	2225	3607
14	1901	2363
15	1894	2361
16	3640	7807
17	3629	7794

```
18 1646 6713
19 1642 6701
20 1069 4480
21 1060 4471
22 3714 5409
23 3669 5398
24 3184 8680
25 3152 8666
26 973 3666
27 972 3661
28 1120 4312
29 1117 4307
30 65 2872
31 65 2872 >
```

```
[15]: region = df['Status']
      print(region)
```

```
0    Regd
1    Appd
2    Regd
3    Appd
4    Regd
5    Appd
6    Regd
7    Appd
8    Regd
9    Appd
10   Regd
11   Appd
12   Regd
13   Appd
14   Regd
15   Appd
16   Regd
17   Appd
18   Regd
19   Appd
20   Regd
21   Appd
22   Regd
23   Appd
24   Regd
25   Appd
26   Regd
27   Appd
28   Regd
```

```

29     Appd
30     Regd
31     Appd
Name: Status, dtype: object

```

```
[16]: df.isnull()
```

```

[16]:      Class  Year  Region  Status  CTSA  GOVT  GOVT AIDED  INDEPENDENT  \
0  False  False  False  False  False  False  False  False  False
1  False  False  False  False  False  False  False  False  False
2  False  False  False  False  False  False  False  False  False
3  False  False  False  False  False  False  False  False  False
4  False  False  False  False  False  False  False  False  False
5  False  False  False  False  False  False  False  False  False
6  False  False  False  False  False  False  False  False  False
7  False  False  False  False  False  False  False  False  False
8  False  False  False  False  False  False  False  False  False
9  False  False  False  False  False  False  False  False  False
10 False  False  False  False  False  False  False  False  False
11 False  False  False  False  False  False  False  False  False
12 False  False  False  False  False  False  False  False  False
13 False  False  False  False  False  False  False  False  False
14 False  False  False  False  False  False  False  False  False
15 False  False  False  False  False  False  False  False  False
16 False  False  False  False  False  False  False  False  False
17 False  False  False  False  False  False  False  False  False
18 False  False  False  False  False  False  False  False  False
19 False  False  False  False  False  False  False  False  False
20 False  False  False  False  False  False  False  False  False
21 False  False  False  False  False  False  False  False  False
22 False  False  False  False  False  False  False  False  False
23 False  False  False  False  False  False  False  False  False
24 False  False  False  False  False  False  False  False  False
25 False  False  False  False  False  False  False  False  False
26 False  False  False  False  False  False  False  False  False
27 False  False  False  False  False  False  False  False  False
28 False  False  False  False  False  False  False  False  False
29 False  False  False  False  False  False  False  False  False
30 False  False  False  False  False  False  False  False  False
31 False  False  False  False  False  False  False  False  False

      JNV    KV
0  False  False
1  False  False
2  False  False
3  False  False
4  False  False

```

5	False	False
6	False	False
7	False	False
8	False	False
9	False	False
10	False	False
11	False	False
12	False	False
13	False	False
14	False	False
15	False	False
16	False	False
17	False	False
18	False	False
19	False	False
20	False	False
21	False	False
22	False	False
23	False	False
24	False	False
25	False	False
26	False	False
27	False	False
28	False	False
29	False	False
30	False	False
31	False	False