```
import pandas as pd
import numpy as np
```

```
df = pd.read_csv(r"dataset_Facebook.csv", sep=";")
df
```

	Page total likes	Type	Category	Post Month	Post Weekday	Post Hour	Paid	Lifetime Post Total Reach	Lifetime Post Total Impressions	Lifetime Engaged Users	Lifetime Post Consumers	Lifetime Post Consumptions	Lifetime Post Impressions by people who have liked your Page	Lifetime Post reach by people who like your Page
0	139441	Photo	2	12	4	3	0.0	2752	5091	178	109	159	3078	1640
1	139441	Status	2	12	3	10	0.0	10460	19057	1457	1361	1674	11710	6112
2	139441	Photo	3	12	3	3	0.0	2413	4373	177	113	154	2812	1503
3	139441	Photo	2	12	2	10	1.0	50128	87991	2211	790	1119	61027	32048
4	139441	Photo	2	12	2	3	0.0	7244	13594	671	410	580	6228	3200
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
495	85093	Photo	3	1	7	2	0.0	4684	7536	733	708	985	4750	2876
496	81370	Photo	2	1	5	8	0.0	3480	6229	537	508	687	3961	2104
497	81370	Photo	1	1	5	2	0.0	3778	7216	625	572	795	4742	2388
498	81370	Photo	3	1	4	11	0.0	4156	7564	626	574	832	4534	2452
499	81370	Photo	2	1	4	4	NaN	4188	7292	564	524	743	3861	2200

500 rows × 19 columns

```
df.describe()
```

	Page total likes	Category	Post Month	Post Weekday	Post Hour	Paid	Lifetime Post Total Reach	Lifetime Post Total Impressions	Lifetime Engaged Users	Lifetime Post Consumers	Con
count	500.000000	500.000000	500.000000	500.000000	500.000000	499.000000	500.00000	5.000000e+02	500.000000	500.000000	5
mean	123194.176000	1.880000	7.038000	4.150000	7.840000	0.278557	13903.36000	2.958595e+04	920.344000	798.772000	1
std	16272.813214	0.852675	3.307936	2.030701	4.368589	0.448739	22740.78789	7.680325e+04	985.016636	882.505013	2
min	81370.000000	1.000000	1.000000	1.000000	1.000000	0.000000	238.00000	5.700000e+02	9.000000	9.000000	
25%	112676.000000	1.000000	4.000000	2.000000	3.000000	0.000000	3315.00000	5.694750e+03	393.750000	332.500000	5
50%	129600.000000	2.000000	7.000000	4.000000	9.000000	0.000000	5281.00000	9.051000e+03	625.500000	551.500000	8
75%	136393.000000	3.000000	10.000000	6.000000	11.000000	1.000000	13168.00000	2.208550e+04	1062.000000	955.500000	1
max	139441.000000	3.000000	12.000000	7.000000	23.000000	1.000000	180480.00000	1.110282e+06	11452.000000	11328.000000	19

```
df.shape
```

```
(500, 19)
```

```
df.columns
```

```
Index(['Page total likes', 'Type', 'Category', 'Post Month', 'Post Weekday',
       'Post Hour', 'Paid', 'Lifetime Post Total Reach',
       'Lifetime Post Total Impressions', 'Lifetime Engaged Users',
       'Lifetime Post Consumers', 'Lifetime Post Consumptions',
```

```
       'Lifetime Post Impressions by people who have liked your Page',
       'Lifetime Post reach by people who like your Page',
       'Lifetime People who have liked your Page and engaged with your post',
       'comment', 'like', 'share', 'Total Interactions'],
      dtype='object')
```

```
df1 = df[['Page total likes','Category','Post Month','Post Weekday']].loc[0:15]
df1
```

	Page total likes	Category	Post Month	Post Weekday
0	139441	2	12	4
1	139441	2	12	3
2	139441	3	12	3
3	139441	2	12	2
4	139441	2	12	2
5	139441	2	12	1
6	139441	3	12	1
7	139441	3	12	7
8	139441	2	12	7
9	139441	3	12	6
10	139441	2	12	5
11	139441	2	12	5
12	139441	2	12	5
13	139441	2	12	5
14	138414	2	12	4
15	138414	2	12	3

```
df2 = df[['Page total likes','Category','Post Month','Post Weekday']].loc[16:30]
df2
```

	Page total likes	Category	Post Month	Post Weekday
16	138414	3	12	3
17	138414	1	12	2
18	138414	3	12	2
19	138414	3	12	1
20	138414	2	12	1
21	138414	1	12	7
22	138414	1	12	7
23	138414	3	12	7
24	138414	2	12	6
25	138458	2	12	6
26	138458	2	12	5
27	138458	3	12	5
28	138895	2	12	5
29	138895	1	12	4
30	138895	2	12	4

```
df3 = df[['Page total likes','Category','Post Month','Post Weekday']].loc[31:50]
df3
```

	Page total likes	Category	Post Month	Post Weekday
31	138895	2	12	3
32	138895	3	12	3
33	138895	3	12	2
34	138895	1	12	2
35	138895	2	12	1
36	138895	3	12	1
37	138895	1	12	7
38	138895	2	12	7
39	138895	1	12	7
40	138895	2	12	6
41	138895	1	12	6
42	138353	1	12	5
43	138353	1	12	5
44	138353	1	12	4
45	138353	1	12	4
46	138353	1	12	3
47	138353	1	12	3
48	138353	1	12	2
49	138353	1	12	2
50	138353	2	11	1

```
merging = pd.concat([df1, df2, df3])
merging
```

	Page total likes	Category	Post Month	Post Weekday
0	139441	2	12	4
1	139441	2	12	3
2	139441	3	12	3
3	139441	2	12	2
4	139441	2	12	2
5	139441	2	12	1
6	139441	3	12	1
7	139441	3	12	7
8	139441	2	12	7
9	139441	3	12	6
10	139441	2	12	5
11	139441	2	12	5
12	139441	2	12	5
13	139441	2	12	5
14	138414	2	12	4
15	138414	2	12	3
16	138414	3	12	3
17	138414	1	12	2
18	138414	3	12	2
19	138414	3	12	1
20	138414	2	12	1
21	138414	1	12	7
22	138414	1	12	7
23	138414	3	12	7
24	138414	2	12	6
25	138458	2	12	6
26	138458	2	12	5
27	138458	3	12	5
28	138895	2	12	5
29	138895	1	12	4
30	138895	2	12	4
31	138895	2	12	3
32	138895	3	12	3
33	138895	3	12	2
34	138895	1	12	2
35	138895	2	12	1
36	138895	3	12	1
37	138895	1	12	7
38	138895	2	12	7
39	138895	1	12	7
40	138895	2	12	6
41	138895	1	12	6
42	138353	1	12	5
43	138353	1	12	5
44	138353	1	12	4
45	138353	1	12	4

46	138353	1	12	3
47	138353	1	12	3
48	138353	1	12	2
49	138353	1	12	2
50	138353	2	11	1

```
sort_values = df.sort_values('Page total likes', ascending=False)
sort_values
```

	Page total likes	Type	Category	Post Month	Post Weekday	Post Hour	Paid	Lifetime Post Total Reach	Lifetime Post Total Impressions	Lifetime Engaged Users	Lifetime Post Consumers	Lifetime Post Consumptions	Lifetime Post Impressions by people who have liked your Page	Lifetime Post reach by people who like your Page
0	139441	Photo	2	12	4	3	0.0	2752	5091	178	109	159	3078	1640
8	139441	Status	2	12	7	3	0.0	11844	22538	1530	1407	1692	15220	7912
1	139441	Status	2	12	3	10	0.0	10460	19057	1457	1361	1674	11710	6112
12	139441	Photo	2	12	5	10	0.0	2847	5133	193	115	133	3779	2072
11	139441	Photo	2	12	5	10	0.0	3112	5590	208	127	145	3887	2174
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
495	85093	Photo	3	1	7	2	0.0	4684	7536	733	708	985	4750	2876
496	81370	Photo	2	1	5	8	0.0	3480	6229	537	508	687	3961	2104
497	81370	Photo	1	1	5	2	0.0	3778	7216	625	572	795	4742	2388
498	81370	Photo	3	1	4	11	0.0	4156	7564	626	574	832	4534	2452
499	81370	Photo	2	1	4	4	NaN	4188	7292	564	524	743	3861	2200

500 rows × 19 columns

```
transposing = df.transpose()
transposing
```