```
import pandas as pd
import seaborn as sb
facebook = pd.read csv("dataset Facebook.csv", sep=";")
facebook
     Page total likes Type Category Post Month Post Weekday
Post Hour \
               139441
                        Photo
                                       2
                                                  12
3
1
               139441 Status
                                       2
                                                  12
                                                                 3
10
2
               139441 Photo
                                       3
                                                  12
                                                                 3
3
3
               139441
                        Photo
                                                  12
                                                                 2
                                       2
10
               139441
                                                  12
                                                                 2
4
                        Photo
                                       2
3
. .
. . .
                85093
495
                        Photo
                                       3
                                                   1
                                                                 7
2
496
                81370
                                       2
                                                                 5
                        Photo
8
497
                                                                 5
                81370
                        Photo
2
498
                81370
                        Photo
                                       3
                                                                 4
11
499
                                                                 4
                81370
                        Photo
4
     Paid Lifetime Post Total Reach Lifetime Post Total Impressions
0
      0.0
                                 2752
                                                                  5091
      0.0
                                10460
                                                                 19057
2
      0.0
                                2413
                                                                  4373
                                                                 87991
3
      1.0
                                50128
      0.0
                                 7244
                                                                 13594
                                                                    . . .
495
      0.0
                                 4684
                                                                  7536
496
      0.0
                                 3480
                                                                  6229
497
                                 3778
      0.0
                                                                  7216
```

```
498
      0.0
                                   4156
                                                                       7564
499
      NaN
                                   4188
                                                                       7292
     Lifetime Engaged Users
                               Lifetime Post Consumers \
0
                          178
                                                     109
1
                         1457
                                                    1361
2
                          177
                                                     113
3
                         2211
                                                     790
4
                          671
                                                     410
                                                     . . .
495
                          733
                                                     708
496
                          537
                                                     508
497
                          625
                                                     572
498
                          626
                                                     574
499
                          564
                                                     524
     Lifetime Post Consumptions \
0
                              159
1
                             1674
2
                              154
3
                             1119
4
                              580
495
                              985
496
                              687
497
                              795
498
                              832
499
                              743
     Lifetime Post Impressions by people who have liked your Page \
0
                                                      3078
1
                                                     11710
2
                                                      2812
3
                                                     61027
4
                                                      6228
                                                      4750
495
496
                                                      3961
497
                                                      4742
498
                                                      4534
499
                                                      3861
     Lifetime Post reach by people who like your Page \
0
                                                     1640
1
                                                     6112
2
                                                     1503
3
                                                    32048
```

```
4
                                                      3200
495
                                                      2876
496
                                                      2104
497
                                                      2388
498
                                                      2452
499
                                                      2200
     Lifetime People who have liked your Page and engaged with your
post \
                                                        119
                                                       1108
1
2
                                                        132
3
                                                       1386
                                                        396
                                                        . . .
495
                                                        392
496
                                                        301
497
                                                        363
498
                                                        370
499
                                                        316
                               Total Interactions
                 like
     comment
                        share
0
                 79.0
                         17.0
                                                100
            4
1
            5
                130.0
                         29.0
                                                164
2
            0
                 66.0
                         14.0
                                                 80
3
                                               1777
           58
               1572.0
                        147.0
4
           19
                325.0
                         49.0
                                                393
            5
                         26.0
                                                 84
495
                 53.0
496
            0
                 53.0
                         22.0
                                                 75
497
            4
                 93.0
                         18.0
                                                115
            7
498
                 91.0
                         38.0
                                                136
            0
                 91.0
                                                119
499
                         28.0
[500 rows x 19 columns]
facebook.shape
(500, 19)
```

```
facebook.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')
facebook.head()
   Page total likes Type Category Post Month Post Weekday Post
Hour \
                                    2
                                                12
                                                               4
             139441 Photo
3
                                    2
                                                12
                                                               3
1
             139441 Status
10
2
             139441 Photo
                                    3
                                                12
                                                               3
3
3
                      Photo
                                    2
                                                12
                                                               2
             139441
10
                                                12
                                                               2
4
             139441
                      Photo
                                    2
3
         Lifetime Post Total Reach
   Paid
                                    Lifetime Post Total Impressions \
0
    0.0
                              2752
                                                                5091
1
    0.0
                             10460
                                                               19057
2
    0.0
                              2413
                                                                4373
3
    1.0
                             50128
                                                               87991
4
    0.0
                              7244
                                                               13594
   Lifetime Engaged Users Lifetime Post Consumers \
0
                      178
                                                109
1
                     1457
                                               1361
2
                      177
                                                113
3
                     2211
                                                790
4
                      671
                                                410
   Lifetime Post Consumptions \
0
                          159
                         1674
1
2
                          154
3
                         1119
4
                          580
```

```
Lifetime Post Impressions by people who have liked your Page \
0
                                                 3078
1
                                                11710
2
                                                 2812
3
                                                61027
4
                                                 6228
   Lifetime Post reach by people who like your Page \
0
                                                1640
1
                                                6112
2
                                                1503
3
                                               32048
4
                                                3200
   Lifetime People who have liked your Page and engaged with your post
0
                                                  119
1
                                                 1108
2
                                                  132
                                                 1386
                                                  396
                           Total Interactions
   comment
              like
                    share
              79.0
0
                     17.0
         4
                                           100
         5
             130.0
                     29.0
                                           164
1
2
              66.0
                     14.0
                                            80
         0
3
            1572.0
        58
                    147.0
                                          1777
        19
             325.0
                     49.0
                                           393
facebook.tail()
     Page total likes Type Category Post Month Post Weekday Post
Hour \
495
                85093 Photo
                                      3
                                                                 7
496
                                      2
                                                                 5
                81370 Photo
8
497
                                                                 5
                81370 Photo
                                      1
2
498
                81370 Photo
                                      3
                                                                 4
11
499
                                                                 4
                81370 Photo
                                      2
4
     Paid Lifetime Post Total Reach Lifetime Post Total Impressions
```

| 495 | 0.0 | 4684 | 7536 |
|---------------------------------|---------------|--|------|
| 496 | 0.0 | 3480 | 6229 |
| 497 | 0.0 | 3778 | 7216 |
| 498 | 0.0 | 4156 | 7564 |
| 499 | NaN | 4188 | 7292 |
| 495 496 497 498 499 | Lifetime | Engaged Users Lifetime Post Consumers \ 733 | |
| 495 496 497 498 499 | Lifetime | Post Consumptions \ 985 687 795 832 743 | |
| 495 496 497 498 499 | Lifetime | Post Impressions by people who have liked your Page 4750 3961 4742 4534 3861 | ge \ |
| 495 496 497 498 499 | Lifetime | Post reach by people who like your Page \ 2876 2104 2388 2452 2200 | |
| post 495 | Lifetime \ | People who have liked your Page and engaged with y | our/ |
| 496 | | 301 | |
| 497 | | 363 | |
| 498 | | 370 | |
| 499 | | 316 | |
| | | | |

| comment like share Total Interactions 495 | | | | | | | | |
|---|--|--|---|-------------------------------|--------------------|-----------|------------------------|--|
| Page total likes int64 Type object Category int64 Post Month int64 Post Weekday int64 Post Hour int64 Paid float64 Lifetime Post Total Reach int64 Lifetime Engaged Users int64 Lifetime Post Consumers int64 Lifetime Post Consumptions int64 Lifetime Post Total Impressions by people who have liked your Page int64 Lifetime Post Total Impressions by people who have liked your Page int64 Lifetime Post Consumptions int64 Lifetime Post reach by people who like your Page int64 Lifetime Post reach by people who like your Page int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post | 495 496 497 498 | 5 5 0 5 4 9 7 9 | 53.0 53.0 93.0 91.0 | 26.0 22.0 18.0 38.0 | Total | Interact | 84 75 115 136 | |
| int64 Type object Category int64 Post Month int64 Post Weekday int64 Post Weekday int64 Post Hour int64 Paid float64 Lifetime Post Total Reach int64 Lifetime Post Total Impressions int64 Lifetime Engaged Users int64 Lifetime Post Consumers int64 Lifetime Post Consumptions int64 Lifetime Post reach by people who have liked your Page int64 Lifetime Post reach by people who like your Page int64 Lifetime Post reach by people who like your Page int64 Lifetime Post reach by people who like your Page int64 Lifetime Post reach by people who like your Page int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post int64 Lifetime People who have liked your Page and engaged with your post | facebook.d | types | S | | | | | |
| Total Interactions int64 dtype: object | Page total int64 Type object Category int64 Post Month int64 Post Weekd int64 Post Hour int64 Paid float64 Lifetime Pint64 Lif | like like like lost l | Total Total Ed Use Consum Consum Impres reach e who | Impress rs ers ptions sions b | oy peop ole who | o like yo | ır Page | |

| facebook.descr | ibe() | | | | |
|--|--|--|------------------------------------|--|------|
| | tal likes | Category | Post Month | Post Weekday | Post |
| | 00.000000 | 500.000000 | 500.000000 | 500.000000 | |
| | 94.176000 | 1.880000 | 7.038000 | 4.150000 | |
| 7.840000 std 162 | 72.813214 | 0.852675 | 3.307936 | 2.030701 | |
| 4.368589 min 813 | 70.000000 | 1.000000 | 1.000000 | 1.000000 | |
| 1.000000 25% 1126 | 76.000000 | 1.000000 | 4.000000 | 2.000000 | |
| 3.000000 | 00.000000 | 2.000000 | 7.000000 | 4.000000 | |
| 9.000000 | 93.000000 | 3.000000 | 10.000000 | | |
| 11.000000 | | | | 6.000000 | |
| max 1394 23.000000 | 41.000000 | 3.000000 | 12.000000 | 7.000000 | |
| | aid Lifet: | ime Post Tot | al Reach Li | fetime Post Tot | al |
| Impressions \count 499.000 | | 5 | 00.00000 | | |
| 5.000000e+02 mean 0.278 | 557 | 139 | 03.36000 | | |
| 2.958595e+04 std 0.448 | 739 | 227 | 40.78789 | | |
| 7.680325e+04 min 0.000 | 000 | 2 | 38.00000 | | |
| 5.700000e+02 25% 0.000 | | | 15.00000 | | |
| 5.694750e+03 50% 0.000 | | | 281.00000 | | |
| 9.051000e+03 | | | .68.00000 | | |
| 2.208550e+04 | | | | | |
| max 1.000 1.110282e+06 | 000 | 1804 | 80.00000 | | |
| Lifetim count mean std min 25% 50% 75% max | e Engaged (500.00 920.34 985.00 9.00 393.75 625.50 1062.00 | 90000 44000 16636 90000 50000 90000 | 798. 882. 9. 332. 551. | 000000 772000 505013 000000 500000 500000 | |
| | | | | | |

| count mean std min 25% 50% 75% max | Lifetime Po | 500.000000 1415.130000 2000.594118 9.000000 509.250000 851.000000 1463.000000 19779.000000 | \ | | |
|---|-------------|---|------------|--|--------------|
| count mean std min 25% 50% 75% max | Lifetime Po | ost Impressions | by people | who have liked 5.000000e+02 1.676638e+04 5.979102e+04 5.670000e+02 3.969750e+03 6.255500e+03 1.486050e+04 1.107833e+06 | your Page \ |
| count mean std min 25% 50% 75% max | Lifetime Po | est reach by peop | ole who li | 1ke your Page 500.000000 6585.488000 7682.009405 236.000000 2181.500000 3417.000000 7989.000000 51456.000000 | \ |
| post count mean std | Lifetime Pe | eople who have l | iked your | Page and engag 500.000000 609.986000 612.725618 | ed with your |
| min 25% | | | | 9.000000 291.000000 | |
| 50% | | | | 412.000000 | |
| 75% | | | | 656.250000 | |
| max | | | | 4376.000000 | |
| | comment | like | share | Total Interact | ions |

```
500.00000
                   499.000000
                               496.000000
                                                    500.000000
count
mean
        7.48200
                   177.945892
                                27.266129
                                                    212.120000
std
        21.18091
                   323.398742
                                42.613292
                                                    380.233118
         0.00000
                     0.000000
                                 0.000000
                                                      0.000000
min
25%
         1.00000
                    56.500000
                                10.000000
                                                     71.000000
50%
         3.00000
                   101.000000
                                19.000000
                                                    123.500000
75%
         7.00000
                   187.500000
                                32.250000
                                                    228.500000
       372.00000 5172.000000 790.000000
                                                   6334.000000
max
facebook.isnull().sum()
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: int64
```

```
facebook = facebook.fillna(facebook['Paid'].mode())
facebook = facebook.fillna(facebook['like'].mean())
facebook = facebook.fillna(facebook[['share']].mean())
facebook.isnull().sum()
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: int64
mean = facebook.mean(numeric_only = True)
mean
```

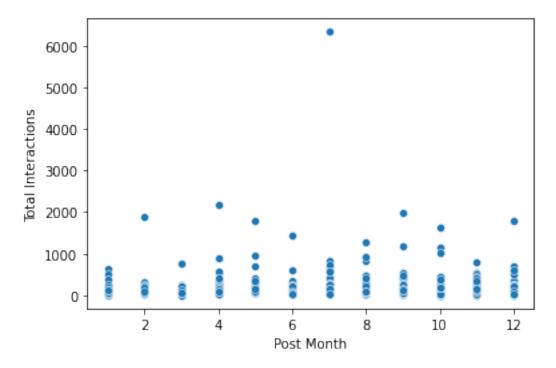
```
Page total likes
123194.176000
Category
1.880000
Post Month
7.038000
Post Weekday
4.150000
Post Hour
7.840000
Paid
0.633892
Lifetime Post Total Reach
13903.360000
Lifetime Post Total Impressions
29585.948000
Lifetime Engaged Users
920.344000
Lifetime Post Consumers
798,772000
Lifetime Post Consumptions
1415.130000
Lifetime Post Impressions by people who have liked your Page
16766.376000
Lifetime Post reach by people who like your Page
6585.488000
Lifetime People who have liked your Page and engaged with your post
609.986000
comment
7.482000
like
177.945892
share
28.471567
Total Interactions
212.120000
dtype: float64
median = facebook.median(numeric only = True)
median
Page total likes
129600.0
Category
2.0
Post Month
7.0
Post Weekday
4.0
Post Hour
```

```
9.0
Paid
0.0
Lifetime Post Total Reach
Lifetime Post Total Impressions
9051.0
Lifetime Engaged Users
625.5
Lifetime Post Consumers
551.5
Lifetime Post Consumptions
851.0
Lifetime Post Impressions by people who have liked your Page
6255.5
Lifetime Post reach by people who like your Page
3417.0
Lifetime People who have liked your Page and engaged with your post
412.0
comment
3.0
like
101.0
share
19.0
Total Interactions
123.5
dtype: float64
mode = facebook[["Page total likes"]].mode(numeric only = True)
mode
   Page total likes
             136393
mode = facebook[["Category"]].mode(numeric only = True)
mode
  Category
mode = facebook[["Post Month"]].mode(numeric only = True)
mode
   Post Month
          10
mode = facebook[["Post Weekday"]].mode(numeric only = True)
mode
```

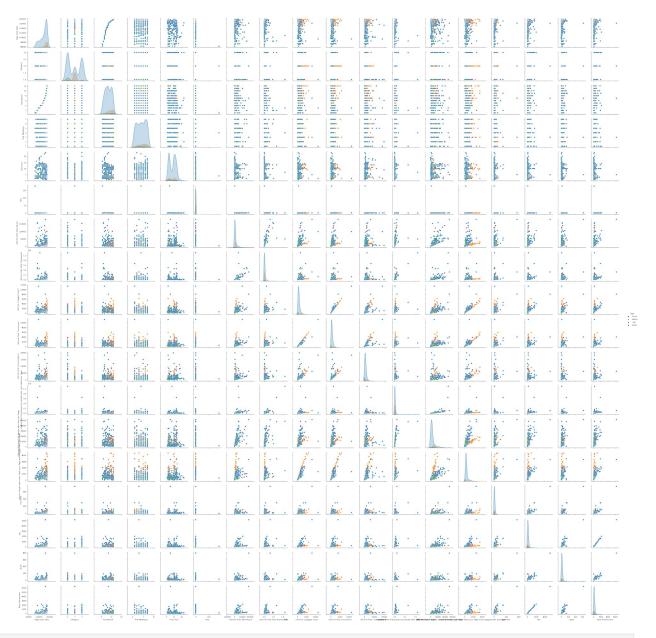
```
Post Weekday
0
mode = facebook[["Post Hour"]].mode(numeric only = True)
mode
   Post Hour
mode = facebook[["Paid"]].mode(numeric_only = True)
   Paid
0.0
mode = facebook[["Lifetime Post Total Reach"]].mode(numeric only =
True)
mode
    Lifetime Post Total Reach
0
                           677
                          2232
1
2
                          2645
3
                          2938
4
                          3322
5
                          3358
6
                          3414
7
                          3528
8
                          3754
9
                          5280
10
                          5290
11
                          6692
12
                          9528
13
                         13544
                         32208
mode = facebook[["Lifetime Post Total Impressions"]].mode(numeric only
= True)
mode
   Lifetime Post Total Impressions
0
                               4372
1
                               6503
2
                               7004
3
                               8533
4
                               8745
                              12735
mode = facebook[["Lifetime Engaged Users"]].mode(numeric_only = True)
mode
```

```
Lifetime Engaged Users
0
mode = facebook[["Lifetime Post Consumers"]].mode(numeric only = True)
mode
   Lifetime Post Consumers
0
                        182
1
                        298
2
                        319
3
                        322
4
                        335
5
                        374
6
                        482
7
                        503
8
                        513
9
                        642
mode = facebook[["Lifetime Post Impressions by people who have liked
your Page"]].mode(numeric_only = True)
mode
   Lifetime Post Impressions by people who have liked your Page
0
                                                   1210
1
                                                   1284
2
                                                   2541
3
                                                   2888
4
                                                   3675
5
                                                   4911
6
                                                   4935
7
                                                   5010
8
                                                   5732
mode = facebook[["Lifetime Post reach by people who like your
Page"]].mode(numeric_only = True)
mode
    Lifetime Post reach by people who like your Page
0
                                                    690
1
                                                    704
2
                                                   1228
3
                                                   1640
4
                                                   1674
5
                                                   1722
6
                                                   2044
7
                                                   2124
8
                                                   2162
9
                                                   2174
10
                                                   2388
11
                                                   2426
12
                                                   2604
```

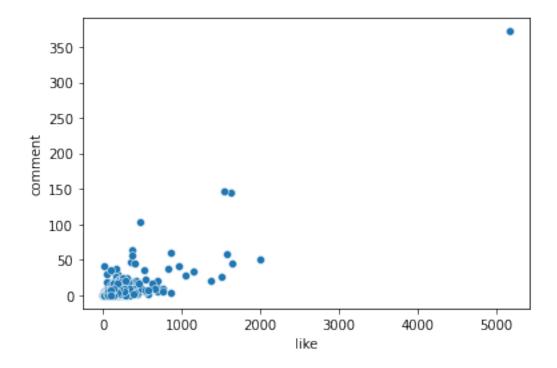
```
13
                                                  2616
14
                                                  2644
15
                                                  2660
16
                                                  2704
17
                                                  2752
18
                                                  2868
19
                                                  3114
20
                                                  3216
21
                                                  3230
22
                                                  3298
23
                                                  3768
24
                                                  5348
25
                                                  5372
26
                                                  7020
27
                                                  7800
28
                                                  8032
29
                                                  8120
30
                                                 20608
mode = facebook[["Lifetime People who have liked your Page and engaged
with your post"]].mode(numeric_only = True)
mode
   Lifetime People who have liked your Page and engaged with your post
0
                                                   403
mode = facebook[["comment"]].mode(numeric only = True)
mode
   comment
mode = facebook[["like"]].mode(numeric only = True)
mode
  like
0 98.0
mode = facebook[["share"]].mode(numeric only = True)
mode
   share
  13.0
0
1 14.0
mode = facebook[["Total Interactions"]].mode(numeric only = True)
mode
   Total Interactions
0
```



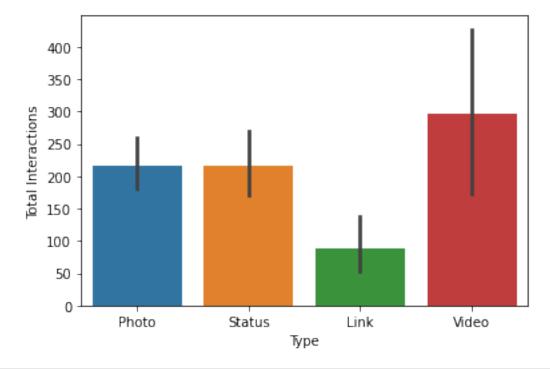
sb.pairplot(facebook, hue="Type")
<seaborn.axisgrid.PairGrid at 0x7fc08d45e040>



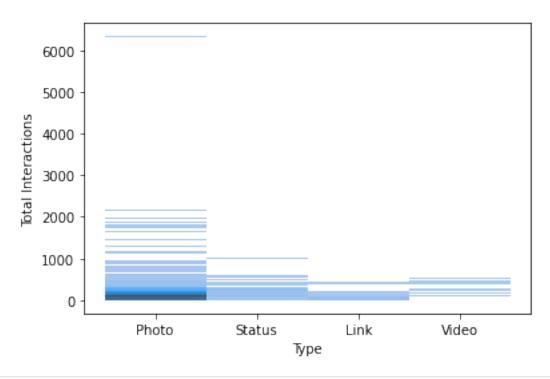
sb.scatterplot(data=facebook, x='like', y='comment')
<AxesSubplot:xlabel='like', ylabel='comment'>



sb.barplot(data=facebook, x="Type",y="Total Interactions")
<AxesSubplot:xlabel='Type', ylabel='Total Interactions'>



sb.histplot(data=facebook, x="Type",y="Total Interactions")
<AxesSubplot:xlabel='Type', ylabel='Total Interactions'>



| _ | <pre>df = facebook df.head()</pre> | | | | | | | | | | | |
|-----------------------|---|---------|---------|--|---|-----|-------|---|-------|---------------|--|---|
| Но | Page ur \ | total | likes | Туре | Catego | ry | Post | Month | Post | Weekday | Pos | t |
| 0 | u. (| - | 139441 | Photo | | 2 | | 12 | | 4 | | |
| 3 | | | 139441 | Status | | 2 | | 12 | | 3 | | |
| 10 2 | | | 139441 | Photo | | 3 | | 12 | | 3 | | |
| 3 | | - | 139441 | Photo | | 2 | | 12 | | 2 | | |
| 10 4 3 | | : | 139441 | Photo | | 2 | | 12 | | 2 | | |
| 0 1 2 3 4 | Paid 0.0 0.0 0.0 1.0 0.0 | Lifet | time Po | st Total | Reach 2752 10460 2413 50128 7244 | Lif | etime | e Post | Total | 19 4 87 | ons 091 057 373 991 594 | \ |
| 0 1 2 3 4 | Lifet | cime Er | ngaged | Users L 178 1457 177 2211 671 | ifetime | Pos | t Cor | 15umers 109 1361 113 790 410 | | | | |

```
Lifetime Post Consumptions \
0
                           159
1
                          1674
2
                           154
3
                          1119
4
                           580
   Lifetime Post Impressions by people who have liked your Page \
0
                                                  3078
1
                                                 11710
2
                                                  2812
3
                                                 61027
4
                                                  6228
   Lifetime Post reach by people who like your Page \
0
                                                 1640
                                                 6112
1
2
                                                 1503
3
                                                32048
4
                                                 3200
   Lifetime People who have liked your Page and engaged with your post
0
                                                   119
                                                  1108
1
2
                                                   132
                                                  1386
                                                   396
                            Total Interactions
              like
   comment
                     share
0
         4
              79.0
                      17.0
                                            100
1
         5
             130.0
                      29.0
                                            164
2
         0
              66.0
                      14.0
                                             80
3
        58
            1572.0
                     147.0
                                           1777
        19
             325.0
                      49.0
                                            393
sb1 = df[['Total Interactions','Lifetime Post reach by people who like
your Page', 'comment', 'share', 'Lifetime Engaged Users', 'Lifetime Post
Total Impressions', 'Category', 'Lifetime Post Consumptions']]
sb1
     Total Interactions Lifetime Post reach by people who like your
Page \
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| 1640 | | | | | | | |
|-------------|----------|---------|----------|-----------|-------|---------------------|--|
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| 2 | | | 80 | | | | |
| 1503 | | | | | | | |
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| 32048 | 3 | | | | | | |
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| 3200 | | | | | | | |
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| 495 | | | 84 | | | | |
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| 497 | | | 115 | | | | |
| 2388 | | | | | | | |
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| 2452 | | | | | | | |
| 499 | | | 119 | | | | |
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| | essions | | | | 170 | | |
| 0 5091 | 4 | 17.0 | | | 178 | | |
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| 3 | 58 | 147.0 | | | 2211 | | |
| 87991 | | | | | | | |
| 4 | 19 | 49.0 | | | 671 | | |
| 13594 | 4 | | | | | | |
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| 495 | 5 | 26.0 | | | 733 | | |
| 7536 | | | | | | | |
| 496 | 0 | 22.0 | | | 537 | | |
| 6229 | 4 | 10.0 | | | 625 | | |
| 497 | 4 | 18.0 | | | 625 | | |
| 7216 | 7 | 20.0 | | | 626 | | |
| 498 7564 | 7 | 38.0 | | | 626 | | |
| 499 | 0 | 28.0 | | | 564 | | |
| 7292 | U | 20.0 | | | 304 | | |
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[500 rows x 8 columns]
sb2 = df[['Total Interactions','Lifetime Post reach by people who like
your Page', 'comment', 'share', 'Lifetime Engaged Users', 'Lifetime Post Total Impressions', 'Category', 'Lifetime Post Consumptions', 'Page total
likes','Type']]
sb2
      Total Interactions Lifetime Post reach by people who like your
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| 7292 | | | | | |
| 0 1 2 3 4 495 496 497 498 499 [500 row sb3 = df your Pag Total Im | [['Tot e','co pressi | columns] al Intera mment','s | Post Consumptions 159 1674 154 1119 580 985 687 795 832 743 ctions','Lifetime Post egory','Lifetime Engage egory','Lifetime Post th','Post Weekday', | aged Users','Lifet st Consumptions',' | ime Post |
| sb3 | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | , , , | | |
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| | comme | | | riterille | Engaged | users | Lifetime | POST I | Otat | |
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| 4 | | 19 | 49.0 | | | 671 | | | | |
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| 7216 | | | | | | | | | | |
| 498 | | 7 | 38.0 | | | 626 | | | | |
| 7564 | | | | | | | | | | |
| 499 | | 0 | 28.0 | | | 564 | | | | |
| 7292 | | | | | | | | | | |
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| | Categ | jory | Lifet | ime Post | Consumpti | ons | Page total | likes | Type | \ |
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| 1 | | 2 | | | | 674 | | 139441 | Status | |
| 2 | | 3 | | | | 154 | | 139441 | Photo | |
| 1 2 3 4 | | 2 3 2 2 | | | | 119 | | 139441 | Photo | |
| 4 | | 2 | | | | 580 | | 139441 | Photo | |
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[500 rows x 13 columns]
sb4 = sb3[sb3['Type']=='Photo']
sb4.shape
(426, 13)
sb5 = sb3[sb2['Type']=='Status']
sb5.shape
(45, 13)
merge12 = pd.merge(sb1, sb2)
merge12
     Total Interactions Lifetime Post reach by people who like your
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| comm | | share | Lifetime | Engaged | Users | Lifetime | e Post ⁻ | Total |
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| 2 | 2 3 2 2 | | | | 154 | | 139441 | Photo |
| 2 | 2 | | | | | | | |
| 3 | 2 | | | | 119 | | 139441 | Photo |
| 4 | 2 | | | | 580 | | 139441 | Photo |
| | | | | | | | | |
| 495 | 3 | | | | 985 | | 85093 | Photo |
| 496 | 2 | | | (| 687 | | 81370 | Photo |
| 497 | 3 2 1 3 | | | | 795 | | 81370 | Photo |
| 498 | 3 | | | | 832 | | 81370 | Photo |
| 499 | 2 | | | | 743 | | 81370 | Photo |
| 733 | Z | | | | 143 | | 012/0 | 111010 |
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| [500 rows | X IO | Cocuiin | 15] | | | | | |
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merge23 = pd.merge(sb2, sb3, how = "outer")
merge23
     Total Interactions Lifetime Post reach by people who like your
Page \
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[500 rows x 13 columns]
merge12 = pd.merge(sb1, sb2, how="inner")
merge12
     Total Interactions Lifetime Post reach by people who like your
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| 497 2388 | | | | 115 | | | | | | | |
| 498 2452 | | | | 136 | | | | | | | |
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| Tmnre | commer | | | Lif | etime | e Engage | d Users | s Li | fetime | e Post | Total |
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| merge | e45 | | | | | | | | | | | | |
|--------------|----------|---------|-------|------------------|-------|--------|--------------------|-----|--------|------|-------|------|--|
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| 469 | | | 587 | | | | | | | | | | |
| 11408 | 3 | | 307 | | | | | | | | | | |
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| 470 | 1 | | 1290 | 104070 | Status | |
| 0 1 2 3 4 466 467 468 469 470 | Post Month | Post Weekday 4 3 2 2 1 1 4 5 6 3 | Post Hour 3 3 10 3 2 3 7 3 15 | | | |

[471 rows x 13 columns]

df.sort_values('Post Month', ascending=True)

| | Page | total | likes | Туре | Category | Post Month | Post Weekday |
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| Post | Hour | \ | | | | | |
| 499 | | | 81370 | Photo | 2 | 1 | 4 |
| 4 | | | | | | | |
| 475 | | | 86909 | Photo | 3 | 1 | 6 |
| 16 | | | | | | | |
| 476 | | | 86909 | Photo | 1 | 1 | 6 |
| 10 | | | | | | | |
| 477 | | | 86909 | Link | 1 | 1 | 6 |
| 4 | | | | | | | |
| 478 | | | 86909 | Photo | 3 | 1 | 5 |
| 13 | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 29 | | | 138895 | Video | 1 | 12 | 4 |
| 11 | | | | | | | |

| 28 | | 138895 | Photo | | 2 | 12 | | | 5 |
|---------------------------------|-----------------|---------|---|----------|--------|---|------|-------|---|
| 3 27 | | 138458 | Photo | | 3 | 12 | | | 5 |
| 3 38 | | 138895 | Status | | 2 | 12 | | | 7 |
| 9 | | 139441 | Photo | | 2 | 12 | | | 4 |
| 0 3 | | | | | | | | | |
| Tmnres | Paid sions \ | l Lifet | ime Pos | t Total | Reach | Lifetime | Post | Total | |
| 499 1 | 77.945892 | | | | 4188 | | | | |
| 7292 475 | 1.000000 | | | | 5754 | | | | |
| 9238 476 | 1.000000 | | | | 37088 | | | | |
| 10966 477 | 0.000000 | | | | 39600 | | | | |
| 7927 478 | 0.000000 | | | | 5536 | | | | |
| 8745 | 0.00000 | , | | | | | | | |
| | | | | | | | | | |
| 29 61262 | 1.000000 | | | | 36208 | | | | |
| 28 18264 | 0.00000 | | | | 9560 | | | | |
| 27 4306 | 0.000000 | | | | 2478 | | | | |
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| 33058 0 | 0.000000 | | | | 2752 | | | | |
| 5091 | | | | | | | | | |
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| 29 28 | | | 1141 973 | | | 1068 559 | | | |
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475
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27
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     Lifetime People who have liked your Page and engaged with your
post \
499
                                                       316
                                                       420
475
476
                                                      2021
477
                                                       167
478
                                                       483
```

| 29 | 559 |
|----|------|
| 28 | 621 |
| 27 | 166 |
| 38 | 4104 |
| 0 | 119 |
| | |

| | comment | like | share | Total Interactions |
|-----|---------|-------|-------|--------------------|
| 499 | 0 | 91.0 | 28.0 | 119 |
| 475 | 0 | 65.0 | 19.0 | 84 |
| 476 | 7 | 579.0 | 47.0 | 633 |
| 477 | 1 | 101.0 | 5.0 | 107 |
| 478 | 1 | 74.0 | 31.0 | 106 |
| | | | | |
| 29 | 18 | 143.0 | 13.0 | 174 |
| 28 | 36 | 523.0 | 63.0 | 622 |
| 27 | 0 | 100.0 | 17.0 | 117 |
| 38 | 11 | 227.0 | 31.0 | 269 |
| 0 | 4 | 79.0 | 17.0 | 100 |

[500 rows x 19 columns]

df.sort_values('Post Month',ascending = False)

| Doot | _ | | ikes | Туре | Category | Post Mon | th Po | st Weekday |
|-----------|------|-----|------|--------|----------|----------|-------|------------|
| 0 | Hour | - | 9441 | Photo | 2 | | 12 | 4 |
| 3 38 | | 138 | 8895 | Status | 2 | | 12 | 7 |
| 9 28 | | 138 | 3895 | Photo | 2 | | 12 | 5 |
| 3 29 | | 138 | 3895 | Video | 1 | | 12 | 4 |
| 11 30 | | | 3895 | Photo | 2 | | 12 | 4 |
| 2 | | 150 | | | | | | |
| | | 0.0 | | Dhata | | | 1 | |
| 478 13 | | | 5909 | Photo | 3 | | 1 | 5 |
| 477 4 | | 86 | 5909 | Link | 1 | | 1 | 6 |
| 476 10 | | 86 | 5909 | Photo | 1 | | 1 | 6 |
| 475 16 | | 86 | 5909 | Photo | 3 | | 1 | 6 |

| 499 4 | | 81370 | Photo | | 2 | 1 | | | 4 |
|---------------------------------|-----------------------------|----------|---|------------------|---------------|--|------|-------|---|
| 0 | Paid sions \ 0.000000 | Lifeti | me Post | Total | Reach 2752 | Lifetime | Post | Total | |
| 5091 38 33058 | 0.000000 | | | | 17576 | | | | |
| 28 18264 | 0.000000 | | | | 9560 | | | | |
| 29 61262 | 1.000000 | | | | 36208 | | | | |
| 30 9390 | 0.000000 | | | | 4940 | | | | |
| | | | | | | | | | |
| 478 8745 | 0.000000 | | | | 5536 | | | | |
| 477 7927 | 0.000000 | | | | 39600 | | | | |
| 476 10966 | 1.000000 | | | | 37088 | | | | |
| 475 | 1.000000 | | | | 5754 | | | | |
| 9238 499 1 7292 | 77.945892 | | | | 4188 | | | | |
| 0 38 28 29 30 | ifetime E | | sers L 178 5352 973 1141 385 | ifetime | e Post | Consumers 109 5202 559 1068 306 | \ | | |
| 478 477 476 475 499 | | | 1141 572 2728 1179 564 | | | 1099 496 2288 1143 524 | | | |
| 0 L | ifetime Po | ost Cons | umption 15 | | | | | | |
| 38 28 29 30 | | | 654 88 172 50 | 7 5 8 1 | | | | | |
| 478 477 | | | 146 58 | 1 | | | | | |

| 476 475 499 | 3183 1452 743 |
|---------------------------------|---|
| 0 38 28 29 30 | Lifetime Post Impressions by people who have liked your Page \ 3078 23135 9217 30131 5860 |
| 478 477 476 475 499 | 5225 12522 66311 6101 3861 |
| 0 38 28 29 30 | Lifetime Post reach by people who like your Page \ 1640 11792 4748 14112 2930 |
| 478 477 476 475 499 | 3098 8176 34352 3546 2200 |
| post | Lifetime People who have liked your Page and engaged with your |
| 0 | 119 |
| 38 | 4104 |
| 28 | 621 |
| 29 | 559 |
| 30 | 273 |
| | |
| 478 | 483 |
| 477 | 167 |
| 476 | 2021 |

| 475 | 420 | | |
|---|--------|-----------|--|
| 499 | 316 | | |
| | | | |
| comment like share Total Interactions | | | |
| 0 4 79.0 17.0 100 | | | |
| 38 11 227.0 31.0 269 | | | |
| 28 | | | |
| 30 33 107.0 22.0 162 | | | |
| | | | |
| 478 1 74.0 31.0 106 | | | |
| 477 1 101.0 5.0 107 476 7 579.0 47.0 633 | | | |
| 475 | | | |
| 499 0 91.0 28.0 119 | | | |
| [[00 00 0 10 00] 00 00 00 | | | |
| [500 rows x 19 columns] | | | |
| | | | |
| <pre>transpose = df.transpose()</pre> | | | |
| · | | | |
| transpose | | | |
| | 0 | 1 | |
| 2 | | | |
| Page total likes 139441 | 139441 | 139441 | |
| Type | Photo | Status | |
| Photo | | 0 10 10 0 | |
| Category | 2 | 2 | |
| 3 Post Month | 12 | 12 | |
| 12 | 12 | 12 | |
| Post Weekday | 4 | 3 | |
| 3 | _ | | |
| Post Hour 3 | 3 | 10 | |
| Paid | 0.0 | 0.0 | |
| 0.0 | 0.0 | 010 | |
| Lifetime Post Total Reach | 2752 | 10460 | |
| 2413 | F001 | 10057 | |
| Lifetime Post Total Impressions 4373 | 5091 | 19057 | |
| Lifetime Engaged Users | 178 | 1457 | |
| 177 | | | |
| Lifetime Post Consumers | 109 | 1361 | |
| 113 Lifetime Post Consumptions | 159 | 1674 | |
| TT. CTIMO 1 00 C CONSUMPCIONS | 133 | 1074 | |

| 154 Lifetime Post Impressions by people who have li | 3078 | 11710 |
|---|--------|--------|
| 2812 | | |
| Lifetime Post reach by people who like your Page 1503 | 1640 | 6112 |
| Lifetime People who have liked your Page and en | 119 | 1108 |
| comment 0 | 4 | 5 |
| like | 79.0 | 130.0 |
| 66.0 share | 17.0 | 29.0 |
| 14.0 Total Interactions | 100 | 164 |
| 80 | 100 | 104 |
| | 3 | 4 |
| 5 \ Page total likes | 139441 | 139441 |
| 139441 Type | Photo | Photo |
| Status | | |
| Category 2 | 2 | 2 |
| Post Month 12 | 12 | 12 |
| Post Weekday | 2 | 2 |
| 1 Post Hour | 10 | 3 |
| 9 Paid | 1.0 | 0.0 |
| 0.0 | | |
| Lifetime Post Total Reach 10472 | 50128 | 7244 |
| Lifetime Post Total Impressions 20849 | 87991 | 13594 |
| Lifetime Engaged Users | 2211 | 671 |
| 1191 Lifetime Post Consumers | 790 | 410 |
| 1073 Lifetime Post Consumptions | 1119 | 580 |
| 1389 | | |
| Lifetime Post Impressions by people who have li 16034 | 61027 | 6228 |
| Lifetime Post reach by people who like your Page 7852 | 32048 | 3200 |
| Lifetime People who have liked your Page and en | 1386 | 396 |
| 1016 comment | 58 | 19 |
| | | |

| 1 like | 1572.0 | 325.0 |
|---|--------|--------|
| 152.0 | 13/2.0 | 323.0 |
| share | 147.0 | 49.0 |
| 33.0 | 1777 | 202 |
| Total Interactions 186 | 1777 | 393 |
| 100 | | |
| | 6 | 7 |
| 8 \ | 100441 | 100441 |
| Page total likes 139441 | 139441 | 139441 |
| Type | Photo | Photo |
| Status | 111000 | 111000 |
| Category | 3 | 3 |
| 2 | | |
| Post Month | 12 | 12 |
| 12 Post Weekday | 1 | 7 |
| 7 | 1 | / |
| Post Hour | 3 | 9 |
| 3 | | |
| Paid | 1.0 | 1.0 |
| 0.0 Lifetime Post Total Reach | 11602 | 12720 |
| 11844 | 11692 | 13720 |
| Lifetime Post Total Impressions | 19479 | 24137 |
| 22538 | | |
| Lifetime Engaged Users | 481 | 537 |
| 1530 | 265 | 222 |
| Lifetime Post Consumers 1407 | 265 | 232 |
| Lifetime Post Consumptions | 364 | 305 |
| 1692 | | |
| Lifetime Post Impressions by people who have li | 15432 | 19728 |
| 15220 | 0220 | 11056 |
| Lifetime Post reach by people who like your Page 7912 | 9328 | 11056 |
| Lifetime People who have liked your Page and en | 379 | 422 |
| 1250 | 3.3 | 122 |
| comment | 3 | 0 |
| 0 | 242.0 | 225 6 |
| like 161.0 | 249.0 | 325.0 |
| share | 27.0 | 14.0 |
| 31.0 | 27.0 | 14.0 |
| Total Interactions | 279 | 339 |
| 192 | | |

| | 9 | | 490 |
|---|--------|-------|--------|
| 491 \ | 9 | | 430 |
| Page total likes | 139441 | | 85979 |
| 85979 Type | Photo | | Photo |
| Type Photo | PIIOLO | | FIIOLO |
| Category | 3 | | 3 |
| 3 | | | |
| Post Month | 12 | | 1 |
| 1 Post Weekday | 6 | | 6 |
| 6 | U | | U |
| Post Hour | 10 | | 11 |
| 3 | | | |
| Paid | 0.0 | | 0.0 |
| 1.0 | 4604 | | F200 |
| Lifetime Post Total Reach 6184 | 4694 | | 5280 |
| Lifetime Post Total Impressions | 8668 | | 8703 |
| 10228 | | | 0.00 |
| Lifetime Engaged Users | 280 | | 951 |
| 956 | 100 | | 011 |
| Lifetime Post Consumers 901 | 183 | | 911 |
| Lifetime Post Consumptions | 250 | | 1237 |
| 1140 | 230 | ••• | 1237 |
| Lifetime Post Impressions by people who have li | 4309 | | 5757 |
| 6085 | | | 2222 |
| Lifetime Post reach by people who like your Page 3502 | 2324 | | 3300 |
| Lifetime People who have liked your Page and en | 199 | | 431 |
| 437 | 133 | ••• | 731 |
| comment | 3 | | 1 |
| 1 | | | |
| like | 113.0 | | 79.0 |
| 105.0 share | 26.0 | | 30.0 |
| 46.0 | 20.0 | • • • | 30.0 |
| Total Interactions | 142 | | 110 |
| 152 | | | |
| | 400 | 402 | |
| 494 \ | 492 | 493 | |
| Page total likes | 85979 | 85093 | |
| 85093 | 55575 | 35055 | |
| Туре | Link | Photo | |
| Photo | - | _ | |
| Category | 1 | 3 | |
| 3 | | | |

| Post Weekday 7 5 1 7 7 7 9 1 1 2 10 9 10 9 10 9 10 9 10 9 10 9 1 | | | |
|--|--|-------|-------|
| Post Weekday 7 | Post Month | 1 | 1 |
| Post Hour 1 2 10 Paid 0.0 0.0 0.0 Paid 0.0 0.0 0.0 Lifetime Post Total Reach 45920 8412 5400 Lifetime Post Total Impressions 5808 13960 9218 Lifetime Engaged Users 753 1179 810 Lifetime Post Consumers 655 1111 756 Lifetime Post Consumptions 763 1632 1003 Lifetime Post Impressions by people who have li 15766 8632 5654 Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 Comment 0 17 10 Like 128.0 185.0 125.0 Share 9.0 55.0 497 \ Page total Interactions 137 257 Total Interactions 137 257 Total Interactions 137 257 Total Interactions 137 257 Post Month 1 1 Post Weekday 7 5 Post Weekday 7 5 Post Hour 2 8 Paid 0.0 0.0 0.0 | 1 Post Weekday | 5 | 1 |
| 10 Paid | 7 | | |
| Paid 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0. | | 11 | 2 |
| 0.0 Lifetime Post Total Reach | Paid | 0.0 | 0.0 |
| Sample S | 0.0 | | |
| Lifetime Post Total Impressions 5808 13960 9218 1179 810 753 1179 810 1175 1179 810 1175 1179 810 1175 1175 1175 1175 1175 1175 1175 11 | | 45920 | 8412 |
| ### Page total likes ### Post Weekday | | 5808 | 13960 |
| ### State | 9218 | 3000 | 13300 |
| Lifetime Post Consumers 655 1111 756 Lifetime Post Consumptions 763 1632 1003 Lifetime Post Impressions by people who have li 15766 8632 5654 Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 comment 0 17 10 11 10 128.0 185.0 128.0 185.0 128.1 185.0 128.1 185.0 128.2 185.0 128.3 185.0 128.3 185.0 128.4 185.0 128.5 185.0 128.6 185.0 128.7 185.0 | Lifetime Engaged Users | 753 | 1179 |
| 756 Lifetime Post Consumptions 763 1632 1003 Lifetime Post Impressions by people who have li 15766 8632 5654 Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 comment 0 17 10 Like 128.0 185.0 125.0 185.0 185.0 176 707 Total Interactions 137 257 176 495 496 497 \ Page total likes 85093 81370 Type Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 Post Hour 2 8 Paid 0.0 0.0 | | 655 | 1111 |
| 1003 Lifetime Post Impressions by people who have li 15766 8632 5654 Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 comment 0 17 10 11 10 128.0 185.0 128.0 185.0 125.0 125.0 125.0 126.0 127 127 128 129 129 129 129 129 129 120 120 120 120 120 120 120 120 120 120 | 756 | 033 | 1111 |
| Lifetime Post Impressions by people who have li 15766 8632 5654 Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 comment 0 17 10 like 128.0 185.0 125.0 share 9.0 55.0 41.0 Total Interactions 137 257 176 495 496 497 \ Page total likes 85093 81370 Type Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 Post Hour 2 8 Paid 0.0 0.0 | Lifetime Post Consumptions | 763 | 1632 |
| ### Description of the proof of | 1003 | 15766 | 0622 |
| Lifetime Post reach by people who like your Page 10720 5348 3230 Lifetime People who have liked your Page and en 220 699 422 comment 0 17 10 like 128.0 185.0 125.0 share 9.0 55.0 41.0 Total Interactions 137 257 176 497 \ Page total likes 85093 81370 Type Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | | 13/00 | 8032 |
| Lifetime People who have liked your Page and en 220 699 422 comment | Lifetime Post reach by people who like your Page | 10720 | 5348 |
| ### Accomment | 3230 | 220 | 600 |
| comment 0 17 10 128.0 185.0 125.0 128.0 185.0 share 9.0 55.0 41.0 137 257 Total Interactions 137 257 495 496 497 \ 495 496 498 496 496 499 496 496 499 496 496 499 496 496 497 496 496 498 85093 81370 81370 81370 81370 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 900 900 900 10 | | 220 | 699 |
| like 128.0 185.0 125.0 9.0 55.0 41.0 137 257 Total Interactions 137 257 495 496 497 \ 495 496 81370 495 81370 Type Photo Photo Photo Photo Category 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8 3 2 4 8 4 9 5 8 6 9 7 5 8 9 8 | comment | 0 | 17 |
| 125.0 share 9.0 55.0 41.0 Total Interactions 137 257 176 495 496 497 \ Page total likes 85093 81370 Type Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | 10 | | |
| Share 9.0 55.0 41.0 Total Interactions 137 257 176 495 496 497 \ Page total likes 85093 81370 Type Photo Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | | 128.0 | 185.0 |
| 41.0 Total Interactions 137 257 176 495 496 497 \ Page total likes 85093 81370 81370 Type Photo | share | 9.0 | 55.0 |
| 176 495 496 497 \ Page total likes 85093 81370 81370 Type Photo Photo Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 Post Hour 2 8 2 Paid 0.0 0.0 | 41.0 | | |
| 495 496 497 \ Page total likes 85093 81370 Type Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 Post Hour 2 8 2 Paid 0.0 0.0 | | 137 | 257 |
| 497 \ Page total likes 85093 81370 81370 Photo | 1/0 | | |
| Page total likes 85093 81370 Type Photo Photo Photo Photo Photo Category 3 2 1 1 1 Post Month 1 1 1 1 1 Post Weekday 7 5 Post Hour 2 8 2 8 Paid 0.0 0.0 | | 495 | 496 |
| 81370 Type Photo Photo Photo Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | 497 \ | 05000 | 01270 |
| Type Photo Photo Photo Photo Category 3 2 1 1 1 Post Month 1 1 1 1 1 Post Weekday 7 5 Post Hour 2 8 2 8 Paid 0.0 0.0 | | 85093 | 813/0 |
| Category 3 2 1 Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | Type | Photo | Photo |
| 1 Post Month 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Photo | | |
| Post Month 1 1 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | | 3 | 2 |
| 1 Post Weekday 7 5 5 Post Hour 2 8 2 Paid 0.0 0.0 | Post Month | 1 | 1 |
| 5 Post Hour 2 8 2 Paid 0.0 0.0 | 1 | | |
| Post Hour 2 8 2 Paid 0.0 0.0 | Post Weekday | 7 | 5 |
| 2 Paid 0.0 0.0 | | 2 | Я |
| | 2 | _ | J |
| ⊍.⊎ | Paid | 0.0 | 0.0 |
| | ⊎.⊍ | | |

| Lifetime Post Total Reach 3778 | 4684 | 3480 |
|--|-------|------------|
| Lifetime Post Total Impressions 7216 | 7536 | 6229 |
| Lifetime Engaged Users | 733 | 537 |
| 625 Lifetime Post Consumers | 708 | 508 |
| 572 Lifetime Post Consumptions | 985 | 687 |
| 795 Lifetime Post Impressions by people who have li | 4750 | 3961 |
| 4742 Lifetime Post reach by people who like your Page | 2876 | 2104 |
| 2388 Lifetime People who have liked your Page and en | 392 | 301 |
| 363 comment | 5 | 0 |
| 4 | J | U |
| like 93.0 | 53.0 | 53.0 |
| share | 26.0 | 22.0 |
| 18.0 Total Interactions | 84 | 75 |
| 115 | | |
| | 498 | 499 |
| Page total likes | 81370 | 81370 |
| Туре | Photo | Photo |
| Category | 3 | 2 |
| Post Month | 1 | 1 |
| Post Weekday | 4 | 4 |
| Post Hour | 11 | 4 |
| Paid | 0.0 | 177.945892 |
| Lifetime Post Total Reach | 4156 | 4188 |
| Lifetime Post Total Impressions | 7564 | 7292 |
| Lifetime Engaged Users | 626 | 564 |
| Lifetime Post Consumers | 574 | 524 |
| Lifetime Post Consumptions | 832 | 743 |
| | | |

| Lifetime Po | st Impressio | ns by pe | eople who hav | ve li | 4534 | 3861 |
|-----------------------------------|--------------|----------|---------------|-------------|-------------|------|
| Lifetime Po | st reach by | people v | who like you | r Page | 2452 | 2200 |
| Lifetime Pe | ople who hav | e liked | your Page ar | nd en | 370 | 316 |
| comment | | | | | 7 | 0 |
| like | | | | | 91.0 | 91.0 |
| share | | | | | 38.0 | 28.0 |
| Total Inter | actions | | | | 136 | 119 |
| [19 rows x | 500 columns] | | | | | |
| transpose.s | hape | | | | | |
| (19, 500) | | | | | | |
| pd.pivot_ta | ble(df,index | ="Type" | ,values="like | e",columns= | "Post Month | ") |
| Post Month 6 \ Type | 1 | 2 | 3 | 4 | 5 | |
| Link | 61.500000 | 114.00 | 35.333333 | 151.000000 | 46.00000 | 0 |
| NaN Photo | 134.571429 | 196.12 | 89.406250 | 179.065217 | 229.03030 | 3 |
| 134.065217 Status | NaN | NaN | 25.000000 | 447.000000 | 131.33333 | 3 |
| 88.000000 Video | NaN | NaN | NaN | NaN | Na | N |
| 204.000000 | | | | | | |
| Post Month 12 | 7 | 8 | 9 | 10 | 1 | 1 |
| Туре | | | | | | |
| Link | NaN | NaN | NaN | 66.333333 | 130.00000 | 0 |
| 53.166667 Photo | 292.113636 | 209.1 | 233.806452 | 141.815222 | 152.57894 | 7 |
| 197.258065 Status | 143.285714 | 118.5 | 180.250000 | 283.625000 | 137.00000 | 0 |
| 169.333333 Video 143.000000 | 315.000000 | NaN | 345.000000 | NaN | 204.33333 | 3 |
| | | | | | | |

```
pivots = pd.pivot_table(df,index="Category", columns="Type",
values="Paid")
pivots
Type
         Link
                   Photo Status
                                       Video
Category
           0.3
                0.286486 0.333333
                                    0.571429
2
           0.0 2.208197
                          0.236842
                                         NaN
3
           0.0 0.286667 0.000000
                                         NaN
df.stack()
     Page total likes
139441
     Type
Photo
     Category
2
     Post Month
12
     Post Weekday
4
499 Lifetime People who have liked your Page and engaged with your
post
           316
     comment
0
     like
91.0
     share
28.0
     Total Interactions
119
Length: 9500, dtype: object
df.unstack()
Page total likes
                           139441
                    1
                           139441
                    2
                           139441
                    3
                           139441
                           139441
Total Interactions
                    495
                               84
                    496
                               75
                    497
                              115
                    498
                              136
```

| | | | 499 | 119 | | | |
|---------|-------|--------|--------|-----|--|--|--|
| Length: | 9500, | dtype: | object | | | | |
| | | | | | | | |
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