In [42]:
```
import pandas as pd
df=pd.read_csv('facebookdataset.csv')
print(df.head())
```

```
    userid  age  dob_day  dob_year  dob_month  gender  tenure  friend_count
\
0  2094382   14       19      1999         11    male   266.0             0
1  1192601   14        2      1999         11  female     6.0             0
2  2083884   14       16      1999         11    male    13.0             0
3  1203168   14       25      1999         12  female    93.0             0
4  1733186   14        4      1999         12    male    82.0             0

   friendships_initiated  likes  likes_received  mobile_likes  \
0                      0      0               0             0
1                      0      0               0             0
2                      0      0               0             0
3                      0      0               0             0
4                      0      0               0             0

   mobile_likes_received  www_likes  www_likes_received
0                      0          0                   0
1                      0          0                   0
2                      0          0                   0
3                      0          0                   0
4                      0          0                   0
```

In [40]:
```
print(df.tail())
```

```
        userid  age  dob_day  dob_year  dob_month  gender  tenure  \
98998  1268299   68        4      1945          4  female   541.0
98999  1256153   18       12      1995          3  female    21.0
99000  1195943   15       10      1998          5  female   111.0
99001  1468023   23       11      1990          4  female   416.0
99002  1397896   39       15      1974          5  female   397.0

       friend_count  friendships_initiated  likes  likes_received  \
98998          2118                    341   3996           18089
98999          1968                   1720   4401           13412
99000          2002                   1524  11959           12554
99001          2560                    185   4506            6516
99002          2049                    768   9410           12443

       mobile_likes  mobile_likes_received  www_likes  www_likes_received
98998          3505                  11887        491                6202
98999          4399                  10592          2                2820
99000         11959                  11462          0                1092
99001          4506                   5760          0                 756
99002          9410                   9530          0                2913
```

In [5]:
```
#subset1
subset1=df[['age','tenure','www_likes']]
subset1.head()
```

Out[5]:

	age	tenure	www_likes
0	14	266.0	0
1	14	6.0	0
2	14	13.0	0
3	14	93.0	0
4	14	82.0	0

In [8]:
```
#subset2
subset2=df[['gender','tenure','dob_year']]
subset2.head()
```

Out[8]:

	gender	tenure	dob_year
0	male	266.0	1999
1	female	6.0	1999
2	male	13.0	1999
3	female	93.0	1999
4	male	82.0	1999

In [9]:
```
#merge
subset3=pd.merge(subset1,subset2)
subset3.head()
```

Out[9]:

	age	tenure	www_likes	gender	dob_year
0	14	266.0	0	male	1999
1	14	266.0	0	male	1999
2	14	266.0	0	male	1988
3	14	266.0	0	female	1987
4	14	266.0	0	male	1983

In [13]:
```
#sort
subset3.sort_values("gender",axis=0,ascending=True,inplace=True)
subset3
```

Out[13]:

	age	tenure	www_likes	gender	dob_year
79808	13	12.0	0	female	1958
796703	27	221.0	0	female	1946
8769962	27	752.0	0	female	1949
8769965	27	752.0	0	female	1986
8769959	27	752.0	0	female	1984
...	...	...	...	...	...
9148626	113	2278.0	18	NaN	1905
9151738	113	2131.0	197	NaN	1905
9151434	113	2323.0	233	NaN	1958
9105299	113	1534.0	9	NaN	1988
9076198	113	1586.0	105	NaN	1905

9152903 rows × 5 columns

In [41]:
```
#transpose
result = subset3.transpose()
print(result)
```

```
           79808   796703  8769962 8769965 8769959 8769930 8769924 1934000  \
age            13      27      27      27      27      27      27      27
tenure       12.0   221.0   752.0   752.0   752.0   752.0   752.0    96.0
www_likes       0       0       0       0       0       0       0     105
gender     female  female  female  female  female  female  female  female
dob_year     1958    1946    1949    1986    1984    1950    1952    1987

           1933953 1933956  ... 8932487 9122875 9127707 9150018 9148625  \
age            27      27  ...     113     113     113     113     113
tenure       96.0    96.0  ...  1366.0  1622.0  2319.0  2238.0  2278.0
www_likes     105     105  ...      90       0       0      68      18
gender     female  female  ...     NaN     NaN     NaN     NaN     NaN
dob_year     1948    1963  ...    1900    1947    1922    1905    1900

           9148626 9151738 9151434 9105299 9076198
age            113     113     113     113     113
tenure      2278.0  2131.0  2323.0  1534.0  1586.0
www_likes       18     197     233       9     105
gender         NaN     NaN     NaN     NaN     NaN
dob_year     1905    1905    1958    1988    1905

[5 rows x 9152903 columns]
```

In [23]:
```
import numpy as np
a=np.random.rand(3,2,5)
```

In [21]:
```
df.size
```

Out[21]:
```
1485045
```

In [24]:
```
#shape
df.shape
```

Out[24]:
```
(99003, 15)
```

In [37]:
```
#reshape
reshape=df.iloc[:500,:10]
reshape
```

Out[37]:

	userid	age	dob_day	dob_year	dob_month	gender	tenure	friend_count	friendships_in
0	2094382	14	19	1999	11	male	266.0	0	
1	1192601	14	2	1999	11	female	6.0	0	
2	2083884	14	16	1999	11	male	13.0	0	
3	1203168	14	25	1999	12	female	93.0	0	
4	1733186	14	4	1999	12	male	82.0	0	
...	...	...	...	...	...	...	...	...	
495	2135177	23	17	1990	4	male	791.0	0	
496	1883780	23	3	1990	4	female	635.0	0	
497	1549449	23	4	1990	4	female	557.0	0	
498	2181007	23	5	1990	4	female	383.0	0	
499	1634894	23	5	1990	4	male	5.0	0	

500 rows × 10 columns

In [39]:
```
#reshape
reshape.shape
```

Out[39]:
```
(500, 10)
```

In [ ]:
```

```