

# Exploratory Data Analysis – facebook Data

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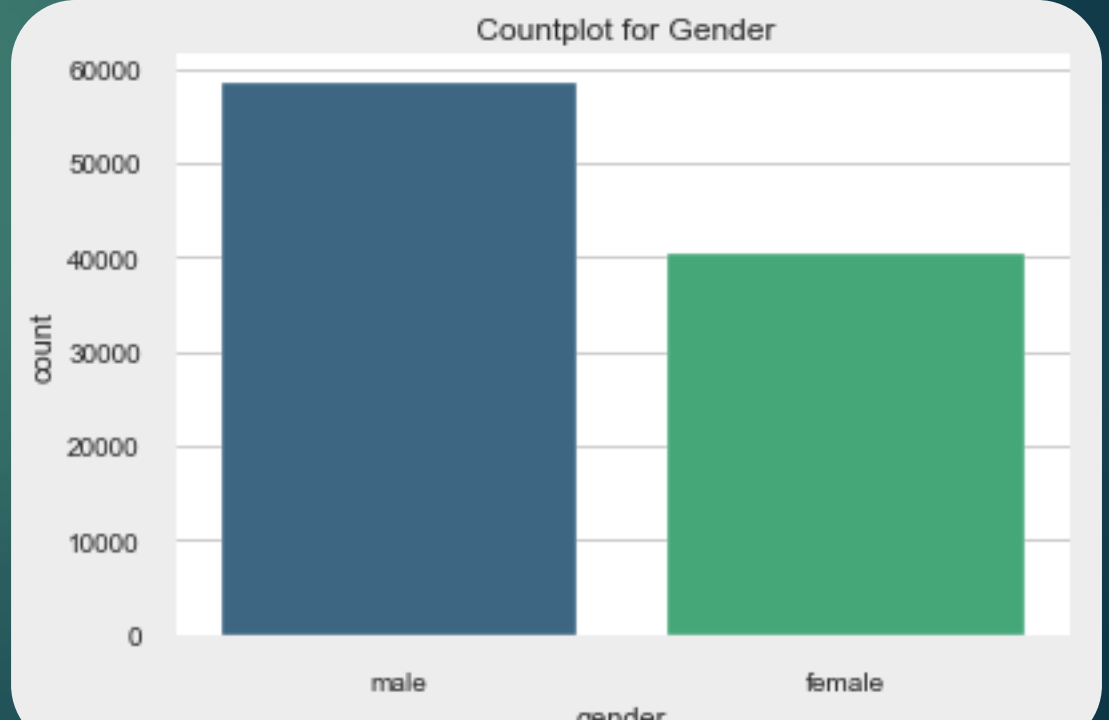
## User Count –Gender Wise

Males user count are more than female

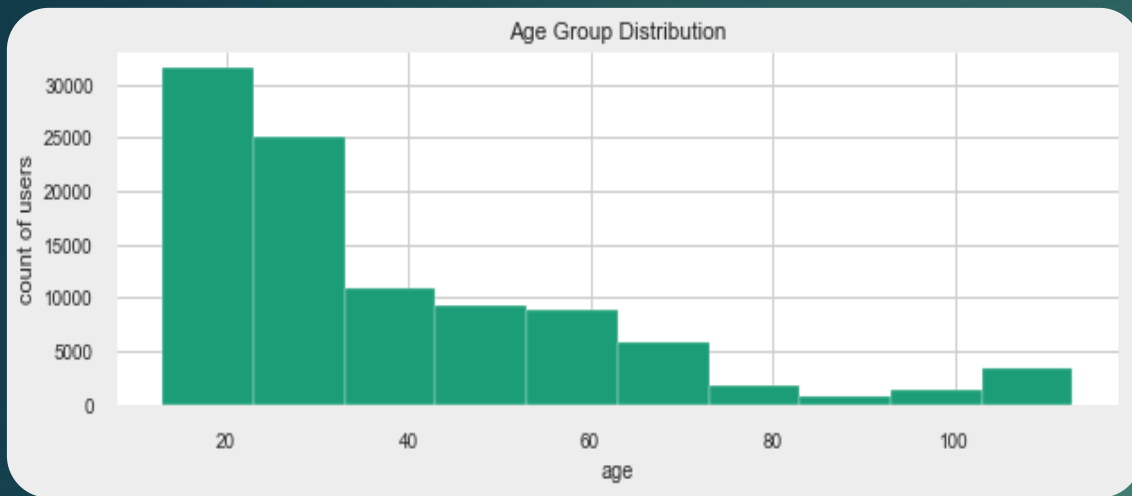
58552 user belongs to male

40241 user belongs to female

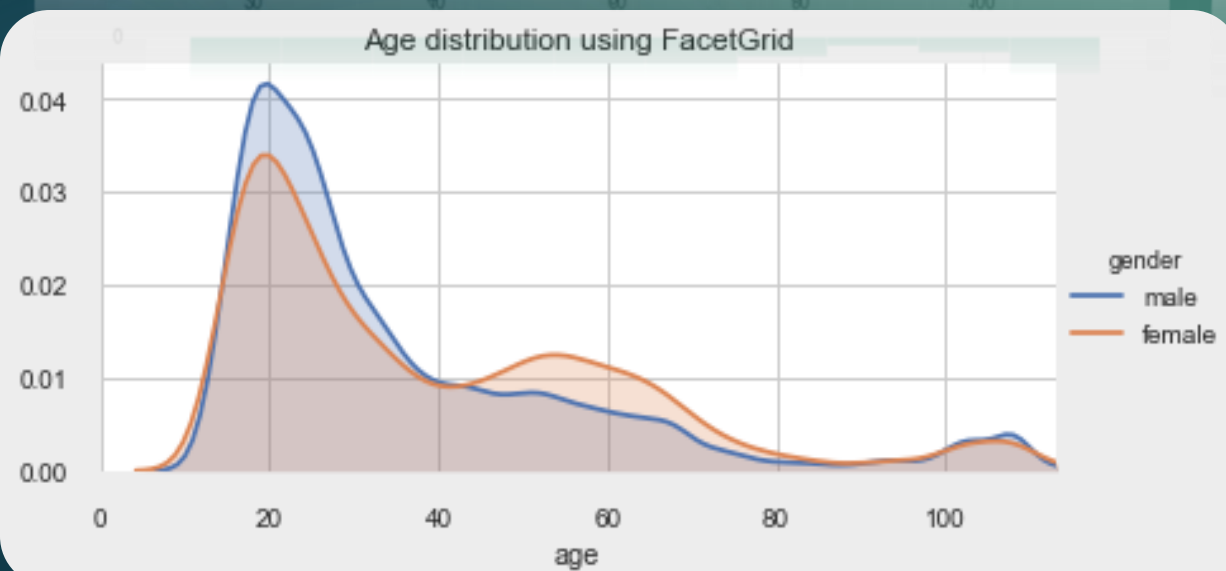
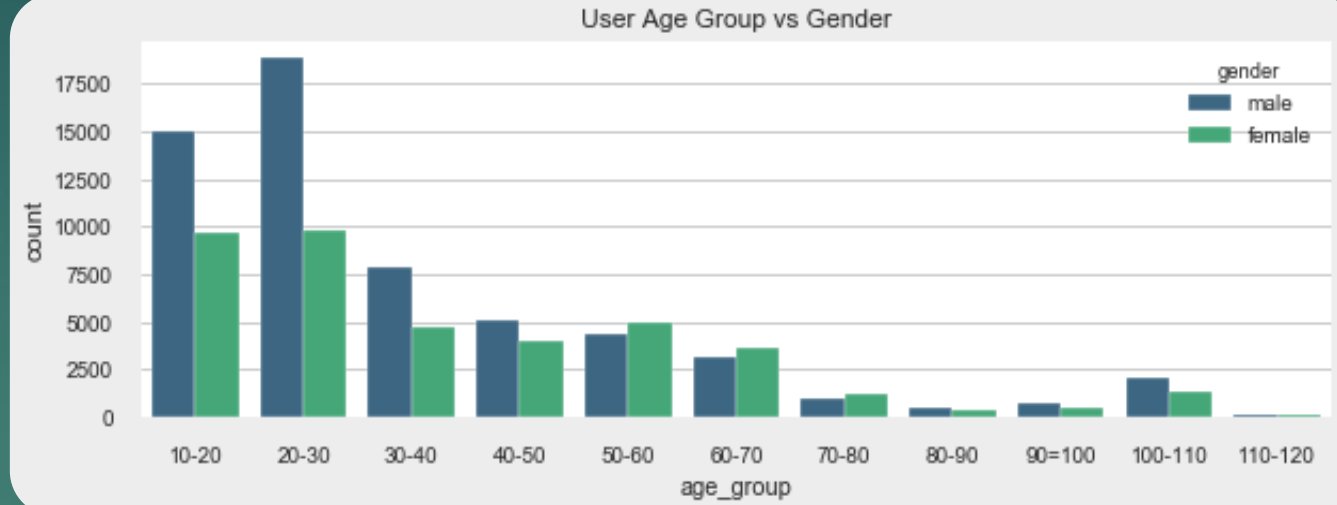
```
fb['gender'].value_counts()
male      58552
female    40241
Name: gender, dtype: int64
```



## ► Age Distribution



## ► Age Group vs Gender



Most of the user belongs to 20-30 age group.

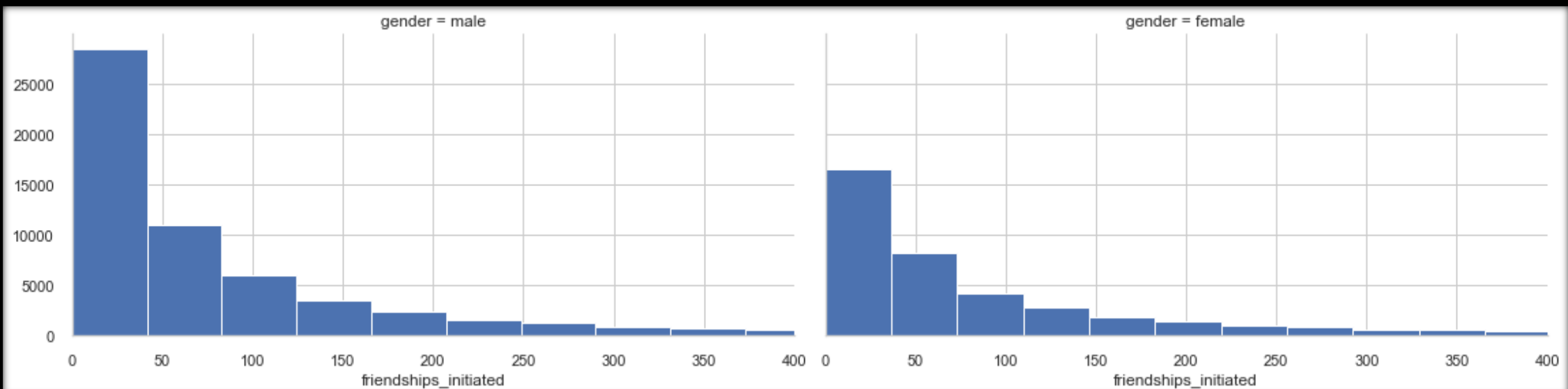
Male users are more in most of the age group however female users belonging to age group 50-70 are slightly more than male.

There is a declining trend in users after age 30.

Minimum user age is 13.

Maximum user age is 113.

# Who Initiated Friendship more?



Males seems to be more open and initiated friendship more than female. It could be because male user count are more than female as well.

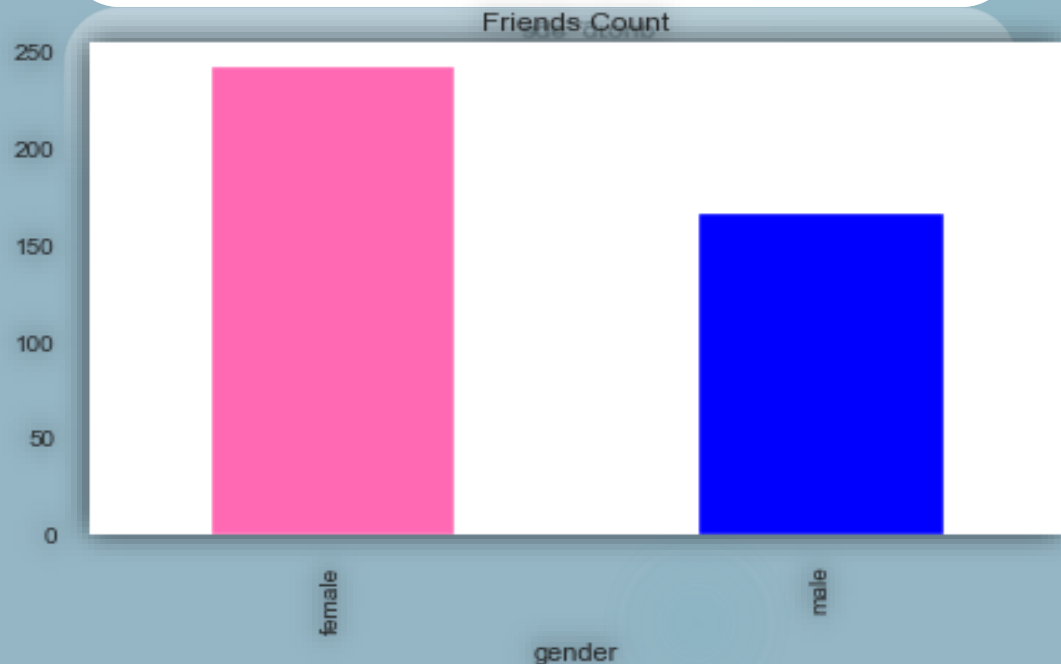
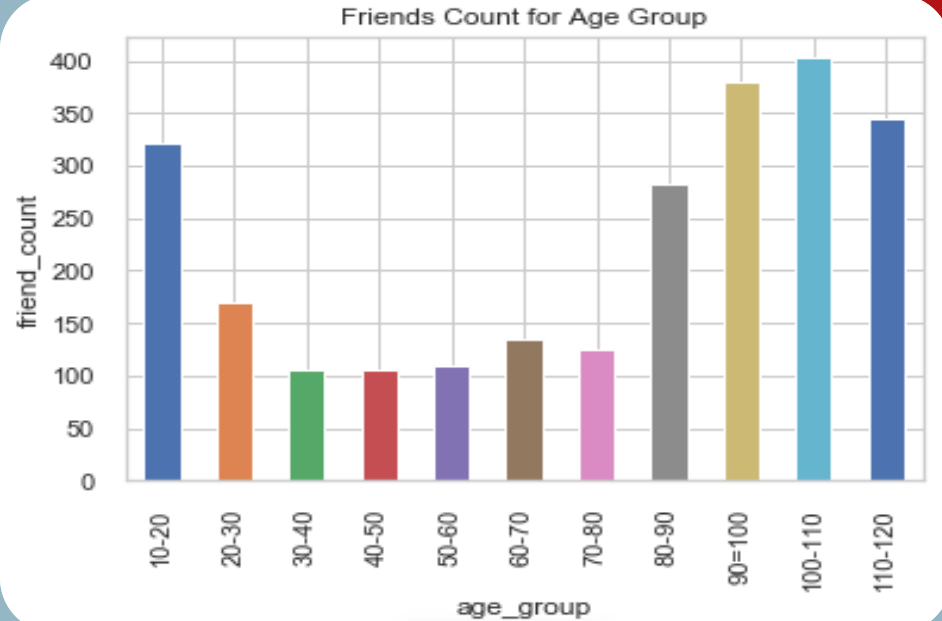
```
fb.groupby('gender').friendships_initiated.describe()
```

	count	mean	std	min	25%	50%	75%	max
gender								
female	40241.0	113.933575	195.161156	0.0	19.0	49.0	125.0	3654.0
male	58552.0	103.105325	184.316359	0.0	15.0	44.0	111.0	4144.0

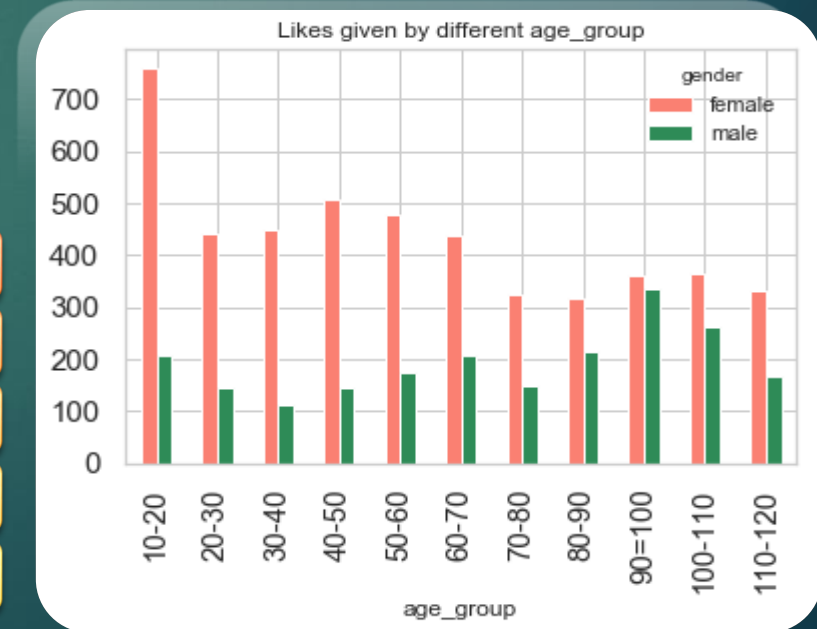
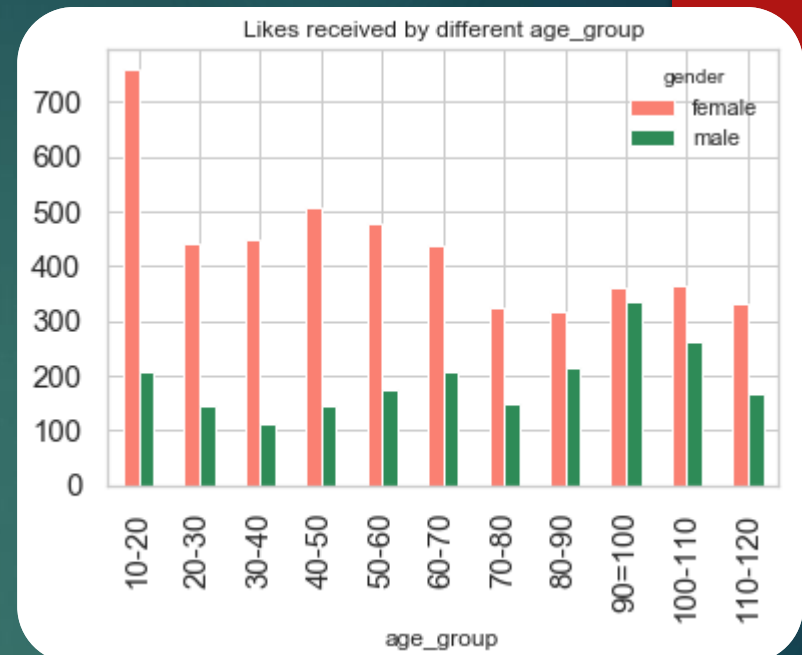
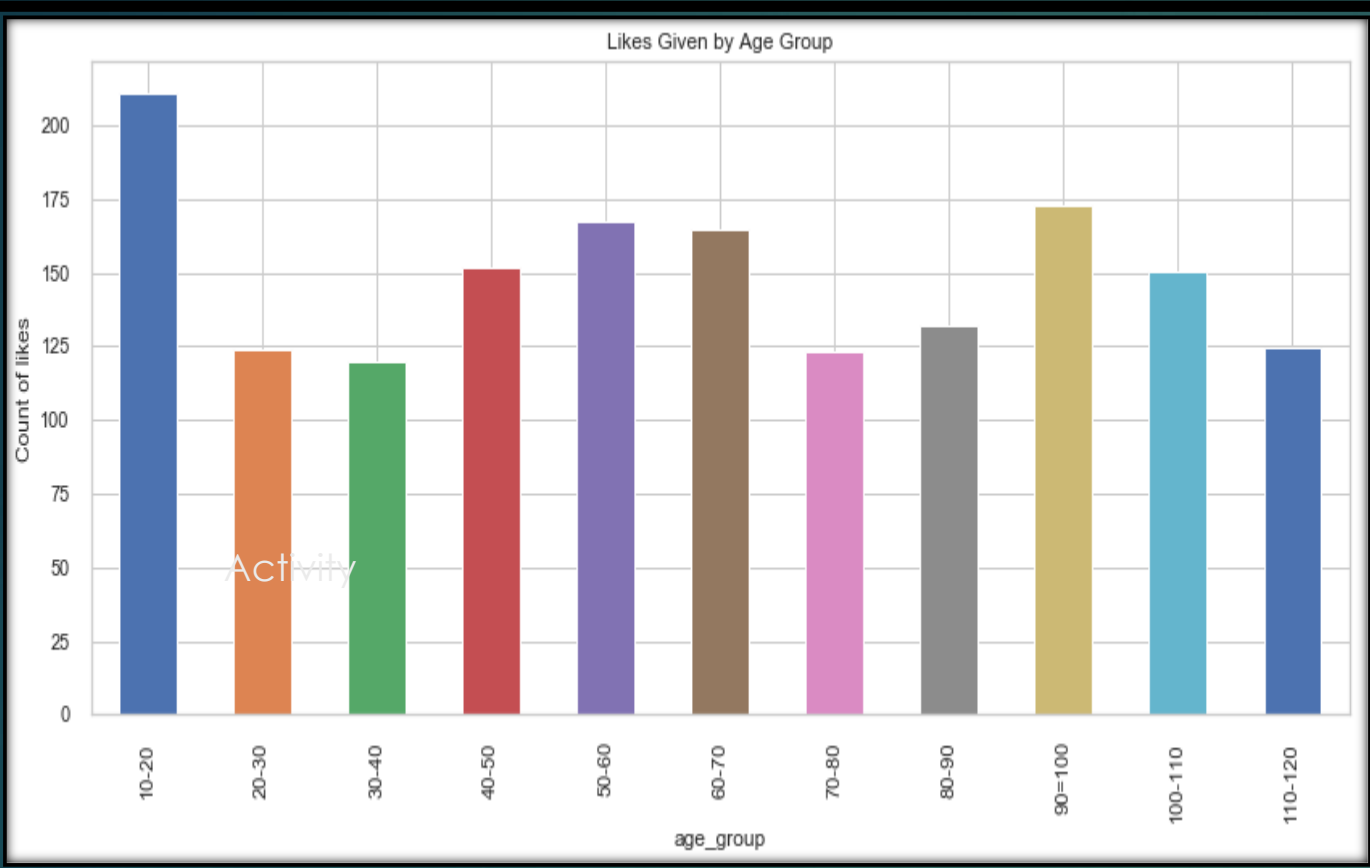
# FRIENDS COUNT

## FRIENDS COUNT

FEMALE HAS MORE FRIENDS  
THAN MALE  
AGE GROUP 10-20 HAS MORE  
FRIENDS AND THERE'S STEEP  
DECLINED FROM AGE 20-80  
AGE GROUP 100-110 HAS  
MAXIMUM FRIENDS.



# Activities



This plot shows the activity for different age group vs gender

Maximum likes is given by age group 10-20

There's slight decline in activity for age group between 20-40

Female user gave more likes, this shows female user are more active than male

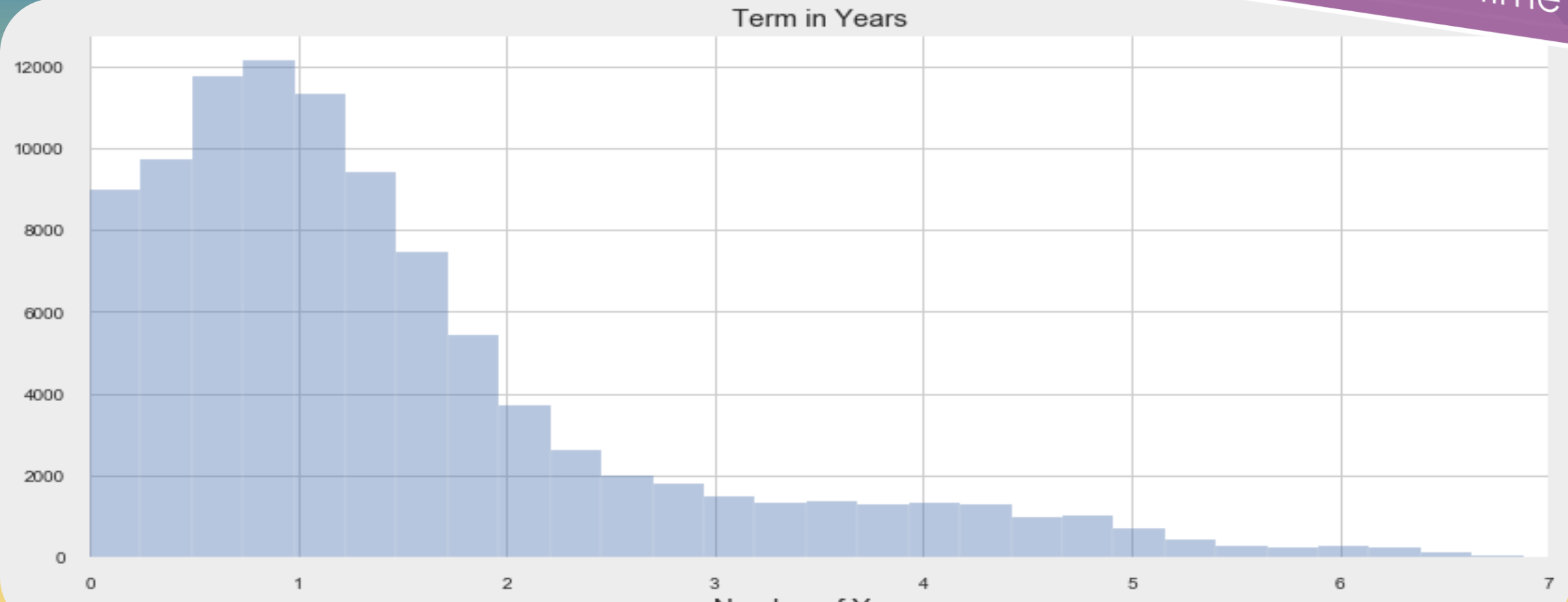
Female user received more likes than male across all the age groups

```
fb.tenure.describe()
```

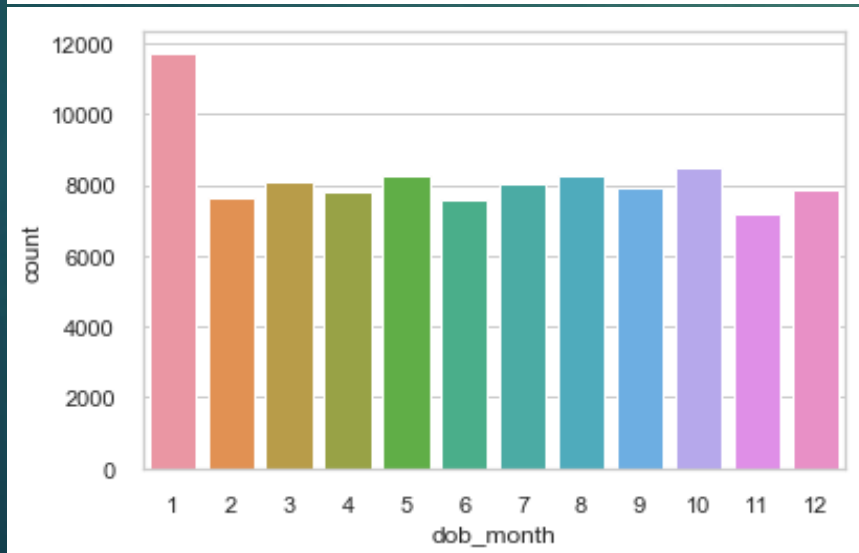
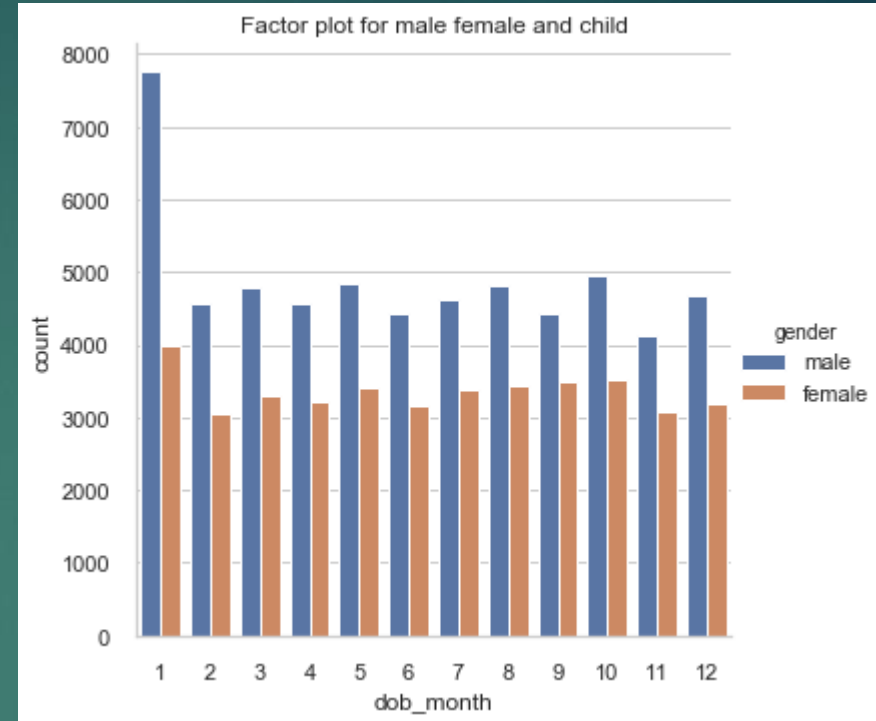
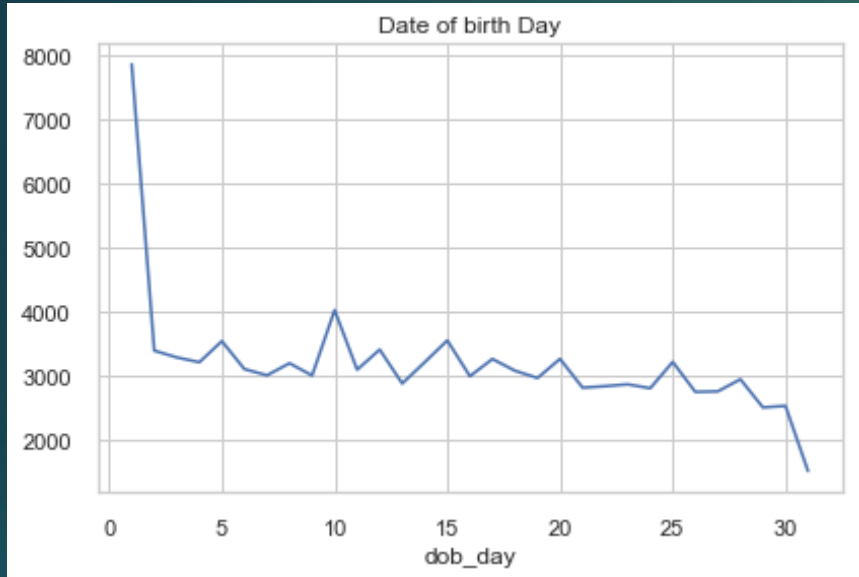
count	98793.000000
mean	535.828682
std	454.228764
min	0.000000
25%	226.000000
50%	412.000000
75%	673.000000
max	3139.000000
Name: tenure, dtype: float64	

# Tenure

This plot shows user mostly are active for 1-2yrs.  
New user are more active than old user.  
There's steep decline in activity as time goes



# Which day has maximum birthday



- ❖ This plot shows most of the users registered their birthday as 1<sup>st</sup> Jan both for male & female
- ❖ Count for rest of the month are fairly the same



Thank you