Report:

Variables	Description	Data type	Notes
created_at	date the account was created at	datetime64, Categorical	converted from object to datetime64
default_profile_image	shows the type of the profile image if its the defualt image or not	object, Categorical	
description	bio of the account	object, Categorical	
favourites_count	hows the number of the account likes on tweets	float64, Nominal	
followers_count	followers of the account	float64, Nominal	
friends_count	people that the account is following	float64, Nominal	converted from object to float64
geo_enabled	location of the account user	object, Categorical	
id	id of the account	object, Nominal	
listed_count	number of public lists the user have or member of	float64, Nominal	converted from object to float64
location	the location of the user	object, Categorical	
profile_background_color	color of the background	object, Categorical	
profile_background_image_url	url of the background image	object, Nominal	
profile_text_color	color of the profile text	object, Nominal	
profile_use_background_image	the type of the backgrond image if its the original or changed	object, Categorical	
protected	is the account private or not	object, Categorical	
screen_name	username of the account	object, Categorical	
statuses_count	number of tweets	float64, continuous	
url	the url account has in his profile	object, Categorical	
name	name of the newspaper	object, Categorical	i added this column
tweets_mean	average number of tweets	float64, continuous	i added this column

contributors_enabled : this column was not used in the analysis because its definition was not

known default_profile : this column was not used in the analysis because its definition was not known profile_background_tile : this column was not used in the analysis because its definition was not known verified : this column was not used in the analysis because its definition was not known

- there are 110203 account creation date, 58729 of them are unique, the top freq date is 2017-05-06 12:23:44 with 25340 freq.

  - count 110203
  - unique 58729
  - top 2017-05-06 12:23:44
  - freq 25340

- there are 110203 value of default_profile_image with 17 unique value, the top value is False with freq of 64961.

  - count 110203
  - unique 17
  - top False
  - freq 64961

- there are 59576 description with 17534 unique value, the top is I♡9-6-214 with freq of 25340.

  - count 59576
  - unique 17534
  - top I♡9-6-214
  - freq 25340

- there are 7.452000e+04 favourites, with mean of(1.369238e+14), min(0.000000e+00), max(9.842015e+17).

  - count 7.452000e+04
  - mean 1.369238e+14
  - std 1.083383e+16
  - min 0.000000e+00
  - 25% 0.000000e+00
  - 50% 2.000000e+00
  - 75% 4.700000e+01
  - max 9.842015e+17

- there are 7.452000e+04 follower, with mean(1.741434e+03), min(0.000000e+00), max(6.976151e+06).

  - count 7.452000e+04
  - mean 1.741434e+03
  - std 3.760930e+04
  - min 0.000000e+00
  - 25% 2.000000e+00
  - 50% 9.000000e+00
  - 75% 7.300000e+01
  - max 6.976151e+06

- there are count 74510 friend, 9249 of them are unique, the top value is 20 with freq of 2921.

  - count 74510
  - unique 9249

- top 20
- freq 2921

- there are 74520 value of geo_enabled with 8 unique values, the top value is False with freq of 57353.

  - count 74520
  - unique 8
  - top False
  - freq 57353

- there are 74520 value of listed count, 425 of them are unique, the top is 0 with freq of 64691.

  - count 74520
  - unique 425
  - top 0
  - freq 64691

- the are 21121 location with 4533 unique value, the top value is دولة الكويت with freq of 3955.

  - count 21121
  - unique 4533
  - top دولة الكويت
  - freq 3955

- there are 74520 value of profile_background_color with unique value of 201, the top value is F5F8FA with freq of 59206.

  - count 74520
  - unique 201
  - top F5F8FA
  - freq 59206

- there are 15314 value of profile_background_image_url with unique value of 697, the top value is http://abs.twimg.com/images/themes/theme1/bg.png (http://abs.twimg.com/images/themes/theme1/bg.png) with freq of 13392.

  - count 15314
  - unique 697
  - top http://abs.twimg.com/images/themes/theme1/bg.png (http://abs.twimg.com/images/themes/theme1/bg.png)
  - freq 13392

- there are 74520 value of profile_text_color with unique vale of 123, the top value is 333333 with freq of 70469.

  - count 74520
  - unique 123
  - top 333333
  - freq 70469

- there are 74507 value of profile_use_background_image with unique value of 2, the top value is True with freq of 73148.

  - count 74507
  - unique 2
  - top True
  - freq 73148

- there are 74520 value of protected with unique values of 2, the top value is False with freq of 68493.

  - count 74520
  - unique 2
  - top False
  - freq 68493
- there are 74507 value of screen_name with unique values of 57409, the top value is RG1XkMe19r3NcCo with freq of 8. (the same person followed 8 newspapers)

  - count 74507
  - unique 57409
  - top RG1XkMe19r3NcCo
  - freq 8
- there are 7.452000e+04 user, with mean(2.068873e+03), min(0.000000e+00), max(1.337342e+06).

  - count 7.450700e+04
  - mean 2.068873e+03
  - std 2.096673e+04
  - min 0.000000e+00
  - 25% 0.000000e+00
  - 50% 3.000000e+00
  - 75% 9.400000e+01
  - max 1.337342e+06
- there are 2233 values of url with unique values of 1768, the top value is https://t.co/twxHxOtlG0 with freq of 9.

  - count 2233
  - unique 1768
  - top [https://t.co/twxHxOtlG0 (https://t.co/twxHxOtlG0)](https://t.co/twxHxOtlG0)
  - freq 9
- there are 163638 value of name with unique value of 8, the top value is aldaar with freq of 66164.

  - count 163638
  - unique 8
  - top aldaar
  - freq 66164

Analysis:

```
In [202]:  import matplotlib.pyplot as plt
           import pandas as pd
           import seaborn as sns
           import numpy as np
           %matplotlib inline
```

In [6]: `followers_df = pd.read_csv("followers_df.csv", encoding="utf-8")`

```
C:\Users\almousawi\Anaconda3\lib\site-packages\IPython\core\interactiveshell.p
y:2717: DtypeWarning: Columns (7,8,9,10,11,12,13,14,15,16,17,18,20,21) have mix
ed types. Specify dtype option on import or set low_memory=False.
  interactivity=interactivity, compiler=compiler, result=result)
```

In [7]: `followers_df.head().T`

Out[7]:

	0	1	2	
contributors_enabled	False	False	False	Fal
created_at	2018-04-27 06:47:58	2017-01-27 04:16:32	2018-03-30 19:01:16	2018-04- 18:28:
default_profile	True	True	True	Tr
default_profile_image	True	False	False	Tr
description	NaN	NaN	أن يكون امامك اسد مفترس .. افضل من أن يكون خلف...	Na
favourites_count	0	374	932	
followers_count	0	49	58	
friends_count	7	123	105	1!
geo_enabled	False	False	False	Fal
id	9.89758e+17	8.24833e+17	9.79796e+17	9.84861e+
listed_count	0	0	0	
location	NaN	NaN	NaN	Na
profile_background_color	F5F8FA	F5F8FA	F5F8FA	F5F8I
profile_background_image_url	NaN	NaN	NaN	Na
profile_background_tile	False	False	False	Fal
profile_text_color	333333	333333	333333	3333:
profile_use_background_image	True	True	True	Tr
protected	False	False	False	Fal
screen_name	NfL4eqkwEtNO9Ij	AbdelraheemDahe	6YL4FYnsTIpJgpb	Abonass492678:
statuses_count	2	56	173	
url	NaN	NaN	NaN	Na
verified	False	False	False	Fal
name	alseyassah	alseyassah	alseyassah	alseyassa

In [41]: `followers_df.count()`

Out[41]:
```
Unnamed: 0                     163638
contributors_enabled           163638
created_at                     110203
default_profile                110203
default_profile_image          110203
description                     59576
favourites_count                74520
followers_count                 74520
friends_count                   74510
geo_enabled                     74520
id                              74508
listed_count                    74520
location                        21121
profile_background_color        74520
profile_background_image_url    15314
profile_background_tile         74520
profile_text_color              74520
profile_use_background_image    74507
protected                       74520
screen_name                     74507
statuses_count                  74507
url                              2233
verified                        74507
name                           163638
dtype: int64
```

In [25]: `followers_df[followers_df.default_profile == False].head()`

Out[25]:

url	profile_background_tile	profile_text_color	profile_use_background_image	protected	screen_nai
ng	False	000000	False	False	hazemfrk(
gif	False	000000	False	False	NisreenAbusee
ng	False	000000	False	False	nourinou
ng	False	000000	True	False	helaly_ta
gif	True	3D1957	True	False	imcarlc

```
In [26]: followers_df.created_at.describe()
```

```
Out[26]: count                   110203
         unique                   58729
         top         2017-05-06 12:23:44
         freq                     25340
         Name: created_at, dtype: object
```

```
In [28]: followers_df.default_profile_image.describe()
```

```
Out[28]: count    110203
         unique       17
         top       False
         freq      64961
         Name: default_profile_image, dtype: object
```

```
In [206]: followers_df2.default_profile_image.value_counts()
```

```
Out[206]: False    38795
          True     23107
          TRUE      3396
          FALSE     3201
          False     2689
          True      1096
          Name: default_profile_image, dtype: int64
```

```
In [56]: followers_df.id.describe()
```

```
Out[56]: count           74508
         unique          63573
         top         9.87787e+17
         freq               13
         Name: id, dtype: object
```

```
In [29]: followers_df.description.describe()
```

```
Out[29]: count           59576
         unique          17534
         top         I♡9-6-214
         freq            25340
         Name: description, dtype: object
```

```
In [30]: followers_df.favourites_count.describe()
```

```
Out[30]: count    7.452000e+04
         mean     1.369238e+14
         std      1.083383e+16
         min      0.000000e+00
         25%      0.000000e+00
         50%      2.000000e+00
         75%      4.700000e+01
         max      9.842015e+17
         Name: favourites_count, dtype: float64
```

In [31]:
```python
followers_df.followers_count.describe()
```

Out[31]:
```
count    7.452000e+04
mean     1.741434e+03
std      3.760930e+04
min      0.000000e+00
25%      2.000000e+00
50%      9.000000e+00
75%      7.300000e+01
max      6.976151e+06
Name: followers_count, dtype: float64
```

In [32]:
```python
followers_df.friends_count.describe()
```

Out[32]:
```
count     74510
unique     9249
top          20
freq       2921
Name: friends_count, dtype: object
```

In [215]:
```python
followers_df2["friends_count"] = pd.to_numeric(followers_df2.friends_count)
```

```
C:\Users\almousawi\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stab
le/indexing.html#indexing-view-versus-copy (http://pandas.pydata.org/pandas-doc
s/stable/indexing.html#indexing-view-versus-copy)
  """Entry point for launching an IPython kernel.
```

In [33]:
```python
followers_df.geo_enabled.describe()
```

Out[33]:
```
count     74520
unique        8
top       False
freq      57353
Name: geo_enabled, dtype: object
```

In [34]:
```python
followers_df.listed_count.describe()
```

Out[34]:
```
count     74520
unique      425
top           0
freq      64691
Name: listed_count, dtype: object
```

In [217]: `followers_df2["listed_count"] = pd.to_numeric(followers_df2.listed_count)`

```
C:\Users\almousawi\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stab
le/indexing.html#indexing-view-versus-copy (http://pandas.pydata.org/pandas-doc
s/stable/indexing.html#indexing-view-versus-copy)
  """Entry point for launching an IPython kernel.
```

In [218]: `followers_df2.dtypes`

```
Out[218]: contributors_enabled              object
          created_at                datetime64[ns]
          default_profile                   object
          default_profile_image            object
          description                       object
          favourites_count                 float64
          followers_count                  float64
          friends_count                    float64
          geo_enabled                       object
          id                                object
          listed_count                     float64
          location                          object
          profile_background_color          object
          profile_background_image_url      object
          profile_background_tile           object
          profile_text_color                object
          profile_use_background_image      object
          protected                         object
          screen_name                       object
          statuses_count                   float64
          url                               object
          verified                          object
          name                              object
          dtype: object
```

In [35]: `followers_df.location.describe()`

```
Out[35]: count              21121
         unique              4533
         top          دولة الكويت
         freq                3955
         Name: location, dtype: object
```

In [36]: `followers_df.profile_background_color.describe()`

```
Out[36]: count       74520
         unique        201
         top        F5F8FA
         freq        59206
         Name: profile_background_color, dtype: object
```

In [37]: `followers_df.profile_background_image_url.describe()`

Out[37]:
```
count                                                 15314
unique                                                  697
top          http://abs.twimg.com/images/themes/theme1/bg.png (http://abs.twimg.co
m/images/themes/theme1/bg.png)
freq                                                  13392
Name: profile_background_image_url, dtype: object
```

In [38]: `followers_df.profile_text_color.describe()`

Out[38]:
```
count      74520
unique       123
top       333333
freq       70469
Name: profile_text_color, dtype: object
```

In [39]: `followers_df.profile_use_background_image.describe()`

Out[39]:
```
count     74507
unique        2
top        True
freq      73148
Name: profile_use_background_image, dtype: object
```

In [40]: `followers_df.protected.describe()`

Out[40]:
```
count     74520
unique        2
top       False
freq      68493
Name: protected, dtype: object
```

In [41]: `followers_df.screen_name.describe()`

Out[41]:
```
count              74507
unique             57409
top       RG1XkMe19r3NcCo
freq                   8
Name: screen_name, dtype: object
```

```
In [82]: followers_df.favourites_count
```

```
Out[82]: 0          0.0
         1        374.0
         2        932.0
         3          0.0
         4          0.0
         5          0.0
         6       2289.0
         7        822.0
         8          0.0
         9         82.0
         10         0.0
         11         0.0
         12       710.0
         13         0.0
         14       572.0
         15      1963.0
         16         0.0
         17         3.0
         18         1.0
         19       370.0
         20         0.0
         21         0.0
         22         0.0
         23       259.0
         24         0.0
         25         0.0
         26         0.0
         27         8.0
         28         2.0
         29         1.0
                   ...
         163608   738.0
         163609     0.0
         163610     0.0
         163611     3.0
         163612     8.0
         163613     0.0
         163614     6.0
         163615     0.0
         163616     0.0
         163617     0.0
         163618     0.0
         163619     0.0
         163620     0.0
         163621     0.0
         163622     2.0
         163623     0.0
         163624     0.0
         163625     0.0
         163626     0.0
         163627     0.0
         163628     0.0
         163629     0.0
         163630     0.0
```

```
163631      1.0
163632      0.0
163633      0.0
163634      0.0
163635   1095.0
163636      0.0
163637      4.0
Name: favourites_count, Length: 163638, dtype: float64
```

In [44]: `followers_df[followers_df.screen_name == "RG1XkMe19r3NcCo"].T`

Out[44]:

	283	
contributors_enabled	False	
created_at	2017-12-03 06:55:59	
default_profile	False	
default_profile_image	False	
description	... رجل عراقي مستقل احب العراق وشعب العراق . عمري	عب العراق . عمري
favourites_count	1467	
followers_count	1722	
friends_count	3173	
geo_enabled	False	
id	9.37214e+17	
listed_count	0	
location	Iraq	
profile_background_color	000000	
profile_background_image_url	http://abs.twimg.com/images/themes/theme1/bg.png	http://abs.twimg.com/ima
profile_background_tile	False	
profile_text_color	000000	
profile_use_background_image	False	
protected	False	
screen_name	RG1XkMe19r3NcCo	
statuses_count	3565	
url	NaN	
verified	False	
name	alseyassah	

```
In [45]: followers_df.statuses_count.describe()
```

```
Out[45]: count    7.450700e+04
         mean     2.068873e+03
         std      2.096673e+04
         min      0.000000e+00
         25%      0.000000e+00
         50%      3.000000e+00
         75%      9.400000e+01
         max      1.337342e+06
         Name: statuses_count, dtype: float64
```

```
In [46]: followers_df.url.describe()
```

```
Out[46]: count                              2233
         unique                             1768
         top      https://t.co/twxHxOtlG0 (https://t.co/twxHxOtlG0)
         freq                                  9
         Name: url, dtype: object
```

```
In [47]: followers_df.name.describe()
```

```
Out[47]: count     163638
         unique         8
         top       aldaar
         freq       66164
         Name: name, dtype: object
```

In [74]: `followers_df[followers_df.created_at == "2017-05-06 12:23:44"].T`

Out[74]:

	17628	17629	17630	17631	17632	17633	17634
contributors_enabled	False	False	False	False	False	False	False
created_at	2017-05-06 12:23:44	2017-05-06 12:23:44	2017-05-06 12:23:44	2017-05-06 12:23:44	2017-05-06 12:23:44	2017-05-06 12:23:44	2017-05-06 12:23:44	1:
default_profile	True	True	True	True	True	True	True
default_profile_image	False	False	False	False	False	False	False
description	I♡9-6-214	I♡9-6-214	I♡9-6-214	I♡9-6-214	I♡9-6-214	I♡9-6-214	I♡9-6-214
favourites_count	NaN	NaN	NaN	NaN	NaN	NaN	NaN
followers_count	NaN	NaN	NaN	NaN	NaN	NaN	NaN
friends_count	NaN	NaN	NaN	NaN	NaN	NaN	NaN
geo_enabled	NaN	NaN	NaN	NaN	NaN	NaN	NaN
id	NaN	NaN	NaN	NaN	NaN	NaN	NaN
listed_count	NaN	NaN	NaN	NaN	NaN	NaN	NaN
location	NaN	NaN	NaN	NaN	NaN	NaN	NaN
profile_background_color	NaN	NaN	NaN	NaN	NaN	NaN	NaN
profile_background_image_url	NaN	NaN	NaN	NaN	NaN	NaN	NaN
profile_background_tile	NaN	NaN	NaN	NaN	NaN	NaN	NaN
profile_text_color	NaN	NaN	NaN	NaN	NaN	NaN	NaN
profile_use_background_image	NaN	NaN	NaN	NaN	NaN	NaN	NaN
protected	NaN	NaN	NaN	NaN	NaN	NaN	NaN
screen_name	NaN	NaN	NaN	NaN	NaN	NaN	NaN
statuses_count	NaN	NaN	NaN	NaN	NaN	NaN	NaN
url	NaN	NaN	NaN	NaN	NaN	NaN	NaN
verified	NaN	NaN	NaN	NaN	NaN	NaN	NaN
name	alnahar	alnahar	alnahar	alnahar	alnahar	alnahar	alnahar	a

23 rows × 25340 columns
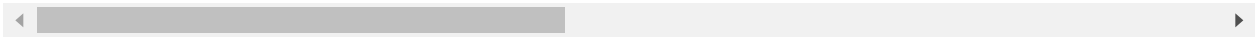
In [87]: `followers_df[~followers_df.screen_name.isnull()]`

NaN	False	333333	True	False	pHEu0vdN5bUe66y
NaN	False	333333	True	False	Gassim99367283
NaN	False	333333	True	False	julianaroyer6
NaN	False	333333	True	False	Saloumi37963004
NaN	False	333333	True	False	kuwaiti62013232

image_url	profile_background_tile	profile_text_color	profile_use_background_image	protected	screen_name
NaN	False	333333	True	False	chua_nevi
NaN	False	333333	True	False	Naaiif97607648

In [106]:
```python
import httplib
for x in followers_df2.url.value_counts()[:10].index:
    fp = urllib2.urlopen(x)
    print(fp.geturl())
```

```
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
<ipython-input-106-77583c24cbb0> in <module>()
----> 1 import httplib
      2 for x in followers_df2.url.value_counts()[:10].index:
      3     fp = urllib2.urlopen(x)
      4     print(fp.geturl())

ModuleNotFoundError: No module named 'httplib'
```

In [91]: `followers_df2=followers_df[~followers_df[["screen_name","name"]].duplicated()]`

```
In [93]: followers_df2.screen_name.value_counts()
```

```
Out[93]: 8jn5yNdee0O6Oa8        7
         VQlJC9F3iBKyzBc         7
         RG1XkMe19r3NcCo         7
         t0c81Ks6ZuvsTbu         7
         9SS9AD8XU5wteYM         7
         s77fwaat77              7
         Dream25656980           6
         f6cdGXD3TivR8YL         6
         ladiavo66               6
         DQP6vSlSeefJQIi         6
         7685_965                6
         HKK9hc8v350v1cM         6
         Alimohmed261            6
         adelalsayegh4           6
         HSdaDId5ORWews6         6
         CzZTcyXTTagPUgc         6
         Naset18049173           6
         dyhdrsger4242           6
         FA19393050              6
         mdh01575387             6
         kw622544                6
         YefXPGLOfp305B7         6
         lsWVhef65glXkYU         6
         kuwaitlaw77             6
         Katyoshaa1              6
         khaledalzbdan           6
         abuahma13736937         6
         zZ713865NbHHJzm         6
         FahadYani               6
         HamedAl82032113         6
                                ..
         almhagrrrrr5            1
         SaluhcT                 1
         carlyn8329vd            1
         rfthgzvr1077fz          1
         Q8alshar7               1
         Niu2wyExuaN2Umo         1
         Ncv9IGq5Fa6ZOJt         1
         Fwoaz86852135           1
         i_92faisal              1
         mylive9666              1
         MostajaMostajab         1
         LpCvaTXjZrcsdDx         1
         q8_d111                 1
         MayoofYousef            1
         mqabandi55              1
         bizeheryermaras         1
         umkdlkfrl2978           1
         Xjxyzhfss1              1
         zaVDMda8ihQ37e5         1
         Kuwait_Tag              1
         RaselKh43303935         1
         MO1duuKNZZPjPug         1
         smldvbcnpf1916          1
         saif7877522             1
```
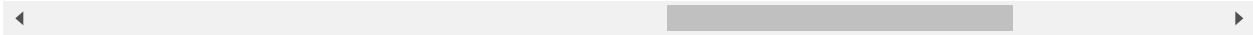
```
ahmed88289998       1
CUN09EuFrlfHQfD     1
aljaleel0           1
AbinWilson619       1
Mohamed54918297     1
Lheydhen143         1
Name: screen_name, Length: 57409, dtype: int64
```

In [75]: `followers_df.head()`

Out[75]:

und_image_url	profile_background_tile	profile_text_color	profile_use_background_image	protected
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False h

```
In [139]: followers_df.statuses_count
```

```
Out[139]: 0           2.0
          1          56.0
          2         173.0
          3           0.0
          4           0.0
          5          13.0
          6         600.0
          7           1.0
          8           0.0
          9          75.0
          10          0.0
          11          0.0
          12        179.0
          13          0.0
          14       3120.0
          15       1839.0
          16          0.0
          17         37.0
          18          0.0
          19        381.0
          20          0.0
          21         46.0
          22          0.0
          23       2979.0
          24          0.0
          25          0.0
          26          0.0
          27         38.0
          28          0.0
          29          2.0
                     ...
          163608   23794.0
          163609       0.0
          163610       0.0
          163611       3.0
          163612       7.0
          163613      27.0
          163614       4.0
          163615       0.0
          163616       0.0
          163617       0.0
          163618       0.0
          163619       0.0
          163620       0.0
          163621       0.0
          163622       1.0
          163623       0.0
          163624       1.0
          163625       0.0
          163626       0.0
          163627       0.0
          163628       0.0
          163629       0.0
          163630       0.0
          163631       0.0
```

```
163632        0.0
163633        0.0
163634        0.0
163635      224.0
163636        0.0
163637        7.0
Name: statuses_count, Length: 163638, dtype: float64
```

In [81]: `followers_df[followers_df.statuses_count == 0]`

image_url	profile_background_tile	profile_text_color	profile_use_background_image	protected	screen_name
NaN	False	333333	True	False	Abonass49267837
NaN	False	333333	True	False	hgLKyaK6pbTUREV
NaN	False	333333	True	False	AhmedFa00156388
NaN	False	333333	True	False	R4DFnaM2jfv0SpC
NaN	False	333333	True	True	voice_kuw83

In [ ]:

In [126]:
```python
from datetime import datetime
def convert_date(x):
    print(x)
    print(x == "0")
    x = x.split(" ")[0]
    return datetime.strptime(x,"%Y-%m-%d")
```

In [127]: `convert_date("2018-04-27 06:47:58")`

```
2018-04-27 06:47:58
False
```

Out[127]: `datetime.datetime(2018, 4, 27, 0, 0)`

In [130]: `followers_df2[followers_df2.created_at == "0"]`

Out[130]:

	contributors_enabled	created_at	default_profile	default_profile_image	description	favourites_cou

0 rows × 23 columns

```
In [134]: followers_df.created_at.value_counts()
```

```
Out[134]: 2017-05-06 12:23:44    25340
          2013-05-30 18:15:29    10332
          23/4/2018 12:59            8
          20/4/2018 22:49            7
          21/4/2018 9:44            7
          2011-06-14 20:00:51       7
          2018-04-09 05:17:26       7
          2018-04-11 07:23:24       7
          2018-04-11 09:36:35       7
          20/4/2018 23:42           7
          2018-04-06 13:02:33       6
          2018-04-01 20:12:46       6
          2018-04-13 14:22:27       6
          20/4/2018 21:44           6
          2017-06-26 09:43:28       6
          22/4/2018 18:58           6
          2018-04-13 07:41:42       6
          2018-04-12 03:57:00       6
          2018-04-13 12:45:29       6
          2014-10-03 11:42:50       6
          2018-03-30 12:10:51       6
          2018-04-12 12:02:41       6
          2018-04-09 10:51:07       6
          21/4/2018 21:40           6
          2018-03-16 10:26:12       6
          2017-09-16 17:45:30       6
          2018-04-09 11:00:06       6
          2018-04-13 06:14:03       6
          2018-04-11 21:52:07       6
          20/4/2018 21:09           6
                                  ...
          2017-10-17 14:24:01       1
          2018-03-22 21:30:18       1
          2018-02-04 11:35:55       1
          2013-11-21 15:30:09       1
          2017-08-17 11:23:38       1
          2016-04-19 23:11:43       1
          2018-04-24 14:51:46       1
          2011-02-18 15:10:56       1
          2013-08-27 03:55:58       1
          2018-04-17 19:57:24       1
          7/12/2016 20:30           1
          2018-04-02 12:53:40       1
          2017-05-28 13:34:57       1
          2016-09-30 14:16:20       1
          2013-03-23 12:10:52       1
          2014-12-08 21:55:55       1
          2018-03-23 11:20:04       1
          2011-10-25 17:11:03       1
          2017-11-10 16:42:12       1
          2017-09-13 06:31:18       1
          2017-07-04 18:09:34       1
          2017-10-17 04:51:21       1
          2018-04-24 14:41:25       1
          2014-06-25 14:50:02       1
```

```
           2009-12-08 20:30:48         1
           2017-02-17 00:58:13         1
           2018-04-05 02:20:17         1
           2013-06-21 22:28:09         1
           2018-04-15 11:19:25         1
           2018-03-27 21:39:55         1
           Name: created_at, Length: 58729, dtype: int64
```

In [140]:
```
followers_df2["created_at"] = pd.to_datetime(followers_df2.created_at, errors='co
infer_datetime_format=True)
```

```
C:\Users\almousawi\Anaconda3\lib\site-packages\ipykernel_launcher.py:2: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stab
le/indexing.html#indexing-view-versus-copy (http://pandas.pydata.org/pandas-doc
s/stable/indexing.html#indexing-view-versus-copy)
```

In [149]:
```
followers_df2.dtypes
```

Out[149]:
```
contributors_enabled                  object
created_at                    datetime64[ns]
default_profile                       object
default_profile_image                 object
description                           object
favourites_count                     float64
followers_count                      float64
friends_count                         object
geo_enabled                           object
id                                    object
listed_count                          object
location                              object
profile_background_color              object
profile_background_image_url          object
profile_background_tile               object
profile_text_color                    object
profile_use_background_image          object
protected                             object
screen_name                           object
statuses_count                       float64
url                                   object
verified                              object
name                                  object
dtype: object
```

In [151]: `followers_df2.head()`

Out[151]:

und_image_url	profile_background_tile	profile_text_color	profile_use_background_image	protected
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False
NaN	False	333333	True	False h

```
In [327]: followers_df2[["screen_name", "statuses_count",]]
```

Out[327]:

	screen_name	statuses_count
0	NfL4eqkwEtNO9Ij	2.0
1	AbdelraheemDahe	56.0
2	6YL4FYnsTIpJgpb	173.0
3	Abonass49267837	0.0
4	hgLKyaK6pbTUREV	0.0
5	MOHAMMED_MISR	13.0
6	AhmedMo55079804	600.0
7	AzozDar11049201	1.0
8	AhmedFa00156388	0.0
9	manarsh2000	75.0
10	R4DFnaM2jfv0SpC	0.0
11	voice_kuw83	0.0
12	AlsayahNayef	179.0
13	faizabdullahra	0.0
14	DrJenan_Alharbi	3120.0
15	abcde202030	1839.0
16	7ijnah	0.0
17	toooth1784	37.0
18	bader29166614	0.0
19	EgSu9	381.0
20	BNGj33	0.0
21	fbgtm8lNhuieSdK	46.0
22	Nn06923549	0.0
23	OneDay155	2979.0
24	abdulla41406958	0.0
25	Zp5hKJn4hUbiUYD	0.0
26	AlseadiNaser	0.0
27	a74658080	38.0
28	erjjwan	0.0
29	OmYa3qoob_	2.0
...	...	...
161807	WWW35197632	167.0
161808	PW9PzwyT4vqsXHf	14.0
161809	Ranim69647789	0.0

	screen_name	statuses_count
161810	tnt__1212	2.0
161811	Almjboor3	0.0
161812	dainahaendschk5	0.0
161813	joellemccarlie2	0.0
161814	alajmi_nashi	2.0
161815	2IlWOXNFkbVk5jS	0.0
161816	I59DGrhPeY3L8ik	40.0
161817	ahmadal02168062	0.0
161818	alysaskehan2	0.0
161819	fatoom96616843	0.0
161820	Dhiyaa99	6.0
161821	Fahad3087619518	0.0
161822	Dnajjsndjd1	0.0
161823	Saqqar313	0.0
161824	XJ44EtDcBcRpfcJ	0.0
161825	donagor24274813	0.0
161826	ff00tt1	0.0
161827	kuwait67164658	0.0
161828	al3od_dahn	0.0
161829	Feahed1	0.0
161830	hares14736439	0.0
161831	Lheydhen143	0.0
161832	0eKJSR7607dlL2D	0.0
161833	abulais_molla	0.0
161834	gwyngoncalves3	0.0
161835	zehrsm0a	32426.0
161836	azeel08510991	0.0

72284 rows × 2 columns

In [219]: `followers_df2.head().T`

Out[219]:

|	0	1	2	
contributors_enabled	False	False	False	Fal
created_at	2018-04-27 06:47:58	2017-01-27 04:16:32	2018-03-30 19:01:16	2018-04- 18:28:
default_profile	True	True	True	Tr
default_profile_image	True	False	False	Tr
description	NaN	NaN	أن يكون امامك اسد مفترس .. افضل من أن يكون خلف...	Na
favourites_count	0	374	932	
followers_count	0	49	58	
friends_count	7	123	105	1!
geo_enabled	False	False	False	Fal
id	9.89758e+17	8.24833e+17	9.79796e+17	9.84861e+
listed_count	0	0	0	
location	NaN	NaN	NaN	Na
profile_background_color	F5F8FA	F5F8FA	F5F8FA	F5F8I
profile_background_image_url	NaN	NaN	NaN	Na
profile_background_tile	False	False	False	Fal
profile_text_color	333333	333333	333333	3333:
profile_use_background_image	True	True	True	Tr
protected	False	False	False	Fal
screen_name	NfL4eqkwEtNO9Ij	AbdelraheemDahe	6YL4FYnsTIpJgpb	Abonass492678:
statuses_count	2	56	173	
url	NaN	NaN	NaN	Na
verified	False	False	False	Fal
name	alseyassah	alseyassah	alseyassah	alseyass:

In [174]:
```
h = followers_df2.statuses_count.hist()
h.set(yscale="log")
```
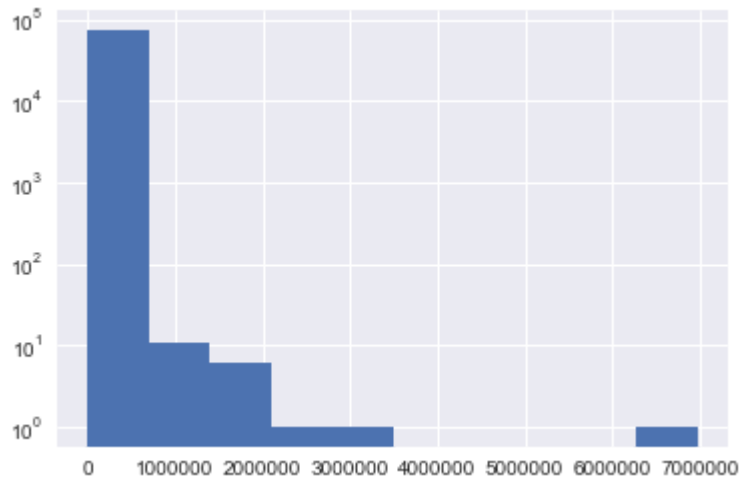
Out[174]: [None]
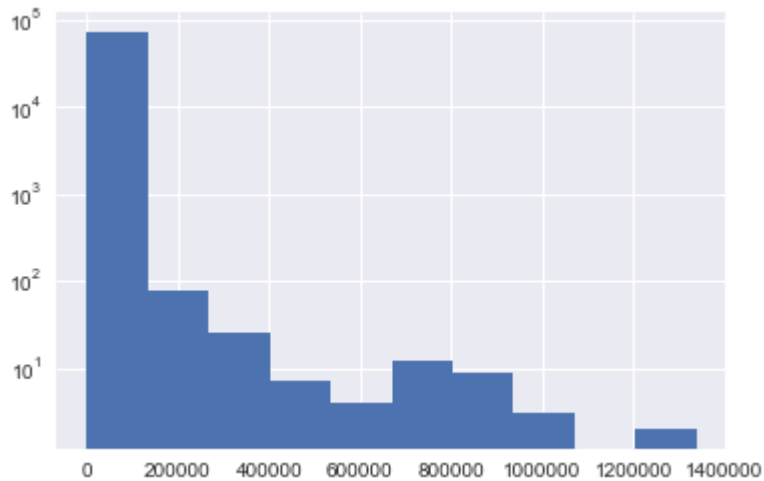
In [177]:
```
a = followers_df2.favourites_count.hist()
a.set(yscale="log")
```
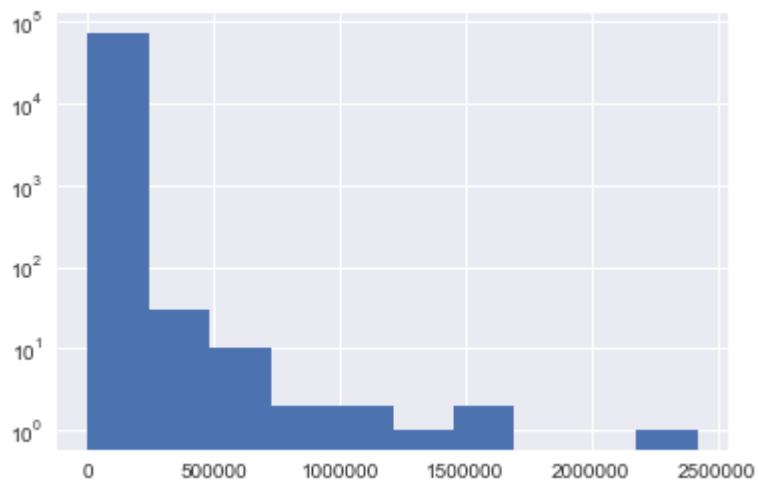
Out[177]: [None]
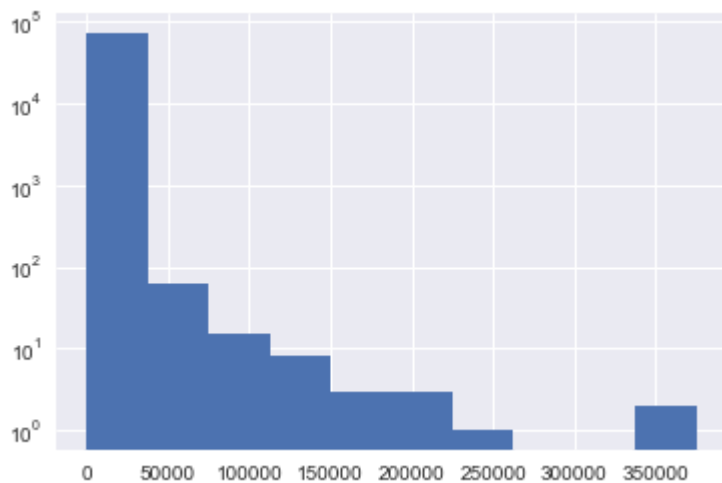
In [211]:
```
b = followers_df2.followers_count.hist()
b.set(yscale="log")
```
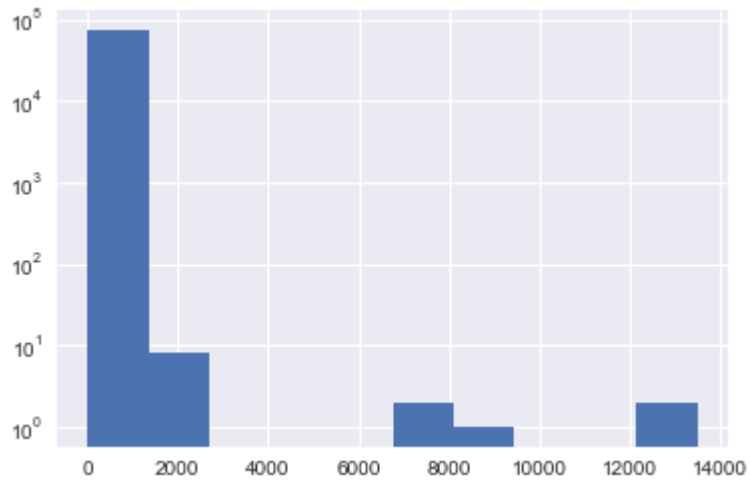
Out[211]: [None]

In [216]:
```
c = followers_df2.friends_count.hist()
c.set(yscale="log")
```

Out[216]: [None]

In [220]:
```
d = followers_df2.listed_count.hist()
d.set(yscale="log")
```

Out[220]: [None]

```
In [231]: followers_df2.profile_text_color.value_counts()
```

```
Out[231]: 333333      68265
          333333.0     1972
          000000       1256
          3C3940        116
          3D1957         95
          666666         95
          0              87
          3E4415         61
          362720         59
          663B12         54
          0C3E53         44
          634047         35
          5E412F          7
          FFFFFF          5
          827972          5
          1C1F23          4
          62187A          3
          4BB7DF          3
          4F3F38          3
          140714          3
          9AE4E8          3
          FF0000          2
          DFB407          2
          6C961C          2
          CE7834          2
          838978          2
          B5903F          2
          B8B4B4          2
          990000          2
          7D7D7D          2
                       ...
          E3D86E          1
          FF8800          1
          FDB31C          1
          0F034E          1
          8E8FAD          1
          424242          1
          383738          1
          8A8A8A          1
          1A171A          1
          9DDD95          1
          7A5103          1
          F6EDC6          1
          4A474A          1
          C2C286          1
          CB9D5B          1
          F69B88          1
          FF1F17          1
          696545          1
          9A7C95          1
          00E043          1
          0F17A8          1
          F67C94          1
          4A66C1          1
          0099B9          1
```

```
           E0912A             1
           5C91B9             1
           AB37AB             1
           404040             1
           7290A8             1
           2FC2EF             1
           Name: profile_text_color, Length: 114, dtype: int64
```
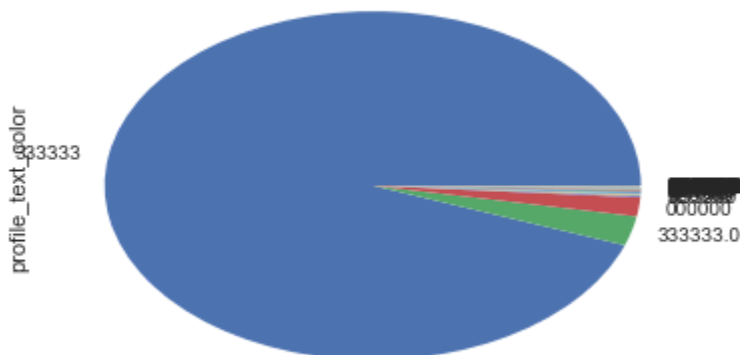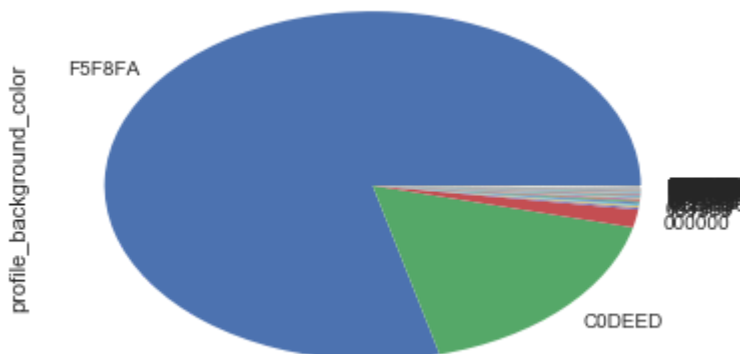
In [239]: `followers_df2.profile_text_color.value_counts().plot(kind="pie")`

Out[239]: <matplotlib.axes._subplots.AxesSubplot at 0x57a2947ba8>

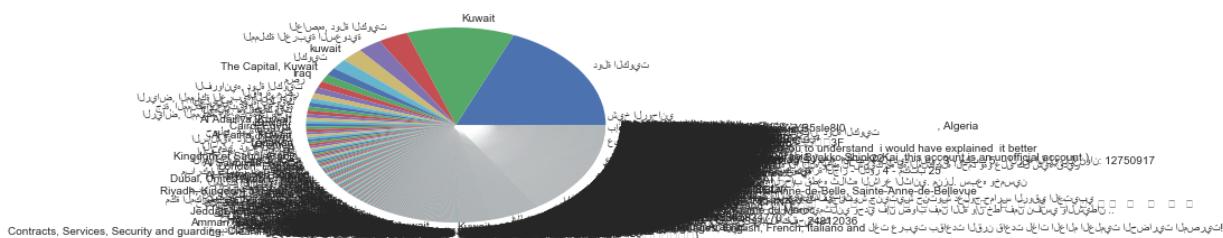In [243]: `followers_df2.profile_background_color.value_counts().plot(kind="pie")`

Out[243]: <matplotlib.axes._subplots.AxesSubplot at 0x57b2c2b518>

In [248]: `followers_df2.location.value_counts().plot(kind="pie")`

Out[248]: <matplotlib.axes._subplots.AxesSubplot at 0x57bd53cba8>

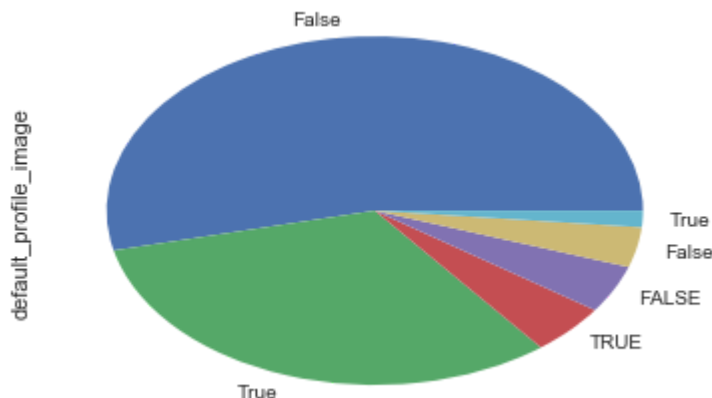In [250]: `followers_df2.location.value_counts().head()`

Out[250]:
```
3877                     دولة الكويت
Kuwait                          2409
664              العاصمه, دولة الكويت
532          المملكة العربية السعودية
kuwait                           479
Name: location, dtype: int64
```

In [251]: `followers_df2.default_profile_image.value_counts().plot(kind="pie")`

Out[251]: `<matplotlib.axes._subplots.AxesSubplot at 0x57bd490860>`

In [253]: `followers_df2[~(followers_df2.description.isnull()) | (followers_df2.)]`

Out[253]:

	contributors_enabled	created_at	default_profile	default_profile_image	descript
2	False	2018-03-30 19:01:16	True	False	ون امامك اسد مفترس .. نل من أن يكون خلف
5	False	2018-04-20 12:30:29	False	False	نَ اللَّهَ وَمَلَائِكَتَهُ يُصَلُّونَ عَلَى
6	False	2017-12-29 23:43:11	True	False	ن الله وبحمده ... سبحان الله م
8	False	2018-04-26 03:56:58	True	False	No Risk No
9	False	2017-08-23 22:04:35	True	True	ار الأخبار العامة الصحفيون ياضات أخبا

In [254]:
```
followers_df2["tweets_mean"] = followers_df2.statuses_count.mean()
```

C:\Users\almousawi\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stab
le/indexing.html#indexing-view-versus-copy (http://pandas.pydata.org/pandas-doc
s/stable/indexing.html#indexing-view-versus-copy)
  """Entry point for launching an IPython kernel.

```
In [255]: followers_df2.head().T
```

Out[255]:

	0	1	2	
contributors_enabled	False	False	False	Fal
created_at	2018-04-27 06:47:58	2017-01-27 04:16:32	2018-03-30 19:01:16	2018-04- 18:28:
default_profile	True	True	True	Tr
default_profile_image	True	False	False	Tr
description	NaN	NaN	أن يكون امامك اسد مفترس .. افضل من أن يكون خلف...	Na
favourites_count	0	374	932	
followers_count	0	49	58	
friends_count	7	123	105	1!
geo_enabled	False	False	False	Fal
id	9.89758e+17	8.24833e+17	9.79796e+17	9.84861e+
listed_count	0	0	0	
location	NaN	NaN	NaN	Na
profile_background_color	F5F8FA	F5F8FA	F5F8FA	F5F8F
profile_background_image_url	NaN	NaN	NaN	Na
profile_background_tile	False	False	False	Fal
profile_text_color	333333	333333	333333	3333:
profile_use_background_image	True	True	True	Tr
protected	False	False	False	Fal
screen_name	NfL4eqkwEtNO9Ij	AbdelraheemDahe	6YL4FYnsTIpJgpb	Abonass492678:
statuses_count	2	56	173	
url	NaN	NaN	NaN	Na
verified	False	False	False	Fal
name	alseyassah	alseyassah	alseyassah	alseyassa
tweets_mean	2113.97	2113.97	2113.97	2113.!

```
In [257]: above_mean_tweets = followers_df2[followers_df2.statuses_count > followers_df2.tw
```

```
In [275]: sorted_above_mean_tweets = above_mean_tweets.sort_values(by="statuses_count", asc
```

In [281]: sorted_above_mean_tweets[["location","statuses_count"]]

Out[281]:

	location	statuses_count
46340	USA|EUROPE|ASIA|GLOBAL✈	1337342.0
62719	USA|EUROPE|ASIA|GLOBAL✈	1337330.0
67566	NaN	968244.0
54656	NaN	967967.0
68045	NaN	957859.0
67550	NaN	921416.0
61313	NaN	921117.0
68222	NaN	899703.0
67962	NaN	894437.0
8500	NaN	894362.0
56180	NaN	894129.0
67599	NaN	878434.0
2603	NaN	878371.0
66430	NaN	878229.0
9062	NaN	782924.0
14221	NaN	782862.0
56399	NaN	782702.0
133703	الرياض	773946.0
91	للاعلان 0551503226	764345.0
134280	للاعلان 0551503226	763394.0
57372	للاعلان 0551503226	763393.0
143734	للاعلان 0551503226	761030.0
47086	NaN	745468.0
64284	NaN	745468.0
10702	NaN	745467.0
67934	الرياض, المملكة العربية السعودية	711725.0
68113	NaN	640575.0
160041	NaN	634562.0
67717	NaN	614079.0
6883	NaN	566032.0
...	...	...
49701	NaN	2135.0
67582	NaN	2135.0
151342	الشيخ أبو عبد الرحمن	2132.0

	location	statuses_count
147739	السعودية AL DAMMAM	2131.0
137358	NaN	2131.0
61151	kuwaitкw	2130.0
154667	الكويت.القادسية.الزهراء	2129.0
53768	Kuwait	2128.0
53661	Kuwait	2128.0
66931	NaN	2128.0
61116	الرياض, المملكة العربية السعود	2127.0
147992	NaN	2127.0
46509	NaN	2126.0
53666	Kuwait	2126.0
7222	NaN	2126.0
48229	kuwait! اللهم ارحم ابي	2125.0
14703	الدمام	2122.0
152946	الدمام	2122.0
55501	NaN	2121.0
56543	NaN	2121.0
48546	Kuwait	2121.0
51174	Kuwait	2120.0
133209	NaN	2120.0
56505	alshamia .kuwait	2119.0
53944	Kuwait	2117.0
6314	NaN	2117.0
67827	NaN	2116.0
51189	Sur, Oman	2116.0
147617	Oslo, Norway	2115.0
54079	Al Adan, Kuwait	2114.0

6568 rows × 2 columns

```
In [283]: followers_df2.geo_enabled.value_counts().plot(kind="pie")
```
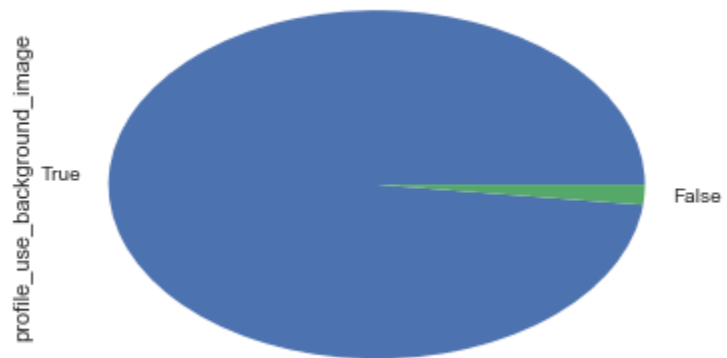
Out[283]: <matplotlib.axes._subplots.AxesSubplot at 0x57cbf1e0b8>
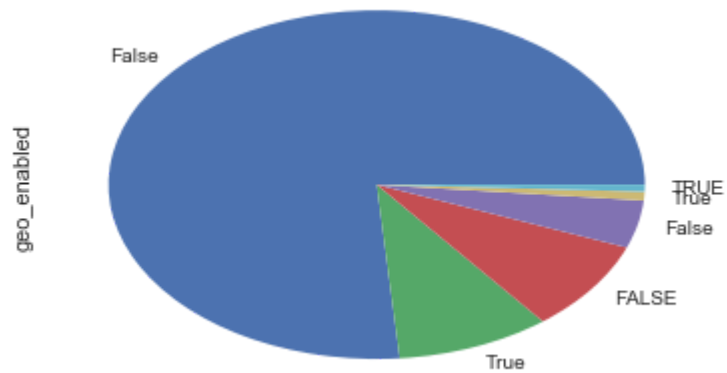

```
In [285]: followers_df2.profile_use_background_image.value_counts().plot(kind="pie")
```

Out[285]: <matplotlib.axes._subplots.AxesSubplot at 0x57cc0cdf28>


```
In [311]: _color == "C0DEED") | (followers_df2.profile_background_color == "555555") | (fol
```

```
In [298]: followers_df2.profile_background_color.head()
```

Out[298]: 0   F5F8FA
          1   F5F8FA
          2   F5F8FA
          3   F5F8FA
          4   F5F8FA
          Name: profile_background_color, dtype: object

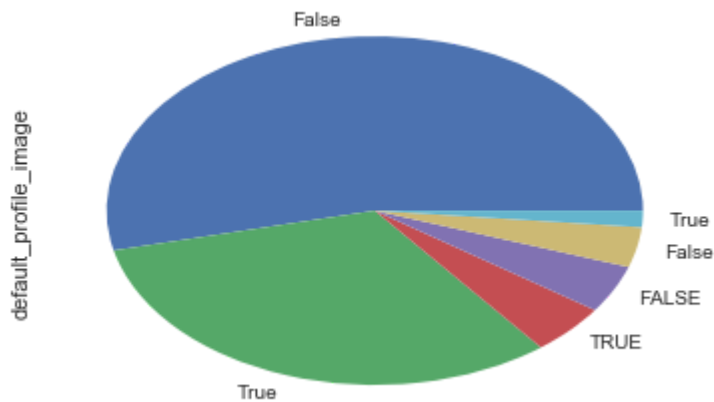In [316]: `most_background_colors.profile_background_color.value_counts().plot(kind="bar")`

Out[316]: `<matplotlib.axes._subplots.AxesSubplot at 0x57cf8dea90>`
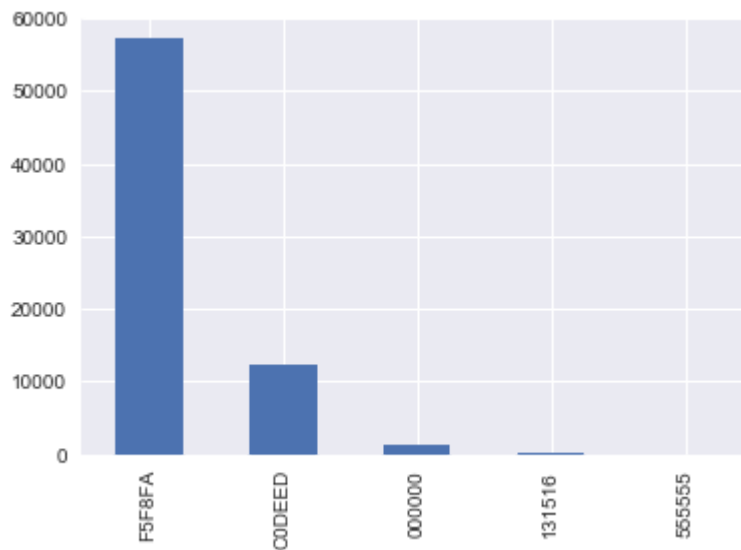
In [331]: `followers_df2.default_profile_image.value_counts().plot(kind="pie")`

Out[331]: `<matplotlib.axes._subplots.AxesSubplot at 0x57cf02c0b8>`

In [340]: `followers_fake = followers_df2[(followers_df2.default_profile_image == False) | (`

In [341]:
```
followers_fake[["default_profile_image", "screen_name"]]
```

Out[341]:

	default_profile_image	screen_name
57145	FALSE	AlansiMee
57149	FALSE	FethAlmsha3er
57151	FALSE	maha666666
57152	FALSE	JulietYorpo
57154	FALSE	bo3li872
57155	FALSE	HezilKada
57160	FALSE	Meniac321
57162	FALSE	pjn5cMGPZpW6Mhl
57165	FALSE	ZtYBmTIWz0TIas5
57166	FALSE	dana7x_
57167	FALSE	Ahmed65533162
57168	FALSE	hamdi_zeid
57174	FALSE	dcdxfg
57176	FALSE	sayed_FHassan
57180	FALSE	AliAli99161994
57181	FALSE	jawarneh_waed
57182	FALSE	RachidElhalla
57184	FALSE	Nasserkanaan2
57185	FALSE	MidoElboghdady0
57186	FALSE	JuSFNI9ZSSNfjSp
57187	FALSE	Abuhamad1000
57188	FALSE	66Fatooon
57189	FALSE	FswR0skHAmSeXBa
57190	FALSE	W_7beeb
57191	FALSE	oXanvthutN2NLUH
57195	FALSE	ShyamSu95425637
57196	FALSE	mostafabk2010
57197	FALSE	presspho
57198	FALSE	faizabdullahra
57199	FALSE	ABUOMSHARY
...	...	...
155035	FALSE	mozellgeoffroy2
155038	FALSE	ALKHATLAN_ALI
155039	FALSE	fance1974

	default_profile_image	screen_name
155044	FALSE	s_j456
155047	FALSE	fernandafitou13
155048	FALSE	qa20tar22
155052	FALSE	ali19788954
155053	FALSE	AheadZulfikar
155060	FALSE	rosetta86976554
155061	FALSE	aiXkeds9nRGju7W
155066	FALSE	AyaElkomy12
155068	FALSE	matilda97512288
155070	FALSE	e3z8zanuzeWLQ6A
155074	FALSE	IEZkGHGyh5l6bZ3
155076	FALSE	daynacarlson11
155077	FALSE	salem61000957
155079	FALSE	DFkdPf0z9xBvOcL
155081	FALSE	8Mw5r
155082	FALSE	z3abinho10
155084	FALSE	maged_store_q8
155089	FALSE	DVLsgE1rK0z4d5d
155090	FALSE	tien21944685
155096	FALSE	gRMrVRzTb8NZBTy
155099	FALSE	eleni75415816
155104	FALSE	Slm12346
155109	FALSE	gZyB80Uc5YZpglr
155110	FALSE	khaledx52
155112	FALSE	SMgHixoe8sp2KMp
155113	FALSE	MoAdel15272928
155115	FALSE	MohmmedSamir8

5890 rows × 2 columns

```
In [344]: followers_fake2 = followers_df2[(followers_df2.statuses_count < 5)]
```

In [345]: `followers_fake2[["statuses_count", "screen_name"]]`

Out[345]:

	statuses_count	screen_name
0	2.0	NfL4eqkwEtNO9lj
3	0.0	Abonass49267837
4	0.0	hgLKyaK6pbTUREV
7	1.0	AzozDar11049201
8	0.0	AhmedFa00156388
10	0.0	R4DFnaM2jfv0SpC
11	0.0	voice_kuw83
13	0.0	faizabdullahra
16	0.0	7ijnah
18	0.0	bader29166614
20	0.0	BNGj33
22	0.0	Nn06923549
24	0.0	abdulla41406958
25	0.0	Zp5hKJn4hUbiUYD
26	0.0	AlseadiNaser
28	0.0	erjjwan
29	2.0	OmYa3qoob_
31	0.0	5cTuin6ULGU1yqJ
33	0.0	Ebrahim10688802
34	0.0	lailaashkanani3
38	0.0	tiKcnWwl8choifU
39	0.0	NOOnaa8_3
43	0.0	h074n
45	0.0	Na80339378
46	4.0	Eman36440917
48	2.0	AAlbakaa
49	2.0	OMT8V3SQrNdZJrk
53	3.0	kuwaitfalkon
55	0.0	559Qq4Nu8zCsKlZ
57	0.0	y75n4H5EyY5qP0e
...	...	...
161797	0.0	Ge9dNuNeh9kQVG5
161799	0.0	Talool551
161801	0.0	NtSHmGMBU6SJZ6x

	statuses_count	screen_name
161804	0.0	E7iMQ4tGcKgzSy2
161806	0.0	theresaleibovi7
161809	0.0	Ranim69647789
161810	2.0	tnt__1212
161811	0.0	Almjboor3
161812	0.0	dainahaendschk5
161813	0.0	joellemccarlie2
161814	2.0	alajmi_nashi
161815	0.0	2IlWOXNFkbVk5jS
161817	0.0	ahmadal02168062
161818	0.0	alysaskehan2
161819	0.0	fatoom96616843
161821	0.0	Fahad3087619518
161822	0.0	Dnajjsndjd1
161823	0.0	Saqqar313
161824	0.0	XJ44EtDcBcRpfcJ
161825	0.0	donagor24274813
161826	0.0	ff00tt1
161827	0.0	kuwait67164658
161828	0.0	al3od_dahn
161829	0.0	Feahed1
161830	0.0	hares14736439
161831	0.0	Lheydhen143
161832	0.0	0eKJSR7607dlL2D
161833	0.0	abulais_molla
161834	0.0	gwyngoncalves3
161836	0.0	azeel08510991

37588 rows × 2 columns

```
In [362]: ake3 = followers_df2[(followers_df2.statuses_count < 5) & (followers_df2.protected
```

In [363]: `followers_fake3[["statuses_count", "screen_name"]]`

Out[363]:

|	statuses_count	screen_name
0	2.0	NfL4eqkwEtNO9lj
222	1.0	tete06501166
273	0.0	GgffHft
544	0.0	Ahmad41418037
624	0.0	k9vQ46Fo570tAUz
912	0.0	ahmed07437151
1149	2.0	Aeslam14
1200	0.0	Mohammedaly4431
1795	0.0	cki9999
1932	1.0	jhnNRyGJxnTQ4kp
1963	0.0	omarbairam1
2022	1.0	QxjFo
2071	0.0	rCxFAN0xzZLkSBT
2139	0.0	4ZpGP0ktqtnbb6E
2602	0.0	Mo10918898
2714	0.0	ZGytvMR4Nkq2zDz
2754	0.0	King82370260
2769	0.0	G68oKAdJlhwcmcZ
2853	0.0	aboali51313973
2995	1.0	bosalem64
3479	0.0	fDYJYhYZrPWvnFF
3611	4.0	XAiZl6yvhoIlLK2
3857	2.0	5R0eMDdMnNepscO
4133	0.0	AbdurhmanFared
4353	0.0	King61338092
4359	0.0	om3bdulm7
4567	0.0	51guviEjqFclRDW
4652	0.0	emanabushanab
4688	0.0	Br0obwfkNcUqFCF
5224	0.0	jsjsksossososo1
...	...	...
161042	0.0	SARAH60011175
161121	2.0	AlyKhal33223383
161172	0.0	6e00f0fe725347e

|	statuses_count	screen_name
161175	0.0	takentgmailcom1
161226	0.0	2e5TzuriJ3UltqR
161259	0.0	B3omarrr
161318	0.0	suood27011308
161344	0.0	MUuSZDwQmGXwCCy
161464	1.0	wSpZ71Uju1l1HFw
161466	0.0	khalaf106_10
161468	0.0	linuSPolX76GQOS
161477	0.0	Alaa45583350
161519	0.0	Ktw7KQKA2J1Agm6
161536	0.0	bToKESLJx1iNg0n
161546	1.0	abosada50524607
161559	0.0	abdoabd25707213
161562	0.0	AgastinSingara1
161588	1.0	t79t79t
161631	0.0	LqjjmuO2Rbjb1OO
161634	1.0	1YFfjCcSUsCKXu3
161660	0.0	Kemookamal2
161668	0.0	wi6aEMpyXPVDJjt
161669	0.0	mdht93551880
161673	0.0	alaaabobakr816
161680	0.0	Bader37969403
161696	1.0	112113almlaz1
161726	0.0	hayaJaber12
161733	0.0	Lolitaa52237111
161736	1.0	Masoomaalqalla1
161761	0.0	rHxc28ofk5tX3zu

1402 rows × 2 columns

In [350]: sns.lmplot(data=followers_df2, x="followers_count", y="statuses_count")
          plt.xticks(rotation=90)

Out[350]: (array([-1000000.,   0., 1000000., 2000000., 3000000., 4000000.,
                  5000000., 6000000., 7000000., 8000000.]),
          <a list of 10 Text xticklabel objects>)
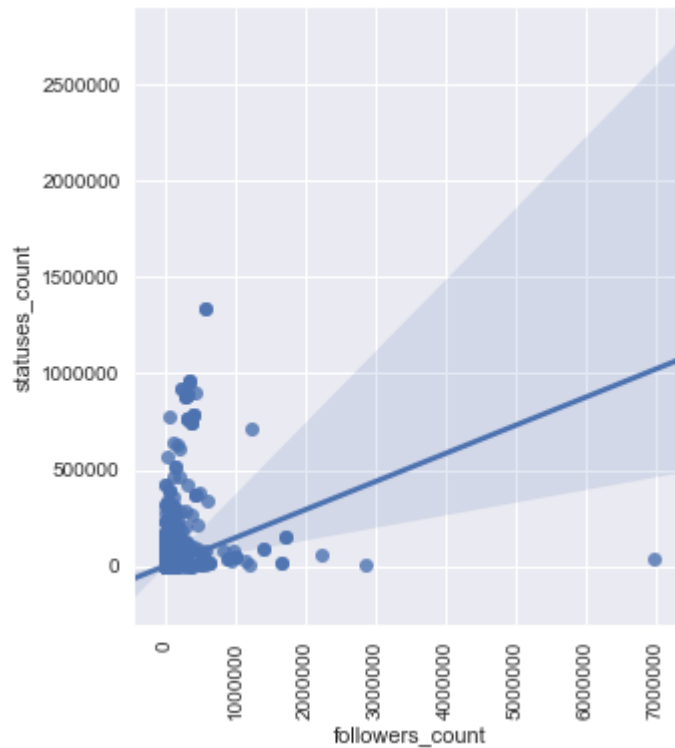
In [371]: plt.plot_date(x= followers_df2.created_at, y=followers_df2.statuses_count)

Out[371]: [<matplotlib.lines.Line2D at 0x57d6591828>]
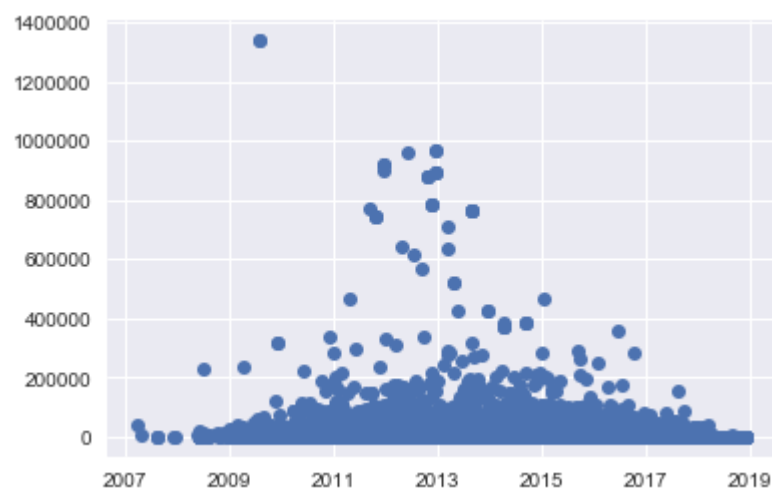
In [375]:
```
followers_df2["followers_mean"] = followers_df2.followers_count.mean()
```

```
C:\Users\almousawi\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: Setting
WithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead

See the caveats in the documentation: http://pandas.pydata.org/pandas-docs/stab
le/indexing.html#indexing-view-versus-copy (http://pandas.pydata.org/pandas-doc
s/stable/indexing.html#indexing-view-versus-copy)
  """Entry point for launching an IPython kernel.
```

In [377]:
```
rs_df2[(followers_df2.followers_count < followers_df2.followers_mean) & (followers_
```

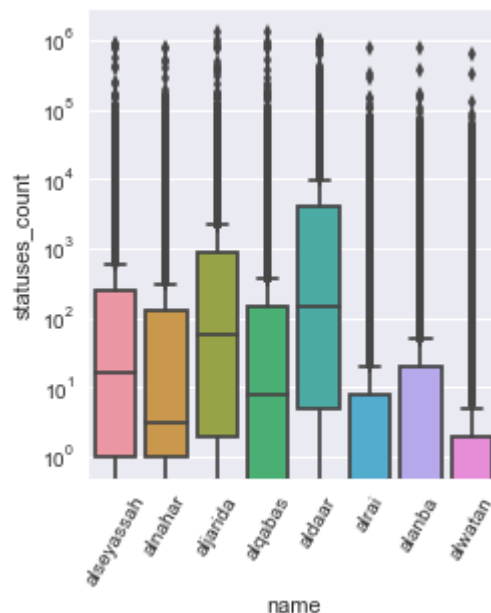| ... | 663B12 | True | False | AhmedFathall7 | 18028.0 | |
...	333333	True	True	bader76aldaheni	7766.0	
...	333333	True	False	kuwaitlaw77	2955.0	
...	333333	True	False	fkamal32	41546.0	https://t.co/YP6
...	333333	True	False	msn77788	3261.0	
...	333333	True	False	ur_fav_kuwaiti	6577.0	https://t.co/gOM
...	000000	False	True	mohammessiteer	8678.0	

In [380]: `sns.factorplot(data=followers_df2, x="name", y="statuses_count", kind="bar")`
          `plt.xticks(rotation=60)`

Out[380]: (array([0, 1, 2, 3, 4, 5, 6, 7]), <a list of 8 Text xticklabel objects>)
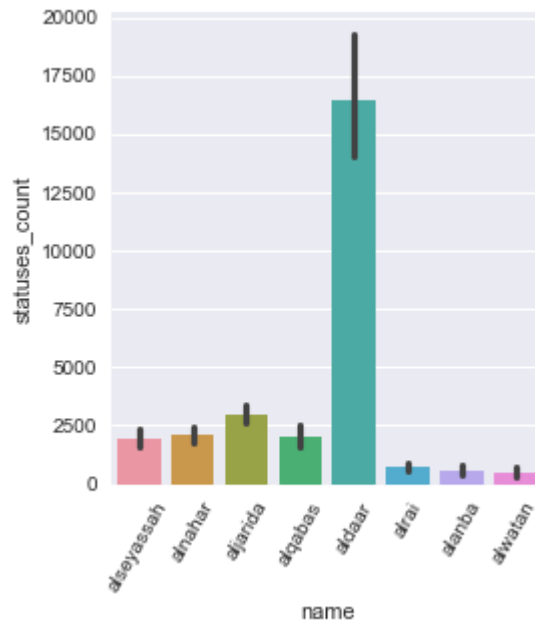
In [403]: `w=sns.factorplot(data=followers_df2, x="name", y="statuses_count", kind="box", or`
          `plt.xticks(rotation=60)`
          `w.set(yscale="log")`

Out[403]: <seaborn.axisgrid.FacetGrid at 0x5825afef28>

In [ ]: