

In [1]:

```
import pandas as pd
import nltk
nltk.download("punkt")
import numpy as np
import string
import json
import matplotlib.pyplot as plt
import csv
import os
from sklearn.utils import shuffle
```

```
[nltk_data] Downloading package punkt to
[nltk_data]      /Users/stevenhansen/nltk_data...
[nltk_data]   Package punkt is already up-to-date!
```

Data sources:

- 1) Random twitter tweets called "random tweets" and 'rand_tweets' in the following code - from: <https://data.world/data-society/twitter-user-data> (<https://data.world/data-society/twitter-user-data>)
- 2) Russian Internet Research Agency (rira) Tweets called "tweets.csv" and 'rira_tweets' in the following code - from: <https://www.kaggle.com/vikasg/russian-troll-tweets?select=tweets.csv> (<https://www.kaggle.com/vikasg/russian-troll-tweets?select=tweets.csv>)
- 3) Random Corpus tweets from the nltk database called "twit_samples_corpus" in the following code
- 4) Data for US Congress party affiliation was pulled from <https://www.kaggle.com/fivethirtyeight/fivethirtyeight-congress-age-dataset> (<https://www.kaggle.com/fivethirtyeight/fivethirtyeight-congress-age-dataset>)

Ingesting the data

In [2]:

```
rira_data = pd.read_csv("./tweets.csv")
```

In [3]:

```
rand_data = pd.read_csv("./Random_Tweets.csv")
```

In [4]:

```
from nltk.corpus import twitter_samples
```

In [5]:

```
twitter_samples.fileids()
```

Out[5]:

```
['negative_tweets.json', 'positive_tweets.json', 'tweets.20150430-223406.json']
```

In [6]:

```
twit_samples_corpus = ([ (t, 'pos') for t in twitter_samples.strings("positive_tweets.json") ] +  
                        [ (t, 'neg') for t in twitter_samples.strings("negative_tweets.json") ] )
```

In [7]:

```
twit_samples_corpus[-1]
```

Out[7]:

```
('@eawoman As a Hull supporter I am expecting a misserable few weeks :-  
(,  
'neg')
```

In [8]:

```
twit_sample_corpus_unlabeled = twitter_samples.strings("positive_tweets.json") + tw  
itter_samples.strings("negative_tweets.json")+twitter_samples.strings("tweets.20150  
430-223406.json")
```

In [9]:

```
twit_sample_corpus_unlabeled
```

Out[9]:

```
[ '#FollowFriday @France_Inte @PKuchly57 @Milipol_Paris for being top en
gaged members in my community this week :)',
 '@Lamb2ja Hey James! How odd :/ Please call our Contact Centre on 0239
2441234 and we will be able to assist you :) Many thanks!',
 '@DespiteOfficial we had a listen last night :) As You Bleed is an ama
zing track. When are you in Scotland?!',
 '@97sides CONGRATS :)',
 'yeaaaah yippppy!!! my accnt verified rqst has succeed got a blue tic
k mark on my fb profile :) in 15 days',
 '@BhaktisBanter @PallaviRuhail This one is irresistible :)\n#FlipkartF
ashionFriday http://t.co/EbZ0L2VENM',
 "We don't like to keep our lovely customers waiting for long! We hope
you enjoy! Happy Friday! - LWWF :) https://t.co/smyYriipxI",
 '@Impatientraider On second thought, there's just not enough time for
a DD :) But new shorts entering system. Sheep must be buying.',
 'Jgh , but we have to go to Bayan :D bye',
 'As an act of mischievousness, am calling the ETL layer of our in-hous
e warehousing app Katamari.\n\nWell... as the name implies :p.',
 '#FollowFriday @wncer1 @Defense_gouv for being top influencers in my c
ommunity this week :)',
 "Who Wouldn't Love These Big....Juicy....Selfies :) - http://t.co/QVzj
gdluFo http://t.co/oWBL1leQRY",
 '@Mish23615351 follow @jnlazts & http://t.co/RCvcYYO0Iq follow u
back :)',
 "@jjulieredburn Perfect, so you already know what's waiting for you
:)",
 'Great new opportunity for junior triathletes aged 12 and 13 at the Ga
torade series! Get your entries in :) http://t.co/of3DyOzML0',
 'Laying out a greetings card range for print today - love my job :-)',
 "Friend's lunch... yummmm :)\n#Nostalgia #TBS #KU.",
 "@RookieSenpai @arcadester it is the id conflict thanks for the help :
D here's the screenshot of it working",
 '@oohdawg_ Hi liv :))',
 'Hello I need to know something can u fm me on Twitter?? - sure thing
:) dm me x http://t.co/W6Dy130BV7',
 '#FollowFriday @MBandScott_ @Eric_FLE @pointsolutions3 for being top n
ew followers in my community this week :)',
 "@crossbreadmore I've heard the Four Seasons is pretty dope. Penthouse,
obvs #Gobigorgohome\nHave fun y'all :)",
 '@gculloty87 Yeah I suppose she was lol! Chat in a bit just off out x
:))',
 'Hello :) Get Youth Job Opportunities follow >> @tolajobjobs @ma
phisa301',
 "👉👉 - :))))) haven't seen you in years",
 '@Bosslogic @amellywood @CW_Arrow @ARROWwriters Thank you! :-)',
 '@johngutierrez1 hope the rest of your night goes by quickly... I am o
ff to bed... got my music fix and now it is time to dream :)',
 'Spiritual Ritual Festival (Népal)\nBeginning of Line-up :)\nIt is lef
t for the line-up (y)\nSee more at:... http://t.co/QMNz62OEuc',
 "@ke7zum Hey Sarah! Send us an email at bitsy@bitdefender.com and we'l
l help you asap :)",
 '@izzkamilhalda lols. :D',
 'MY kik - hatessuce32429 #kik #kikme #lgbt #tinder #nsfw #akua #cumsho
t :) http://t.co/TnHJD36yzf',
 '@KalinWhite come to my house :)))))',
```

'#nsn_supplements, Effective press release distribution with results!
:) [link removed] #PressRelease #NewsDistribution',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ?
\nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x4
6',
'everyone watch the documentary Earthlings on YouTube :-)',
'@jamiefigsxx follow @jnlazts & http://t.co/RCvcYY00Iq follow u b
ack :)',
'#FollowFriday @MichelBauza @InvataOnline for being top supports in my
community this week :)',
'buuuuuuuut oh well :-)',
'@leisuremarkltd @NoshandQuaff @aktarislam @keanebrands @HeritageSilve
r I am looking forward to visiting next week #letsgetmessy Jo :-)',
'@sehunshinedaily if it makes u feel better i never have nor will see
anyone in kpop in the flesh :D',
'@Joyster2012 @CathStaincliffe Good for you, girl!! Best wishes :-)',
'@_Kimimi A great enough reason to listen to one epic soundtrack. :D',
'@AquaDesignGroup Thank you for the shout out. Have a great Friday
:)',
'I added a video to a @YouTube playlist http://t.co/yzpfsMxUq0 im back
on twitch and today it going to be league :) - 1 / 4',
'Would love to see you dear in #Jordan :) waiting you! @FIRDOZ :) @Vi
sitJordan @dannyprol',
'@ABNORMAL_ANA92 oh, okay :D thanks!',
'@sssniperwolf like how to fake gameplays ;) haha Im kidding, im kiddi
ng. You do good stuff :).',
'@dennislami @Dicle_Aygur, yeah exactly :)',
'Our new product line is in our #etsy shop now! Check it out :) htt
p://t.co/h8exCTLQxg #boxroomcrafts',
'@PeakYourMind I hope your vacation is going great! :D',
'@groovinshawn they are rechargeable and it normally comes with a char
ger when u buy it :)',
'#FollowFriday @France_Espana @reglisse_menthe @CCI_inter for being to
p engaged members in my community this week :)',
'Well she's asleep and I have no one to talk to sooo someone text me
:)',
'@brynybrath @smallcappy Yes, I suppose. I bet he'll have a blue fit a
fter hearing her speech today. Pity :-)',
'Green gardens, midnight sun, beautiful canals dasvidaniya till next v
isit.:)',
'@KeithRParsons are you scouting SG for a future WLAN pros conference
here in Asia? :)',
'@Cecilie_Hell @420evilangel @wazimotometal @durooooooooo @spigranty Goo
d for u, better change it to lollipop 🍭 :).',
'We &3 u Nez :) #AGNEZMO https://t.co/cGVIMHSINz',
'@LittleMix Follow me Please :) This is my Big Dream :)',
'@Elemaaan oley be :D',
'"@CowokAddict: Mama is the only reason why I stand stronger up to no
w! :)'',
'@MacatangayApril follow @jnlazts & http://t.co/RCvcYY00Iq follow
u back :)',
'@tk_kjk_kndr @boukendreamer OH MY GOD MISTY, MY BABY IS SO CUTE!!! :
D',
'@BhaktisBanter \n\nI love blue :) \n#FlipkartFashionFriday http://t.c
o/HnbinH35ES',
'@CarcassDrop Woohoo! Can't wait :) Have you signed up yet, or still t
hinking about it? MKa",

'i have liam access now :))',
 '@SyuhxdxTengku most welcome :)',
 'Stats for the day have arrived. 1 new follower and NO unfollowers :)
 via <http://t.co/p6K6SiH58a>.',
 '"@sluttywife2 you shouldn't be surprised...you have an amazing figure :)",
 '#FollowFriday @murtishaw @aqui_fr @FRTechStartups for being top influencers in my community this week :)',
 '#HappyBirthdayEmilyBett @emilybett :) Wishing you all the best you be autiful,sweet,talented,amazing... <https://t.co/humtCltr3I>',
 '2 plans for the day down the drain great :):',
 '@x123456789tine @5SOS_FAHUpdates gotta love timezones :p',
 'are your parents proud of you – lol, not in the least :D maybe sometimes they get happy because of my grades, al... <http://t.co/bJjeGIOOGU>',
 'Grande :) <https://t.co/gsaaxNpR8u>',
 'Manila_bro has chosen to follow me on Twitter! <http://t.co/lKXZWxNlf>
 b. Thanks for the follow :)',
 '"@syazwanzainal sure let me know when you're around..at this side of the world #eh u too take care :-)",
 '#FollowFriday @michaelgreen @superninjaalan @Doug_Laney for being top new followers in my community this week :)',
 'finally the fucking weekend :)',
 'REAL :)',
 '@LoLEsportspedia thanks :D',
 'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw <3 \nLove you <3 x4 5',
 'YES! I Joined #HushedCallWithFraydoe for a call & gift from @_Fraydoe <3 Gotta Get @HushedApp :D <http://t.co/VaLve8omdT>',
 '@YasLarry yeahhh :)',
 'can I DM you & make your night better :)))',
 'just joined the #HushedPinWithSammy Event :D Might get to Text with @SammyWilk for a day! Luv U @HushedApp <http://t.co/kGfgawdHy9>',
 'Would really appreciate it if you share this video around :) <https://t.co/MhK3B3wOpQ>',
 'Hello :) Get Youth Job Opportunities follow >> @tolajobjobs @xhebenkewu_9920',
 '@TomParker oh wow!! That is beautiful tom :)',
 'Love You @darlingIXHAI22 @SyreenAnne :) <https://t.co/wx7yRrE7sV>',
 'I added a video to a @YouTube playlist <http://t.co/HVVPhSYakA> im back on twitch and today it going to be league :) - 1 / 3',
 '#FollowFriday @AmericanOGrain @PecomeP @APaulicand for being top supports in my community this week :)',
 '@ZaynZaynmalik30 follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
 "Gym Monday can't wait :). Likes",
 '"@HarNiLiZaLouis Hey, here's your invite to join Scope as an influencer :) <http://t.co/rZgZtQ2fJT>',
 'Those friends know themselves :)',
 'waiting for nudes :-)',
 '@JacobWhitesides go sleep u ! :)))))))))',
 'Stats for the day have arrived. 1 new follower and NO unfollowers :)
 via <http://t.co/RB8pMNgMEo>.',
 'My birthday is a week today! :D',
 '"@metalgear_jp @Kojima_Hideo I want you're T-shirts ! They are so cool ! :D",
 '@AxeRade haw phela if am not looking like Mom obviously am looking li

ke him :)',
'@zaynmalik prince charming on stage :) x <https://t.co/OnVFhzt5fZ>',
'i have really good luck :)',
'Stats for the day have arrived. 1 new follower and NO unfollowers :)
via <http://t.co/XzsOGaC4zK>.',
'#FollowFriday @straz_das @DCarsonCPA @GH813600 for being top engaged
members in my community this week :)',
'@twentyonepilots @fujirock_jp tylers hipster glasses :D',
'@MartyRafenstein \n\nHey Marty !! Glad to see on Twitter. :)',
'@UKBusinessLunch Hi we will be joining you again today :)',
'@LAfitnessUKhelp done thanks :-)',
'Its already afternoon, lets read Al Kahfi before the day finish :)',
'OhmyG! yaya dub @mainedcm im done doing to stalk your ig acct.. GOND
OOO MOO TOLOGOOO :) HAHA',
'@rozbabes Here's your invite to become a Scope influencer :) Details
here: <http://t.co/ipJ2yOiGet>',
'#FollowFriday @NGourd @Locita @D_Robert_Kelly for being top influence
rs in my community this week :)',
'@kevinthewhippet @Cassie_Spaniel @Bracken_Nelson @BellisimoBella1 @Sp
anielHarry thanks :) zzz xx',
'Physiotherapy Friday is my hashtag for today. Custom! :-)',
'@Cjlopez21 you know I will 🍌 Monica and I miss you to, yeah sounds g
ood to me :)',
'"Good morning, beautiful :)" That\'s all it takes.',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ?
\nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x4
3',
'@MandaScapinello oh yeah?? I am definitely going to try it tonight th
en! :) we took your advice too! We are in Treviso now!',
'@morallosanthony follow @jnlazts & http://t.co/RCvcYY00Iq follow
u back :)',
'@NIKKIERIOZZI Hi! Would you like an @imPastel concert? Let me know yo
ur city and country and I'll start working on it! Thanks :)',
'Fine, \n...Have a gorgeous Friday, friend!...; xo..-:)) <https://t.co/JmpkZP2DaI>',
'Oven roasted garlic in olive oil, sun dried tomatoes, some dried basi
l, and century tuna :) <https://t.co/EsCc9QhLob>',
'@HostMyOffice @NigelpWhittaker @lemezma @TWBC_Business @_TheBunkerJL
Right back atcha! Have a great day everyone :)',
'@TeamTall17 @FlashHayer but doesn't even follow back :-)',
'The future is almost here then :) <https://t.co/role3ZCL97>',
'#FollowFriday @Michelpioria @MyFrenchCity @jasoncreation for being to
p new followers in my community this week :)',
'No chance :)',
'@ChiAB2486 @MrCliveC @PCDKirkwood @DC_ARVSgt @COPS_President @EmWilli
amsCCCU @LauraRGallagher @Hall11Kate @LaMinx541 @JohnTarbet71 cheers
:)',
'@thatguycalledP go po for ice cream :))',
'@19strawberry66 I agree 100% :)',
'@SpazzyTsukihara hehehehe thats the point :p',
'@KalinWhite next time just stay home :)',
'@Gculloty87 thanks :)',
'#FollowFriday @digitalplace2be @intlboost @_lafontpresse for being to
p supports in my community this week :)',
'@stayfaboo it will be up soon, i promise :)',
'Web Whatsapp volta a funcionar com iPhone jailbroken. :-)',
'@crustyolddeen (I plan on watching it later) at 34 mins Leia appears

as a hologram from R2D2 w a message for Obi Wan as he sits w Luke :)',
'@Mburu__ Inter 3 UCL, Arsenal... Small team, Right! :)',
'Just passing by :) 🇬🇧 (@ Dewsbury Railway Station (DEW) - @nationalrail in Dewsbury, West Yorkshire) <https://t.co/DvBssHbrfx>',
'@ClearlyArticle :) its 430 am smh',
'@uptommosass it's 9:25 am here :) I live in Scotland :) it's strange to imagine what?- Megan xx",
'@bookmyshow \n\n !\n#MasaanToday\n#MasaanToday\n\nA4.... Shweta Tripathi \n\n !\n#MasaanToday\n#MasaanToday\n\n-.-) .-..',
'@WforWoman 5. Over 20 W kurtas! And my Mom has about half the number I have :D #WSaleLove',
'Ah! Hello back Larry! @TransworldBooks :) <https://t.co/8XhjJb4jtH>',
'Anyway my Friday is looking kinda goood :)',
'@jhun_hunyo follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back :)',
'Lol. Well. That's life :) thank God it enn you <https://t.co/GLoCEIjGQQ>',
'@OJBJ @holmesjsamuel surely this could be your warmup this morning ??? Coming on 15th to Bath :) xx',
'Dum Dum Andar - Ram Sampath, Sona Mohapatra & Samantha Edwards Me in Tulane to razi razi, Wah! That's Josh :) <http://t.co/ul8MARDfhm>',
'@justinbieber :) always smile',
'@darlakim_ picture. :)',
'@arsenalnewsasit Thanks again, your time 16.20 right? That's perfect timing for me here :).",
'#FollowFriday @IzywayLesExpats @na4innov @InXpressCoAzur for being to p engaged members in my community this week :)',
'@Juleeyaanaa i know :))',
'#GiveItUp We have already given up our gas subsidy long back when this initiative was proposed.. Feeling so delighted having done that!! :)',
'@dayloladay I missed this yesterday!! :-)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x4 2',
'@jaimeemelanie_ lmaoo! The best songs ever &3 We shall have our own little throwback this week (y) :p',
'@Clazziebritchas then go to the outlying islands, such as Cheung Chau, Mui Wo....totally different :))',
'#KFCkitchentours Kitchen is so clean. I'm totally amazed :) @KFC_India",
'@cybelxxx follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back :)',
'@Jana7380 on the cusp of testing the waters, hope yours is rewarding :)',
'#FollowFriday @BroadcastBeat @InSunWeTrust @conseilsmkg for being top influencers in my community this week :)',
'arummzz: Let's go... I'll drive for you :p\n\n#traveling #traveler #yogyakarta #jeep #Indonesia #instamood... <https://t.co/s7y4Ys5JeU>',
'Anyone wanna skype me? :D',
'@agylyxa may i look so, bit i am a real nice friendly girl :-)',
'Im not like them. But i can pretend~ :)',
'watching where we are concert film :)',
'Congratulations @amisharanka95, you're the winner to our #CheesyDelights contest :) \nPlease DM us your address and contact number!",
' :) Have a great weekend guys! <https://t.co/DLDKLpeTAb>',
'#FollowFriday @CLARAROJASG @BF_P2C @MyBusiness_Plan for being top new

followers in my community this week :)',
'@PuaMagasiva it was cool seeing you film today! :)',
"Check out Email Marketing 24/7: <http://t.co/O5fjR7oEqk> you won't regret if you buy it :)',
'@vineshpomal LOL. Come join us ... See u in around 14 hours if u leave now, without delays. :)',
"Actually very easy doing like this, it must be a station I guess where the train 'wd take at least an hour for shifting its engine etc :-)",
'sunburn is peeling :-)',
'@Sexdate_gratis Visit my blog <http://t.co/UzOAqroWKx> thanks :D',
"@TikoSD Hi! Would you like an @imPastel concert? Let me know your city and country and I'll start working on it! Thanks :)",
'@no1_razorstan then talk to me. I can help you :)',
'"@CassTheTrainer: A Huge & Warm Welcome to @VodkaBlond :-))"\n\n★ finally we complete the triangle ! ☆',
'@LucienneDiver I live in Northern Ireland. :) what sights have you seen?',
'@Mecastor01Mica follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
'#FollowFriday @Z_Intl_Agency @Tivipro @compeXly for being top supporters in my community this week :)',
'Stats for the day have arrived. 1 new follower and NO unfollowers :) via <http://t.co/6prugvmOuC>.',
'@imraina feeling smthng smthng fr u...lol...wanna hug u....XOXO...love u u jaann take care :* :)) <3 :)',
'thanks mom :)',
'Thanks #TopNewFollowers @BestOfFicPad @MrCFluegel @JeanMarcPN Happy to connect :)',
"@MooseAllain @MeatBingo that is the just most wonderful thing, it's made me feel all fluffy inside. Great pirouette, Moose :D",
"@KristophCajon I have a trip to philly in December so after that :) I'd love to come out there dude.",
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw <3 \nLove you <3 x4 1',
"The question is flawed. Pain doesn't negate strength :) <https://t.co/77TbkS2Djw>",
"@ReflectKnives You went solo because these moves weren't being made :D",
'hey my fav nirvana song is smells like teen spirit rip amy winehouse :-)))))',
'#FollowFriday @CCIdeLYON @CCI_95 @CPNERI_ESIGROUP for being top engaged members in my community this week :)',
"Let's go... I'll drive for you :p\n\n#traveling #traveler #yogyakarta #jeep #Indonesia #instamood... <https://t.co/s7y4Ys5JeU>",
'did we name the couple yet?? #TomHiddleston #ElizabethOlsen ?? #yaytheylookgreat :)',
'I love you all goodnight. Vid going up when I wake up you all with love this one :)',
'This weekend I am gonna shoot the lovely @NarakuBrock again <3! Here a picture I made of her last time :D <http://t.co/s3e2dmpt24>',
'anyway :-)',
'Itty Bitty Teenie Bikini :) <http://t.co/A2oxW0ZI3g> <http://t.co/jn7KSfHwRc>',
'I just joined the #HushedPinWithSammy Event :D Might get to Text with @SammyWilk for a day! Luv U @HushedApp <http://t.co/czdowli44W>',
'Always so much fun when 4th hour gets together. :) \n\nEnding the nig

ht with ice cream and Xfiles. \n\nContent.',
'@aangelayap easy :D',
"@NTtownend yes, be surprised if we don't see a bit of rain today...
:)",
'@ReyesFraulein follow @jnlazts & http://t.co/RCvcYY00Iq follow u
back :)',
'To all @fatpunkstudio have a fabulous Friday and keep up the fantasti
c work!! :))',
"@justinbieber can you please follow me @caitecat1209 ♡♡♡♡ please jb f
ollow me I love you always and forever. I'm a belieber ♡♡♡♡ :) I love
u",
'#FollowFriday @DiploMix @CCI_entreprises @CCI_92 for being top influe
ncers in my community this week :)',
'Morning all! :)',
'@FranchiSeedsUK good to hear :)',
"@LusciousLyndee1 Nighty night! Don't let the bed bugs bite :D",
'@Bonsplansblog Very beautiful this bracelet! good idea :)',
'@guywilliamsguy waiting for you at the foundry. Where you at?? :)',
'@KalinWhite I like that game :)',
"@suzannepanter @kevinbacon @katosman Ah! Now it makes sense... Didn't
see the pic on my effing phone last night. Woot :) x",
'@Derek_GTA Hi Derek, you could try using ParkShare in Gloucestershire
http://t.co/qIF9AyAlkc :)',
'Aaaahhh man, this track is a traffic stress reliever. :)',
'#FollowFriday @elevents2 @JoussotFrench_J @NYIBF for being top new fo
llowers in my community this week :)',
"@EllneW How're you today my dear? :)",
'@Jesutomisin I hear you guys want Arbeloa. :D',
'@ShawnMendes turning 17 in 15 days...omg. at least we have only 3 yea
rs difference :)',
'@matteomeacci Well, they say Europe is on the rise again, but I find
that hard to believe :)',
'@WforWoman #WSaleLove uncountable coz we love unlimited :)',
'Yes, of course :) #TeamPositive https://t.co/SaIX1VpFJF',
'yes i love :-) #AlDub',
'@coffeebreak22 @LauRenArren @drparkave @JWKanyuiral969 @dheracing @Rh
oaChri @BarbaraBathurst @lcryingeye @willisteam :) 🍷🍷🍷 Thank you Rit
a!',
"@mikerobb Hi there, could you please DM us further info and we'd be h
appy to help! :)",
'@24gooch on way my boy! :)',
'@graphure I hope you will get a lot of nice gifts :D',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ?
\nShe loves you a lot :) \nSee you in Warsaw <3 \nLove you <3 x4
0',
'#FollowFriday @ACBM_SECEM @DCarsonCPA_NYC @PromosalonsInfo for being
top supports in my community this week :)',
'So True!! :) https://t.co/N2ORwrOwhD',
'I added a video to a @YouTube playlist http://t.co/09GuSuMrNb im back
on twitch and today it going to be league :) - 1 / 3',
'@ZarlashtFaisal @Tabinda_Samar Sethi was HIGH ??? :)',
'@IAm_Lennox exe skeem saam :)',
'These are the people who make me smile. :) @_pumpchkin_ @aka_pump @Li
lfrenchMsp @_Lishielou908_ http://t.co/iDdtACKA4K',
'@CoSchedule Thanks for the invite. :)',
'@SyedIHusain polite izzat :) \nwese does she trust him? khawateen k s
ath selfies say to mana kar deya :)',

"Thank you @MovieTubePW that's my Friday evening sorted :-)",
'@nova_caneeee you smart :)))',
'@vaalthepal :-) nice hair tbh',
'5 years :) <https://t.co/hJEhDmxuu9>',
'jacob will there be a m&g upgrade??:-)',
'@heydonworks Nice tee man :)',
'Happy family vacation .. :D [pic] - <https://t.co/HL0Fw8msf1>',
'some sleep would be nice :-)',
"If you're reading this, you're beautiful. \nLike this if you just read this :)",
'Talking to One person Having Two Conversations :)))))))))',
'skype was fun :-)',
'@SoggyStones should be online :)',
"...because it's Friday :D (y) <http://t.co/6rA4ZlpjO9>",
'#FollowFriday @CCIFCcanada @AdamEvmnmt @boxcalf1 for being top engaged members in my community this week :)',
'Something to get your #Friday off to a great start :) Have a great day all! #McIaren #FridayFeeling #TGIF <http://t.co/LshgwcXsSv>',
'@AvinPera follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
'square enix bissmillah ya Allah :)',
"@SephtonMark we're training #SocEnt startups at @TobaccoDockLon this week w/ @HelpingB - we'd love to have you drop in if you're around town :)",
'@HGWWolfie Basically you piss in a cup and they test it :)))',
'@ellenRstewart where are you off to next? :)',
'@IonSwitz @notch also, Twitter is terrible for complicated discussions :)',
'Snapchat me : LynetteLowe #snapchat #kikmenow #snapme #hot #snapchat #amazon #kikmeguys :) <http://t.co/kd54m2IAm6>',
'I am not looking forward to a 12 hour shift today :))))))',
"@ely83_ely definitely agree that it's a growing sport. Drop me an email with details and we can see what we can do :-)",
'My last rt is me :)',
'...and the Rakyat will keep visiting your blog and reading your writing :) <https://t.co/IMRy2BXuzd>',
"@ryan2390 ever since I mentioned fly fishing the other day I'm getting follows and promoted posts about it lol cyber stalked! :-)",
'@Gurmeetramrahim #OurDaughtersOurPride #mypapamypride Proud of You Papa Coach :)',
'@imarpita it was great talking to you :D',
'@awaismarwat2011 never see positive kha u could also mention at least they are going :)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x3 9',
"@_pigglywiggly @Omundson The mango lassi's from Monty's are marvellous :D. Though I suspect that's not what you meant....",
'#FollowFriday @StayfanChemin @CCI_75 @aandreup for being top influencers in my community this week :)',
'@Thakurain_ Haha. Yes. I have 24 hrs. The time has come to touch the Kepler 452b. Chalna hai ?? :D',
'@iyah_mohamad follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
'@allygrrdo thankyou pretty! :)',
'@PinkPeoniesBlog @helloprettysa definitely the Hazel Food Market in Brooklyn, Pta :) & & <http://t.co/ySQkhNDo2B>',

'still awake :))))',
'@joiredve okayy :D',
'Awww thank you :) <https://t.co/9tSQv2DWVm>',
'@AR1961 ha! That does not surprise me in the least! Okay but will see doc this afternoon. Yorkshire is splendid though! :) xx',
'@JRTurnerPhoto @davidqueenan @jameslturnbull spam folder: WOW! I have won a huge amount of \$ I just need to travel to Nigeria to claim it :)',
'@PERKSOFNIALJH RTed! Good Luck :)',
'My legs hurt so bad :))))))))))))))',
'@johnny_lopez96 I get mine Saturday :-))',
'@imafaithreyes thaaanks! December puhon. :)',
'happiness~!! :) <https://t.co/slOn63OUeS>',
'@VaibhavVj78 @PayUmoney True that. Can you change TnC without prior notification? I could have used them last night. :-)',
'<https://t.co/gYx34VfmkK> and I probably only find this funny at 2:22 am :-)',
'@aliyaskates @yoshihikomkm Fat cos he probably ate Yuna :D :D :D',
'@emmajaneparsons @CuriousMindsNW Have fun in Tameside :)',
'@hydrctd what :-) did :-) i :-) do :-?',
'@CharmingJedward you're welcome!! :)',
'My Google+ account. :) <http://t.co/R8jyDxlQyo>',
'@2SHYMC and they call scousers for everything! Hope you and Zoe are well mate :)',
'@RachelEvans_28 RIGHT!!!!!! I literally was like maybe u should get people who actually know what they're doing :-) @StudentTrip",
'|| Sameee~ \n\nRest well :) <https://t.co/T6ZCo4NxDG>',
'@EdgarsLame happy birthday Edgar! I hope you have a good one and keep updating your travel log :)',
'Hello :D\n@VikkFollows @Vikkstar123',
'@MarreyJewAna bring Abes :)',
'Stats for the day have arrived. 2 new followers and NO unfollowers :) via <http://t.co/xxlXs6xYwe>.',
'someone talk to me :))',
'i will never be the same if we ever meet again :D',
'@BBCSport come on man :D :D',
'@prettyden15 follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw <3 \nLove you <3 x3 8',
'@LivelyKaty *sighs dreamily at that pout and those 'come to bath' eyes! * :-) #quacketyquack",
'@_sunshinehoran_ happy birthday love :)',
'@Brianscrooks @burwellitltd @manfrotto_tweet Cheers :-)',
'Funny how that happened when Phil was here too :)',
'@WMFireDogs I'd call 'em Del & Rodders :) What else!",
'@ForkH Hi, may you like play my newest gamejam game, i would be very happy about it :) <http://t.co/8J5voDDHcs>',
'This is great! Irish literature is really inaccessible to most of us without Irish :)',
'@BhaktisBanter @PallaviRuhail yeah! This is fun :) #FlipkartFashionFriday',
'Nice music :) Check it out! <http://t.co/PEjHsORGrk>',
'@_xRiya Strange Kareena's Fans Not Knowing Kareena's Fans :)',
'Hello :) Get Youth Job Opportunities follow >> @tolajobjobs @e1d4c8e25ec844c',

'better :)',
'@ArtForCause Cool. Will look for you there. :)',
' :) beautiful <http://t.co/F8V3McI39e>,
'I'm playing Brain Dots :) #BrainDots\n<http://t.co/CHl12JvuxN> <http://t.co/GGgU9PYEjI>,
'@ScreamQueenLR That's fair enough :) I wouldn't rush back either.",
'Brandi 18 on my FB DROP A SELFIE :) was fun <https://t.co/TRoroeS4FK>,
'@kthrnbyln follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back :)',
'During a carnival men put masks over their masks. Xavier Forneret :
-)',
'@jennnnnifer29 Jennifer, Check my site if u wanna get FREE 50.000 8 Ball Pool Coins. Thank you :)',
'@trishal234 Beautiful edit, Trish! :) Loved it! ♥',
'Gratefulness = Happiness :) Post three things you're grateful for today in the comments",
'Love to wakeup beside her & have some real dirty,dirty sex :-)\n\n<http://t.co/dPLYrlTjil>,
'@literalwt LMAOOO SAME its so hot 🥵🥵 like louis :) he's so hot
!!!!!!!!",
'@MariaGM350 Just gonna throw idea at you cause if they're bad it will inspire you to think of something much better. :-)",
'#FF The Best Twoofs to follow have a GR8 wkend :)\n@allpawone\n@Hungry_Hounds\n@DDWalks\n@HealthyHounds4U\n@pawsforawalk\n<http://t.co/fIYPR3t2Ai>,
'@cinnamoniboni I wish I could! Maybe one year :)',
'hey guys! how are you ? :)',
'I think I need to go to bed kind of exhausted good night twitter :)',
'@renukaVyavahare Thank you so much.. So glad you liked it.. :-)',
'It will all get better in time. :)',
'@Chelt52 Kind words - thank you very much! It's @SueRyderLCH that does so much good in the #Cheltenham area :)',
'Hi beautiful follow me please? :) @iggyazalea @lanadelrey @megannicolle @madisonellebeer @tiffanyalvord \$9',
'@astro_lass They weren't kale crisps :-) Why ruin a good thing?',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x37',
'@mykidsloveme2 Open Worldwide :)',
'get the fuck outta here :D <https://t.co/neJd4AaQWZ>,
'@StreetFighter Cool down guys. It's #SFVBeta, not release. They work on it. :)',
'@CrazyLeoNet @Woodslenny @MSportLtd @FordPerformance It really looks Vantastic :) @VBGIE @FordOwnersClub @autocultureirl',
'Today I finally have time to work on Xcylin again :D',
'@UPCIreland Thank you. So if its a bundle shows the internet price no phone than realistically only paying for Net?:)',
'@PublicProtector :) True Education is the most powerful weapon which you can use to change the world,"Nelson Mandela',
'@agavrilychev2 follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back :)',
'Most recent trip to J&K; totally loved it :D\nAnd that's 'Chenab' there which flows into Pakistan.\n#incredibleindia <http://t.co/1EHnC4mxZL>,
'My #TeenChoice for #ChoiceInternationalArtist is #SuperJunior! :)',
'Caught my first salmon today :D',
'@annaelerihart - happy Friday! Just checking in to see if you enjoyed

our Super-Blend? :)',
"@MrsManfyDiston Thanks for following! Do get in touch if you'd like a ny more info about our project: youth@bipolaruk.org.uk :)",
"Please go check out my awesome friend's stream at <http://t.co/uVBD0iDwDW> ! He's a fantastic artist. :)",
'My Alma Mater :) #HighSchoolDays #ClientVisit :) @ Faith Christian School <https://t.co/OiWrwoFuYl>',
'Good luck to #LizaMinnelli for her upcoming UK appearances :-) @GaryJ Horrocks @ScottGorenstein <http://t.co/r1ExrOTFBP>',
"@messiholic_Lol 😊😊really? I can't believe a beautiful girl like yo u are single :p",
'I will never be listening to The Hills every again :-)',
'@dantoml why would you listen to Beats 1? What went wrong in your lif e? :)',
"@concertina226 Haha that's great :)",
'Getting everything ready for my Natural Pefumery Workshop at Neals Ya rd, Covent Garden - tomorrow :) <http://t.co/WYEE7cbqOZ>',
'@grannaHarmony fback :) indo harmos',
'@ewoksurewok just Americano :)',
'Why am I up :-))',
'@SquadKathNiels @bernardokath i LOVE the way you are :) <3',
'@thevaas @Vasan_Bala ALWAYS Remember :)',
'Aww! Thank you. Beautiful pic :D <https://t.co/044Hfi99Rc>',
'@Podolski10 heads up! :)',
'@jessicaswift_13 Hi! Saw who u follow and thought u might like "Dark" <https://t.co/QSaoy08CIk> .Plz let us know what u think :)',
'Smart, handshome, cute juga :D <https://t.co/7DC0LU3j9k>',
'@LauraSummersNow @STWevents hurray! Looking forward to meeting you to o :)',
'@tomokawaiix follow @jnlazts & http://t.co/RCvcYY00Iq follow u b ack :)',
'@liilss cause hate my course lol but I cant decide what I want to cha nge to so Im just going to take some time off, save \$\$, maybe travel :)',
"@WoollyWormhead It's on my to do list if I'm still at the show :)",
'@realiseagency you too :)',
"@LoreTam Hi! Would you like an @imPastel concert? Let me know your ci ty and country and I'll start working on it! Thanks :)",
'@jojoaro0618 @danisnotonfire @AmazingPhil Oh awesome, thank you so mu ch! :)',
"@CaityYoungblood you're perfect. :)",
'@lcfcsset Hiya, if you email our web exec, Loryn.Good@lincs-chamber.c o.uk, she will be able to help you. :)',
' :) enjoy photos from before/when my mom was a baby <http://t.co/1wqZetbvQu>',
'BIG thx @bikechainricci 4 the kind support @SHINEUKCharity @ShineBall oons. GOOD LUCK!! :-)',
" "Chinas actually a girl.\nThat or a homosexual." \nBut we will love h im/her either way." \n:D\n#HyungBot',
'@Gamer1811 cause i likes him a Lot :)',
'@mattghouse give me some time fam, I got some things in mind :-)',
"Thanks God it's friday :) #jgh.",
'@ashtonparsonsuk @LypstylUK how lovely! :)',
'@heartsouthwest #timetunnel 1982?. Not quite sure if my radio is set at heart :)',
'@jackgilinsky Hiii Jack :) ily 🌟🌟🌟',
'@smartcookiesam @Confarreo I played dominoes in a pub once. It all go

t quite heated! Enjoyed it though :D',
'@hostclubhowell no prob! :)',
'@danvpeterston Enjoy! And sorry about my hastily typed message! :)',
'#FF @dreamshakes @marketsmatter @MrsMarketUK @CheshireLadders @Street
zine @jewellery_bank @luvthenorth444 @BlueAppleHeroes thank you :-)',
'Can I just say a big thank you to the person who came up with the ide
a of screenshotting :-)',
'@AshrafUzma @RTAluvdAfridi \nWe are not true Pakistanis :p',
'@Raj_Poot_ :) ... mention not',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ?
\nShe loves you a lot :) \nSee you in Warsaw ☺ \nLove you ☺ x3
6',
'3Points for #DreamTeam Gooo BAILEY! :) #PBB737Gold @PBBabschn',
'@crisasingson07 Thank you :)',
'@addictionguy You drank because of it? :)',
'@ernezpjy its old pic :)',
'@sharleneyupasc1 follow @jnlazts ɪmp; http://t.co/RCvcYY0Iq follow
u back :)',
'I haven't gotten any sleep and I have to be up in 3 1/2 hours
:)))))))))',
'Off to #Welsh #Wales today. Yippee! :-) http://t.co/BdaXV35FYE',
'@stalkerIDOL_ done :)',
'@fwmkian HAPPY BIRTHDAY BABY 💕💕 I MISS YOU SO MUCH AND LOVE YOU SO M
UCH :))',
'thanks bro ! :D x',
'thats my lord :) http://t.co/7O5XaValPN',
'Sweet :) https://t.co/025WcVvnxe',
'@riprapl We like you Michael :) Thanks for your kind words! Cheers, E
m',
'@coxn8r Morning to you too? Not really :D U're already having fun cau
se its weekend right? :D ure in the future ;) Have an amazing night",
'Waiting for the people to call him BIGOT :p https://t.co/WGvM79ySv
1',
'@yezzer It usually is :) Are you doing front or back squats?',
'@BeingSobtian1 it was so much fun really enjoyed it hope next contest
will be coming soon :-) :-) :-)',
'Dobar dan :) \n\nThe Brand New Heavies #musicology2015 #day2 http://t.c
o/ejDalpfixn',
'@Chileeers looks like a great way to spend a Friday afternoon! Enjoy
your marathon on iflix! :)',
'@itsAllieFx If you need someone to talk to, I am always here :) Keep
your head up.',
'Officially Graduated :D http://t.co/B1jXLiL3Pi',
'I'm so glad! :D Did you cry? ;___; https://t.co/YbgI6MoxnE",
'@Afl2277 thanks. :)',
'@applewriter yep, you *are* an expert on bisexuality :) Good luck!',
'@jiarpi20 minal aidzin yo pi :D',
'@imlexapadilla follow @jnlazts ɪmp; http://t.co/RCvcYY0Iq follow u
back :)',
'@Riverford The plan is: read our brand new cook book and figure out w
hat to make for dinner tonight! :)',
'@snxy lol it's a tough choice tbh i really do like every song, just s
ome more than others :p",
'@JessopJill welcome... :-) :-)',
'chill at SMU oval :D \n\nCoz I am a of basketball player now. Whahahah
a! \n\n#SOAmazing https://t.co/Y3sDCZ6RMk",
'The moment I decide to log onto the account I haven't been on in year

s is the moment I saw the best thing ever :) <http://t.co/pu6B5jodur>",
'@WforWoman \nA5. If I was a Girl,\nMy Wardrobe would only and only have "W" in it :))\n#WSaleLove',
'new user! :-)',
'@umar_farouk7 Welcome back to #TeamRed :)',
"@emily_etc oh apparently I'm already a member ! Lol! Hopefully be able to come depends on the time ! :D",
'@Kayleigh_A all greatly appreciated! :)',
'@lmmamnd hi! we made some changes in our design, hope you like it :) <https://t.co/EXt098Yqlb>',
'@makotobio ahhh yes do that! :D',
'7th CinePambata Video Festival: Complete mechanics and official entry form may be downloaded from <http://t.co/YaYzAbtHtX>. Sali na! :D',
'Hello :) Get Youth Job Opportunities follow & @tolajobjobs @NdumisoNkosi5',
'@WooDotamEl follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
'when ur moms getting u swishers and ur copping Monday :) <http://t.co/qEdmlJLRNt>',
'My Song of the Week is Ducktails - Surreal Exposure #SOTW <https://t.co/BeXVWh7zIR> Jingly jangly loveliness! :-)',
"It's the #Halesowen #BlackCountryFair tomorrow! Are any of our followers going? Come and say hello - our stand is on the High Street :-)",
'Good luck to @georgeeJgibsonn in the assessments today! :) <https://t.co/POpXUShlab>',
'@etherealmind such mental strength! :D',
'@TsMagicCandy Looking beautiful. You have an amazing body. YOu just ooze sex appeal :) xx',
'HOME - AmassiveoverdoseofshipS - <http://t.co/2q38loegUq>\nlatest vid from up my way..enjoy and visit my site..:)',
'@TheEmblaze @cnni ISIS Chan!! :D',
'@SonyMAX T& C noted :) #PKwalaSawaal',
'Stats for the day have arrived. 1 new follower and NO unfollowers :) via <http://t.co/uo3T40FtCQ>.',
'@GemmaPriceUK Thanks for the follow Gemma, and enjoy New Orleans :)',
'@POTUS #fever finally caught up with me \\\n/ \\\n/ \\\n/ .. #GESKenya \n#ObamaInKenya #MagicalKenya :-)\n#GreatKenya #AllGoodThingsKE',
'It is funny, that the next anime that had it, was Umaru :D',
'@sothcott @CaseyBatchelor @BondedByBlood2 great singer too :)',
'@xx_dayan follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
'@amiibofiguresuk looks like GAME ships to the US again! Got my order in :)',
"she takes over my room & my car once I'm gone cool :) <http://t.co/kQxSNy0xK2>",
'going to be streaming soon :)',
'@icy_suan thanks :)',
"@valenaty_4ever Hi! Would you like an @imPastel concert? Let me know your city and country and I'll start working on it! Thanks :)",
'@naqvisahab1 \n\nHahaha everyone has a fun story related to that song. We got labeled as the worst batch by the principal due to it :p',
'@jess_o_lover101 you will get the same stuff like in March. Release that one first before starting a new one :)',
'#FF TOP Twoofs have a Woofastic Wkend Guys :) \n@MerlynTheCollie\n@BarksBunnies\n@JessPals \n@MollySniffs\n@WobblyCollie\n<http://t.co/fiYPR3t2Ai>',
'@DescentHypnosis Well received but not necessary. :) <https://t.co/mRA>

JMGm0Nm',
 '@ayushmannk long time no see :/ where have you been ? :p',
 "I'll regret rn tomorrow morning but its whatever :)",
 '@BadBoyBunny @Clawzskunk That hat :D',
 '@bergsplace @RunJumpScrap @thatchamdad @simplybeingmum @loopyrach @Deardads1979 @mummyvsdaddy @harryshonestmum thank you :)',
 'there will never love again in your life there is\only a success :)',
 '@MikeyyGee_562 @thatdudegalvan_ abstinence :)',
 '@samm_amberr Then there will be a few "Wtf this never happened?!!" moments that you may or may not like. But there\'s a surprise thrown in :D',
 'Start middle and finished :) <http://t.co/k7l5EtENT3>',
 'Im back Twitter.. :-)',
 '@JackJackJohnson ended up happy. :)))',
 '@marthasydenham @alexxdouglas @wordpressdotcom Lovely stuff. This needs to be repeated, relentlessly, for approximately the next 5 years. :)',
 '@Smileformeacc *hug* you have many :)',
 '@RuneScape @OldSchoolRS on OldSchool Runescape :)',
 '@ourseasidebaby @MrsRobinsonme Thanks for the shout out! Have a wonderful weekend :)',
 'REST DAY!! :) <https://t.co/yqaWKHapli>',
 'LOVELY DAAAY! :D',
 '#JUMMA_MUBARIK <3 <3 <3 \nto aLL #FrNds :* \n #Stay_Blessed :) :) :* - feeling blessed',
 'I can sense it :)',
 '@LittleMissLilia @EmInTrouble Awww, they are pussycats! :-) xx',
 '@min0rthreat_ hope everything is going great!! :-) lol',
 '@PinkPeoniesBlog @helloprettysa Market on Main just launched in Pretoria. :)',
 "'Do I care??'\n'I care...'\n<https://t.co/gL6rL6mR70>\n#fahrinahmad #te ngkuaaronshah #eksperimencinta :D",
 'Tykkäsin @YouTube-videosta <http://t.co/p5dAKaodMx> 200sub special!! | 15e PaysafeCard Giveaway!! :) (LUE DESC!!!)',
 '2 months waiting and I finally have my @Jack_Septic_Eye hoodie! :) eep! Yay! #SoHappyRightNow',
 '@FilikIrisha mmmmmm can I c them lovely azz-sets babe :-)',
 '@normabattle thx for the feedback. Glad you gained value from it. :)',
 '@Michael5SOS good night lovely, I hope you have a peaceful nights rest, and feel refreshed when you wake up, sweet dreams :)',
 '"OldManGamin72 I'll never get used to that, but thank you very much. :)",
 '@thinkingdifrnt Thanks Manthan! Stay tuned with us :)',
 '@blogadda Freshness is the beautiful smile of my mother & the determination to make the most of my day :) \n\n#MaxFreshMove',
 "I'm playing Brain Dots :) #BrainDots\n<http://t.co/MifDDs7CQS> <http://t.co/WtIWoeATPj>",
 '@JamesBourne PLEASE JAMES WHAT YOU THINK OF MY BEAUTIFUL GIRLS ARE THE LONELIEST TATTOO? You have changed my life. :) <http://t.co/7ywV5U8sGU>',
 'Hi ! Girls :).wish you all a Happy #Friday.and a #magnificent #fantastic W/E.@LoriShemek @thebikinichef @AgingBackwards @pilatesbodynyc ♥♥♥',
 '@rskdance2011 @southasianartuk @Keranjeet we achieved it together! Thank you Rashmi for your time, dedication and complete inspiration!!

:)',
'#FF #HappyFriday @szekifer @phattony138 @djchiavistelli @DJ_CharlieD
@Paul_Rayner the weekend is nearly here :-)',
'@Biblioticaa I only retweeted :)',
"@naturalsystah It will be updated soon I'm sure. If you sign in you c
an set up text alerts :) |DA",
'Something new :D <http://t.co/3Ftb0woQhM>',
'Dang that is some rad @AbzuGame #fanart! :D <https://t.co/bI8k8tb9ht>',
'@HardcoreGooners @tashagunners @kirstyburns3 @aprilburton21 @liztc2 @
Miss_Boots1 @zannatur @NativeNoddy @NatG_22 @Ms_T_P CHEERS #TGIF :-)',
'Massive congrats to Niamh Fennell here :) Journalism Graduate Lands
Dream Job Copying & Pasting Tweets <http://t.co/3db8Bj5trk>',
'@ice_crystal @Elbow @MeatBingo @govindajeggy Thank you! :)',
'Stats for the day have arrived. 5 new followers and NO unfollowers :)
via <http://t.co/KfqcXZSVOT>.',
'@mrkenny90 Yesss I am thank you :D',
'I have Ariana grande Selena Gomez Louis tomlinson Rita Liam Payne \n
Caradelevingne 🌹 I trade solo dm :)',
'@DomSequitur tired. But fine :) you??',
'@ohvdqohcdjroc Nope you can definitely still apply for this year if y
ou want to :D #iamCA',
'@ashleylynch @wetsprocket Ah, found it, thanks :)',
'@BOYFI_MW aftie :p',
'Goodmorning :)',
'@AnneMOrbs follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u bac
k :)',
'@bjoernknafla @s_whiteant that's EXACTLY the look I'm going for :D',
'#ProKabaddi Koel Mallick @YourKoel recites the "National Anthem" for
@StarSportsIndia On Day-6!!:) <http://t.co/ORqau4PvVz>',
'#YourNaturalLeaders and #YoungNaturalLeaders\nMon27July #Cumbria UK
:) @yournaturallead \n\n& #Flockstars Thur30July ITV\nhttp://t.co/1
YxDIByo2o',
'For most of you it is #GoodMorning but for me it is #GoodNight...\n#s
leepight for me and #haveagoodday for you! :)',
'Only one leg on September. So perhaps BB will promote the full album
on September :D\nhttp://t.co/ZV1HdZB7Nm',
'I still fully intend to write as many game designs as possible while
there. And an attack plan for the next 6 months. >:D',
'To all the birds out there, come here and join us for a little fun :)
#teamAdmicro <http://t.co/35EZmlW16u>',
'@theCIGirl @LeRoiHaptalon @stpierjane @HeadwayGsy @cheshiregsy #Frida
yDownpour - hope it clears for the wkend, have a good one :)',
'time for sleep :)',
"That's three words! But then again, that's what Rohit does to you :D
<https://t.co/YacazN2T0h>",
'@XxGoodGoddessxX you are such a gorgeous queen.... my god :)',
'The long wait is over :)\n#OTWOLGrandTrailer',
"If you didn't get inspired by the sheer fact that Obama beat innumera
ble odds to become US President, ni shauri yako :-) #MemoToHaters",
'Everyone should go drop @Pwinclessly a follow on her stream :D <http://t.co/WMAZJq051K>',
'@nanavisitor Happy Birthday for sunday! :) Hope you have a great da
y, lots of pampering and love!',
"@KingCo915 t'was great! thank you! :)",
'i'm going for the cabincrew interview in langkawi this 1st august :)
please wish me luck @AirAsia @tonyfernandes <http://t.co/EVJx7iu4W4>',
'@buzylizzy1 @tln tweets @NutzAudio @LiPSMACKER_UK @instyle_UK @Jewelle


ry4 @InterfloraUK @IcelandFoods @IloveHQ Thank you! You too :D',
 'I will fulfil all your fantasies :) 🍷 http://t.co/BpljrOakrB 🍷💖 http://t.co/JtSNMUdpnF',
 '@virtuallykaren cool - thanks for thinking of me - hope all is well :
 -)',
 '@jet_cer follow @jnlazts & http://t.co/RCvcYY00Iq follow u back :)',
 '@KrissyDClayton thank you so much babe :D',
 '5 ex-twelebs this side please :)',
 '@ohsexcyrus thanks bro ! :D x',
 '@TomParker have a great day :D',
 'Makes so much sense :D LOL',
 '@BertolacciTweet .. we wait you :) against @Inter',
 '#ff @JaggedEdge1 @MrsHHundal @Hutch_PR @higginsrecruit @KioskAtThePark Have a great weekend all :)',
 '@UptownJavin @ChloeeElmoree @Eymvunique family && friends :)',
 'An apartment makeover? http://t.co/ctLaljpdpdb great ideas for factory living :)',
 '@OrchardTeaRoom @madsenjewellery thanks & you are very welcome, hope it all goes brilliantly. :)',
 '@EmilyBett Happyyyyyyy Birthdaaaaaayyyy! :-)',
 '@momoismail9 come kill it for me :)',
 '@ZaloraID hi, im so interested about your internship program. But sadly, I cant access the Career Page. Can u help me with this issue? :)',
 '@dischanmedia Its sad to hear about this, thank you so much for the overwhelmingly beautiful games, thank you for your hard work. :)',
 '@Murrayyyyyyyy aha yesss! Who are you most looking forward to see in g?:)',
 'Happy Friday you beauts! :) ♫ #FF @sophieintsticks @catecawley @Jon_Clift78 @jasmoonbutterfl @andreasson_ http://t.co/a794A3H7LV',
 '@halfwaytohemmo We do love to help! http://t.co/X31Iw7dile :) /E',
 '@BionsenBeauty would love to win this deo is faaaaaabulous! :D #FreebieFriday #aluminiumfree #stayfresh xx',
 '@MrLythgoe @MeatBingo Yes, and John :)',
 '@ithloopwithcoco Thanks! No worries, I'll navigate to your blog and check it out. :)',
 '@zara_arsalan thnks progrmr :-)',
 '@lewisssrg92 bet you do! Well I won't be getting any sleep it's a 9pm shift until 9am so it's quit hard work! But thank you :) xx",
 '@arabicaah figures :-)',
 '@andreaholzner hardly surprising that roses inspire so much emotive poetry :)',
 '@ROCKMYDNA followed :)',
 '@iFLYflat I joined the @VirginAustralia #FrequentFlyer program :)',
 "I always end up breaking down and apologizing when I shouldn't have to. fuck me for being too nice :-))))))",
 '@tonywhittaker Fabulous! Well we hope you all have a great day :-)^KB',
 "@MusicTuben1 Hi! Would you like an @imPastel concert? Let me know your city and country and I'll start working on it! Thanks :)",
 '@ignitionphoto You're very welcome. :)',
 '@HUNCOY Visit my blog http://t.co/UzOAqrowKx thanks :D',
 '@kunal8966 @Uber_Mumbai Did you enjoy the #LondonDairy #Icecream? Share with us the experience. :)',
 '@LeahCarla11 follow @jnlazts & http://t.co/RCvcYY00Iq follow u back :)',
 '@Playacreep I luv urs too :-)',

'@craftbeerroll I have in the past. A hoodie covers a lot of sins.
:)',
"@AstonMerrygold bet your excited :) :) xxxxxxxx good luck hope it ge
t to number one",
"@MSLJim You're welcome Jim! Made me chuckle on the train this morning
:-) Happy Friday to you too!",
'@KageYashsa Shopping for a bit :p',
'@JadeTheMong agreed haha :p',
"@BakingBar Happy Birthday! We're positive it will be full of cake
:)",
'@Nobicate Doh! 500+ Subscribers are needed :) Please let us know once
you reached this number.',
"@The_ScriptNinja I'm good thanks hope all well with you and yours :
-)) xx",
'Dry, hot, scorching summer #FF :) @infocffm @MediationMK @ExeterMedia
tion @KentFMS @EssexMediation',
'@tom_peters @pallavijha Maybe a younger woman has more stamina than y
ou Tom> :)',
"@digestdigital things aren't looking too great here either - can we e
xpect anything less? lol! At least it's the weekend :)",
'Finally get to be in bed. :) good night, tweeties!',
'@anish_kochar @bangaloretrance Thanks guys! :)',
'@alistairbeech FAB! Thank you for your support :)',
'@TurnUpTexas I really dont I love you so much :)',
'#FF follow her --> "@__KaraboM: 10 loners this side please :)"',
'@RiahanneNavarro and a charger :))',
'This is so me :-) http://t.co/9aqyX0UxuV',
'@electricgecko (Introducing a new word vs. altering the understanding
of a word) x spreading either = The Big Problem. :)',
'@JA0livar0731 follow @jnlazts & http://t.co/RCvcYY00Iq follow u
back :)',
'#FF my Woofstastic TWOOFS hope you have a supa dupa weekend :) \n@MyPac
kofWolves\n@Skythegsd\n@helvellyn\n@BennyBoygr\nhttp://t.co/fIYPR3t2A
i',
'@clivewalker near enough to Dartmoor :)',
"@buymobiles_help I'm gonna stay with the gold colour. Hopefully it wi
ll come soon. Thank you anyway :)",
'@Taylor_Marisa Follow back ? :)',
'@ijn_mikky yay ok!!! :D',
"Someday we'll know. :))",
'@Smiling_Girly_ U r my dii n i cant forget my Sis :)',
'Jgh fr. smf & Ft, W/ My girl. <3 :)',
'maybe we can get some japanese import hello kitty matching stationary
:)',
'The weekend is drawing close. What are your plans ? :D http://t.co/a
g4r42lhF1',
'@peterlizmaher Hi! Saw who u follow and thought u might like "Dark" h
ttps://t.co/aloXWsqdjh .Plz let us know what u think :)',
'AND HELLO TWITTER, MY ACCOUNT IS BROKEN AGAIN :)',
'Hi @NJES44, thanks for connecting. We specialise in thermal imaging s
urveys - here if you need us :)',
'@DrNomanSheikh nice :)',
'Please follow me back @1DThisIsUs @onedirection :) x *10',
'Hi I want to get connected with you @koreacholics :) as I am planning
to come to South Korea',
'@Aremay oh you and your FACTS :p',
"I'd planned to do a nice scamper but I slept through my alarm. For tw

o hours. I suppose I needed the sleep so I ain't mad :)",
"@alanessyahmad Chweina... xD Jotzh :D Dude... go to school and don't waste your time on twitter.",
'@stellaandlouis hiya! Yep our show takes place completely under cover. Worth bringing coat for beforehand tho as FOH is outside :-)',
'@nicagaray thanks!!! :))))))',
'@alrightPET enjoy your holiday! :D',
"I haven't seen that many 'menacing' since I finished JoJo :D",
'@Susansuzt @SimonBedford Ta, same to you both :)',
'Thank you @LaurieTatum2 as always! At last I'm back on track :) Hope you have a fantastic weekend! :) <http://t.co/25fUKonLoM>',
'@cotterw @urihoresh we make it better though :-)',
'Stats for the day have arrived. 1 new follower and NO unfollowers :) via <http://t.co/1eaL6SeNnG>.',
'@DrewJPS accepted. :)',
'@Mhonchi_Savs follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
'I have to go now guys.\nHope you enjoyed the updates :)\nBye\n[Admin LuKris]',
'Have a lovely day yes. Stay happy. :) 🍷 <https://t.co/HAiMzAdnHt>',
'What a day :)',
'Happy birthday to my momma bear. Love you so much. ❤️ I redid this because I found the last picture from 8th grade :) <http://t.co/OkxiraPwXh>',
"@NatILY02 K I'll text you tomorrow :-)",
'@Rosiellis im in :) x',
'I love u. :p <https://t.co/0zr3VlB5kL>',
'@archi7194 nice line :-) :-)',
'Playing V.ball ATM :)',
'Appreciate your recent Retweets ! @SebPoGo @JessicaDelpech @Alexandra Jaafar @JeanDams @raphaelcolas @bylkana Have a great Friday :)',
'@itspatgonzaless follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
"Building a product is like packing a suitcase: Plan out what you think you need. Then remove half." Fully agree :)',
"@royvoragen hang-copying A TRANSLATION of Dostoevsky's Notes.. :) @kg_uvu",
"@AdamKuczynski a voucher for... a new bugatti? what's the value? :D",
'Someone loves you. I promise. :)',
'@_Potz_ @RobinAdamsZA @Converse "I know a bra that knows a bra that can get this and that\':D',
'@royatv @FKarsheh @RahafS #مطعم_هاشم yummy :-) \nA7la bdayt season :-) mnwreeen :-) :-)',
'@NativeMusic49 but I listen to jazz in my truck. :)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x3 4',
"@TvilleSocialMed can't wait to speak at #PBEvent. See you there. :)",
'Waiting for HQ pic from today to add on to my YoonA x Hairpin = OTP collection :D <http://t.co/cGGzwDM6dG>',
'#mastership honey ! :D',
"@She_fantastic I paindo don't want to say #follow me :p",
'@IrhaAzzahraa_ @greekgodnjh sure :)',
'@Gxbbyl82 awesome I await your report :D',
'@lyssafox20 @ManuelJimenez throwback lol. Manny is still an asshole :))',
'#BrijResidency is a G+6 stories structure with 156 units which encomp

asses 2 and 3 BHK Flats :D\n+91 975-580-4444 http://t.co/j1lbGIg4Ll',
'@sajidislam honored to have you here ! :-)',
'@KielixTTV You know you like it :D',
'@Jamelyyyyyy follow @jnlazts & http://t.co/RCvcYYO0Iq follow u ba
ck :)',
'@ZedDBA It was "Currys". They were close to home. :)',
'The Clash :)) "@prasetyoseven: Milano Calling 🍷"',
'@ranzkyle followback po :-) :-D',
'@synergymicro_ i legit am you loser, sit down and get gassed :))',
'All my friends 'hi I saw this dead thing and it made me think of you'
aww thanks guys! :D",
'@DaManDJ3 speak to @andrewspenceim :-)',
'@vinkaazzahp always for you :)',
'@VikkFollows #StarSquad 🌟 Can I please get a follow? You are awesom
e! :)',
'@dk_mok Awww thanks :-) @GalactiChat',
'@evilbluebird @nicole @stevieby @ONETWENTYWATTS @aj_cfc2 @rav_bajwa @
CherylynPitcher @steedy58 @SkidKidd @megan_410 Thanks news man.:) UTC',
'Remember that one time I didn't go to flume/kaytranada/alunageorge ev
en though I had tickets? I still want to kms. :) :)",
'@DamnTurtle1 oh good haha let me know what you think when you can
:)',
'@bravefrontiergl thanks 4 give certainty about d problem :) \nHope u a
ll could solve faster 🍷 \nAt least now i know i dont have to hurry 4 tot
em',
'Off to somewhere later :)))',
'Some good advice for a Friday :) http://t.co/FJUd2N7gmc',
'@lunglock @rhodria @joseyxneko @AnouilhUK @DavidBedwell @StupidFaceRo
b @QueenOfTheSonic @therealrobcook @KingRichard76 Cheers Alice! :)',
'@Namraeter Here you go: http://t.co/nGJlvzhsj1, please click on the l
ink and checkout! :)',
'@GoodwynsPetFood Two dogs & One Cat, all good friends :-) #Goodwy
nsGoodies #FreebieFriday',
'@FooWhiter Ugh. I've never Rt or fade any of your moaning Leeds tweet
s :)',
'Looking forward to Jozi with you guys :) https://t.co/w47eY93ZIQ',
'@MitchFAS hello :D how are you just found after all this time i wasnt
following you till now',
'I THINK THIS IS FROM THEIR FIFTH ALBUM IM :) OKAY :) FUCK :) https://
t.co/qzT5Zsm8RE',
'@philconcerts may available tix pa ba ng ATL concert?? Thanks :)))',
'@syedmohdjunaaid yeah. I have 20 coldplay songs in my playlist :p I lo
ve them. My favorites are The Scientist, Fix You, Yellow and Atlas. :
p',
'@4eyedmonk awesome :) I'll be waiting",
'@chandsxc follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back
:)',
'@lujjoyein done yein :)',
'@yarnsbaby Haha!!! Receiving a #FF for thing on a Friday is a nice wa
y to start the day :) xx',
'lol! selos :) https://t.co/X8nV7tp9S8',
'#JabongatPumaUrbanStampede \n\nAns.7> Timely Arrival :) \n\n@Jabon
gIndia',
'@dreesti \nWaiter: here is your bill sir?? \nCustomer: Ok, where is th
e kitchen?? \n:D',
'as the title says :D http://t.co/WhTPt07UaY',
'@tmart_m me too! hey it's almost time to visit the city :)',

'So you can keep me inside of pocket of ur wrpped jeans :)',
'@soot1978 How beautiful they are!!! :)',
'@iloveseika well haha :D',
"@JessStewart1 @CelebrityCruise @ade_rob I love Connie, she's a fabulous ship with an amazing crew and staff. Have a great time :-)",
"@iSweetan Hi Sweetan! It's best to ask @tristanpope :) Have great day and have fun filming!",
'@BBosold \nnope :-)',
"@UmiAmaiOfficial That's ok, thanks for following me too. :)",
"@_edmce my mum has been begging me to watch sopranos! i'll watch that too :-)",
'@KidXSA Follow back please :)',
'@Vivienneclaire oh, the fun. :)',
"@BigBraMan That's great to hear :D",
'I also #FF #Ukraine :)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x3 3',
'@ollyofficial follow me please Olly :)',
"This is so beautiful :) via disney.arts by the talented elmoprinssi :)\n\nDon't forget to... <https://t.co/UwsFDAeyzB>",
'Bit tired from 3 hours of salsa dancing @LatinMotion last night but definitely worth it. Happy Friday everyone :-)',
'@PiperDonut thanks haha but i only tell the truth to you :):):)',
'@blossominglou yes pls :)))',
'I have gotten at least 3 hours of sleep on the past 4-6 days so the rest of the week should be interesting :) :3 ;)',
'@CCBMLov Thank you. :)',
'Check out my bro @l3Mesh 2nd blogiversary! Many more awesome reviews to come :D ... <http://t.co/a5xIGzTueL>',
'With the top cutie of Bohol :) <https://t.co/Jh7F6U46UB>',
'@_ayeayecaptain follow @jnlazts & http://t.co/RCvcYYO0Iq follow u back :)',
'@BrizzleLass This is brilliant. Was literally just having a conversation about post v email when I saw this :)',
'@ansriram they key word here is "annual". Haven't read anyone writing about that :)',
'A very productive day so far :) Happy Days...!!! :) :) but my head is spinning with things, those voices keep calling...!!! Lol \U000fe334',
'@vaninatwilight Yehey! thank you so much Pinya!! :) whoooah for the win',
'Good morning dear friends &3 Listen to "I am trance lover" and enjoy :D Happy Friday &3 <http://t.co/W7X6ewgfj6>',
'What was your favorite subject in school? - PHYSICS :)))))) <http://t.co/h8wqtuoP8T>',
'@LilyTins congrats :) good news heading into the weekend!',
'@IzabelaCoolCat_ Take my head, I stopped having them. :)',
"@Komal_Indian @SocialitePanda # doesn't matter. Jungle can accommodate both :-)",
"@nejcsvete hi! On our shouting out list you are one of the best, what's your secret behind this?:)@AdeccoWaytoWork #SandroForCEO #CEO1Month",
'@YouTubeActus Swag :D',
"Wait till it's my turn to go mia :-)",
'@KjorObbinsL @wideglide96 @vivijo86 @beingsomebody11 @sophlicious84 @shaymc3796 @ShaymcSharon @ParaJanitor @kelseabellum thanks :)',
"Having a lovely time 'going with the flow' on this #workingprogress. I

love choosing colours :)\nJust a... <https://t.co/13N3WlaWmq>",
 'ryan_landreth No! I love Finnigan :) #Be loyal to my Royal!',
 'Fotoset: reusful: seems like somebody had fun today :D <http://t.co/jaY6beUsFd>',
 '@MiyaOliva I love you :-)',
 'Quit it :) "@_uNeo: You selling it too @Dented_Deni @_uNeo You too you ng to understand muntu"',
 'Another gem from today, Falcos cool too :) #supersmash <https://t.co/EOydn5TLKr>',
 '@DeniseDenise__ Good morning #hotnsexy girl. Have an amazing #frisky friday on the beach :D',
 '@JonsCrazyTweets You are very welcome! :D',
 "@TheYingster @cristianavai3 @AFCGraMaChroi @Goonerlover69 @iWaveBack Lol it's very tiring being this good looking. :)",
 '@chrisjarvis213 Wrong Turn 6 it was amazing movie :))',
 "@LeeCash Glad to hear that's back! If you see anything else crop up l et us know :-)^BA",
 'kill :) me :) <http://t.co/5kon9Txmf6>',
 '@bryanteslava how are those pics of Nash coming out? :)',
 "@saneliur I make sure to always have tissues, chocolate and tea for e very #Hannibal episode :) It just doesn't work any other way for me :)",
 "Contact us today and we'll get you out of the city into a 'hotbed' in a bush somewhere :) #ClassicAssures",
 "@AguilerArmenia Hi! Would you like an @imPastel concert? Let me know your city and country and I'll start working on it! Thanks :)",
 'Stats for the day have arrived. 1 new follower and NO unfollowers :) via <http://t.co/UAIOTsdqvG>.',
 '@Aditi_SoSaree glad that you liked . Check some more nice stuff at #W SaleLOve :) @WforWoman',
 '@Chasilveo follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u bac k :)',
 'We are thrilled to be on our first international assignment as aerial camera operators....Wales here we come #Boom :) Never forget to smil e',
 'Friday Night in Hong Kong... On the Ferry to "Central" to meet new gi rlfriends for an after-work drink :-)\n..... <http://t.co/j9oH0pJSf> r',
 'Family time :D (at Dj Resto) - <https://t.co/hjAiIIsq2S>',
 'Good morning :) - drinkt koffie',
 '@WforWoman \nA6. If I was a Girl,\nMy Wardrobe would only and only ha ve "W" in it :))\n#WSaleLove',
 '@purplestar420 Is that Stargate Atlantis? Such a cool show :)',
 'Great! Muaahhh :))) <https://t.co/CZfjnK8IfU>',
 "@seashoponline ohh. Hii :) haha. thanks for the info. I'll check agai n. 🙏 or maybe di nagsend yung order form ko </3 haha thanks ulit :)",
 '@Little_Nells happy birthday :),
 "There is no TRUST without 'us' but there is no UGLY without 'u' :-)",
 'Leggete qui per la chat Larry :) \n-Mar <http://t.co/gEj5b3qPqS>',
 '@louliveswell Have you encouraged your employer on board (<http://t.co/sczAWaxEW0>) or stuck a poster up (<http://t.co/J024E6Dwvk>)? :)',
 '@hectorparr0123 @hackadayio Sticker came with my sponsor prize for @H ackadayPrize entry <http://t.co/BnyB8BteW3>. The tablet is my own :).',
 '@Real_Liam_Payne goodnight liam ! I hope you had a fantastic day toda y (: sweet dreams baby I love you will all of my heart :D xx.',
 '@Chewy_Lemon Oh yeah, because Milo, Aurini and Juicebro are the fucki

ng pillars of their respective communities. :D',
"Yeah boii! Look what arrived in the post this morning! The latest #SmashingBook5 it's my new bible :D @smashingmag <http://t.co/1E7cfAtEVd>",
'Ill be better soon. :) - feeling sick',
"@Dorky06 LAMO , At first i will fangirl so hard .. then i'd love to share you some platonic pics :D JUST YOU KNOW FOR SCIENCE",
"Morning.....it's FRIDAY! Happy Friday beautiful people :) #Smile",
"@mr__cooke @CCWeekUK Thank you! We're set to have another great day supporting the #community & helping #residents :-) #servicewithasmile",
"@calllmejay_ sounds good to me :) I'll see you Saturday ✨",
'Live night with two fams :) #bloodline #huskies',
"@CorderMrs you're welcome :)",
"The picture I'd like to see in my obituary advert :) #goofingaround #madness #mad #bollywood... <https://t.co/7tyUragh2H>",
'@WhirlpoolBathUK lovely giveaway! :) #FreebieFriday',
'@roofbsuzy @roofyuna @roofsinsb @roofchaelin @roofaim @roofjackson da h move on :))',
"There's nothing as cool as being totally over someone, No bitterness, anger or hatred towards them. Just pure indifference :)",
'when u wake up at 4 AM and the suite life of Zach and Cody is on :))))!!!!!!',
"@rich_bartram29 Oh, didn't know :) But yes, you can have an order delivered to your work address, once it's added to your address book ^AC",
'Achieving excellence in Music as a Music Producer is a Mind Boggling & Fatiguing Job... Baareeq... :) :) :)',
'@bexlittle @AlisonWright8 @lindyrendy @Cloud2ltd @DotNetSolutions love it thanks for sharing :)',
'@Kkiimmeenngg follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
'@mobiadage @GameDevRobot my #gamedev is a hobby :)',
'@AvantikaSeeth @mandisatweets @santherlabelle yes yes yes... I am in :)',
'Thank you :) "@Clicks_SA: Tweenie_Fox Hi, please click here for a list of our hair accessories & products <http://t.co/dunT1DuopC>",
"Sometimes you're just tamang hinala. :) <https://t.co/blnolTbXEY>",
"@RoyalMail I'm following now :)",
'@wonkASSLILO hello babe, you got Niam access?? Could I give you something for a ship dm with them ? :)',
'Selfieeeee :) <https://t.co/R9soIqZXYZ>',
'Especially for three of you, LASS :) w/ Aling <http://t.co/aRwmTLsFZ> r',
'Hi #Gorgeous @TillieModel have a nice swim with your sis!! Can I get a #Birthday shout out please it would make my day?? #Perfection :) xx',
"@Linduhhh9 @doloresssvee there it is haha hope I don't got work tho.. Bout to quit if I do :p",
"@77kaylee77 goodbye, don't forget that it was feminists that fought for your right to act like a snobby little bitch :-) goodnight!!!!",
'@JamieForevs follow @jnlazts & <http://t.co/RCvcYYO0Iq> follow u back :)',
"CAROLINE, Caroline all the guys say she's mighty fine 🔥 I threw up a little making this :-)) HBD ❤️ @Carolineking0 <http://t.co/ttPeupXf44>",
'@FC_TEAMJK3T follback :)',
'Time for jogging :p',
'@GET_TUDA_CHOPPA from all over the place I hope :) I'm a pro at remote work AND traveling ;)',

'Newly listed in my EBay store :-)... <http://t.co/Eelj2ohmgu>',
'The new #disneyinfinity #starwars characters look amazing preorder the starter pack in store today :D <http://t.co/sbbmbDR6us>',
"@Parulcoolthougs I'm here if you want to talk :)",
'I always tweet hit me or snap me... no one ever does but its worth a try :)',
'The homies bought me skins for my bday :D',
'@awadkum - Just chant Jai Italy 100/times fast. :)) @BJP4India @AmitS hahOffice @narendramodi',
'Heeeeyyy. Can all of you follow my fan account? @KINGTOMLINS0N \n\nThank you! :)',
'@leonrestaurants in the UK :)',
'@JEDIEV11 thank you!! :D',
'@Blahkumaran woah! nice nice!! :-)',
'@cuteHiddlesmile u are welcome :-) ♥',
'@lucahollic good and you ? :)',
"And here's @mayankw14's ★★★★★ review: <http://t.co/wNVIPDDRe6> Phew! We're literally overwhelmed. :)",
"@PatoFer222 Hi! Would you like an @imPastel concert? Let me know your city and country and I'll start working on it! Thanks :)",
"@Anaateresaa_ you & the baby😊😊😊 next time , it's my house ! I have it whenever :)",
'@TfLWaystoPay got it, thanks g :)',
'@jonathanhobbs71 Have you encouraged your employer on board (<http://t.co/sczAWaxEW0>) or stuck a poster up (<http://t.co/J024E6Dwvk>)? :)',
'@MsKristinKreuk Hugs and Kisses from the philippines :)',
"I've entered to WIN a huge @BlueMicrophones package from @CazuaLLUK & @Marzbargaming :) ENTER HERE: <https://t.co/yRlT7jltqP> #Giveaway",
'@Jim_Edwards yes, it works now :)',
'@reyes_reynaldoz follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
'Hi @BridgeHouseThel , great to connect. We specialise in thermal imaging surveys - here if you need us :)',
'@juanchavarin52 @taliagarcia__ yeah so you can bruise my rib again : -)',
"@PallaviRuhail @BhaktisBanter #FlipkartFashionFriday 😊😊😊😊😊😊😊 No No won't give dear don't worry :)",
'#TombRaider #hype thought you might like this @MelonieMac :D <http://t.co/aXxprxlPRz>',
'Oh Me Oh Me Oh my its #TheJuiceInTheMix @POTUS rela @talliaoyando in the building :) @HomeboyzRadio @DJBashKenya',
'Low priority match :) hahaha',
'@dxuntlesslarry fback? :)',
'@HelpingGroupDms I want Harry Dm bc I wanna give a surprise to my friend for her birthday. I just wanna make her happy :)',
'Is now not an opportune time 2 collapse chaotic Cosas? <--- note the alliteration :-) @NomalangaSA @barrybateman @AndileMlondo',
"@sungjookxm going well oppayaa! How's yours? :D",
'@khalidALSALEM @Azizsm_ we did our best, as you want body :)',
"#NatGeo new show U can't lick ur elbow. .seems interesting....:)",
'Stats for the day have arrived. 7 new followers and NO unfollowers :) via <http://t.co/C6u8lINDwD>.',
'"@MileyCyrus: Emu is stoked thank you :) <http://t.co/l5Xyt9EM6G>" @creampuffshinee',
"Woke up yo @trentowers fav' my tweet this made my day :))) now just @luketurner89 😊😊 <http://t.co/oGw5sVij7G>",
"Remember, you don't need people's approval when you have God's approval"

al. :-)",
'and jisung is the kid sunshine :) <https://t.co/LBjXDWIAPE>',
'@TheLlamaverse mm okay thanks! :)',
'@noodles78 Message us right here Nicola and we can forward this on :)
Brighten up our day :D Helen',
'@_dreyaniks follow @jnlazts & http://t.co/RCvcYY00Iq follow u back :)',
'@sunofsidess CONGRATS :)',
'@gunnersx4 Hi Brian I'll get it shipped today for you and it can take between 2-3 weeks to Australia. Many thanks :) <http://t.co/IBoe0elaXt>',
'@JanPrince63 @AWonderBall was good fun at the time but the ol' bones are now a creaking :)',
'@Mokhenerale Eh abUtI, WelcOmE to TweetLand.....Lol :p',
'@davidc79 thx! And Android support in by Xmas :)',
'@phedran A great Skyblock stream too. :)',
'this is why im standing and always being a Belieber :) its all bcause of him @justinbieber 2009 until Die :)',
'@BOHEffy I am streaming now on Twitch Join :D\n<http://www.twitch.tv/lockedbeast1>',
'@BRBCODY it was a.. sympathy laugh :)',
'@huskar_nana who would you like? :) xo',
'@DrtyChimichanga Awesome! :D',
'@kimtaaeyeonss unnieeee!!!:)',
'Tonight is the Night ... :) #nuka #penacova #djset #free #EDM #kizomba #latinhouse #HouseMusic #portugal2015 #summer <http://t.co/m5WqWKfqs3>',
'@moonlight69 well you're in for a wild ride >D",
'@TokyoTantra Hahaha tell me anytime you wanna taste it! oh, with yer address to send it :)',
'@mtnza @mtn8 thanks team yellow :) #MTN8',
'@Acsxy Maganda. You look very pretty with short hair. cute. :D',
'@MistressSaphire Good morning to you, gorgeous Mistress Saphire :)',
'@Aware_GinGi I'm at work and I'm busy, so I will help you once I finish and im at home :)',
'Thanks to amazing 4000 Followers on Instagram\nIf you're not among them yet,\nfeel free to connect :-)... <http://t.co/ILy03AtJ83>',
'Coconut Sambal Mussels Recipe :-) <http://t.co/FSfkpOwTpS>',
'Thanks Kalin :) <http://t.co/ihELksfJjT>',
'Follow @JaHz73 on Mixcloud :) \n\n<https://t.co/HviVk8rMmp>',
'@LOMLHES fback? :)',
'@implodingpika Thankyou ! Greetings from Australia :)',
'@MIKEYGEE110 I cant work out if this is sarcasm or not :), i know some Chelsea supporters think hes useless but when he comes on he does ok.',
'@IBePyari follow back :)',
'@aubreysablan I come back next Thursday!! We can still hang out :-) h ehe she said hi love u',
'@shaunamanda2012 Benson is gorgeous!! Thank you so much for sharing him with us :) You can also enter on our Facebook too...',
'@ItsLukeEv you look a solid 16/17 :)',
'Great night! :D',
'@primavera_bella 30°C 🤗\xa0so we just should change for few days and all is good :)))',
'Add me on Snapchat - MaryHicks18 #snapchat #kikmeboys #photooftheday #fuck #chat #musicbiz #sheskindahot :) <http://t.co/plFpD86iEq>',
'"fleekile mbalula", he said. i repeat, i love my south africa. :)',
'when your friend is making fun of the fact that your mexican so you h

urt his feelings that'll leave him scarred for life :)",
"@SophiaDelPizzo it's my office today :)",
'@jeremygutsche we like this amazing donut recipe! we share with #foie gras lovers! :)',
'Despite the weather today the wedding is going to be beautiful :)',
'Where Was Tony Stark? :) - From Incredible Tony Pictures <http://t.co/uwhGYM0BWb> <http://t.co/pHp60cHlXH>',
"To sit and write poems or stories that's been bubbling in my head~ :)",
'Last night :))) <http://t.co/8EDHMc2tiJ>',
'@EmilySmith_91 Dale send a billion kiss to her :) Have a magical day!',
'@mcllary That might work :) Have a great weekend. \\OP',
"Smile, it's #friday :) #TGIF #weekend <http://t.co/L6KxKEAl75>",
'i will not cast my vote in next elections :) #JCReport',
'@PebbleHelp Have done! Thank you for your tweet :)',
'@JILLCLARK1808 @BigAl_lfc @SuePeace1 @michell47881905 @Bevanns @susan horgan1 Oh piggin just go will yer, give us some peace :)',
'@alElizabeth Appreciate the follow :) have you heard of our botanical soaps?',
'@Ashton5SOS @5SOS love u 2 :-)',
'Late upload. Freshly done/3weeks old healed. :)',
"@Im_MsKittenns oh. I was in bed haha. I can't sleep though. My day was too exciting :)",
'@TOBMAST3R @inspchin @koeitecmoeurope @TanikoHorigome @GoldxFierce @Kronin1 @Addictrian @chako33 @MatthewRumple thx Tobi-bro! :D',
'@nikimcglynn How good is that! I think it was my first ISP too! :)',
"@tessasmith4evr @BlueBellEMS we'll steel some from the @BlueBellEMS next Wednesday and see what it's like! :)",
'hey there :)',
"@camerondallas definitely loves making people smile cause I swear since I met him earlier, I haven't stopped smiling :) i love you cam 🥰❤",
"@SabihaMahmoud ... except for her Lord, masha'Allah :)",
'@NeilWhoreAnn some French fans made a movie about the WWAT in France last year with our videos and photos :)',
'@max_pen1 It has been fixed, thanks for your feedback :)',
'Thanks to everyone who came to the stream :D Hope you guys enjoyed. Night all!',
'@siddichan @Twitch YAAAAAAAAY thx :)',
'Looking forward to reviewing ours :-) <https://t.co/y8SUBXjqXk>',
'Thank you Beirutng :)',
'@coolkidsftnjh fback? :)',
'Thanks for updating your profile page @AlexaPoppe :-) <http://t.co/JK3NSXIRMe>',
'Lovely coffee :) @CoffeesToGo1',
"Here's a cute panda to make your day! :) <http://t.co/zCaWqrjSvr> <http://t.co/FuZNhjGWD7>",
'@x0lovestephi thank you eonnie :)',
'@stokebrisbane Hi! Saw who u follow and thought u might like "Dark" <https://t.co/CF10s5hwWw> .Plz let us know what u think :)',
'@Polished_teeth my favourite too! :) @ciatelondon Cream Soda :)',
"I love my body, when it's fuller, and shit, even when it's not lol. I'm just happy to be healthy :) happy to be happy.. 💕",
'Rettweet :-) <http://t.co/l6T0rx7bEf>',
'@DianaaOrtiz the real MVG (MOST VALUABLE GIRLFRIEND) for staying up with me till the Madrid game starts :-)',
'@OLX_OHayoung96 sore ya :)',

"@tmhcuddly I'm so excited, we should definitely meet up :)",
"@morriskid are you coming to Bergerac? Have the first team left any u21's I'd know of? #checking for chants :-)",
'@rizwanism :) just a choice of food. Left to the individuals.',
"@VickiCartagena The episode is excellent so far.:-) I love Adam Beach's movies & shows. I'm looking forward to seeing Suicide Squad next year",
"Growing very fond of Christopher, didn't like him initially because he was cocky and didn't really prove it but his attitude's improving :D",
'@GlenOcsko sounds good! Can you DM me your email address? Will suggest some dates for a coffee! :)',
'@forlodgel It is indeed - many thanks :-)',
'Just smile even your in Pain :) <http://t.co/AxTiqf0xek>',
'Hi happys!!:) <http://t.co/AGiLlxJdbi>',
'Funny. Intelligent, strong and funny. Just funny... :-) <https://t.co/IqJwYRF52C>',
'Hello :) Get Youth Job Opportunities follow && @tolajobjobs @melcampbell',
'@mokwepa no, other than it using Cs :)',
"you ever watch certain people's snapchat over and over again, bc i know i do :-)))",
"@IbnNabih1 that's all ok I know your busy :)",
'Last 2 exams :)',
'forgot u were up. :))) <https://t.co/Or6eATWDjm>',
'Fun fact: I love meeting new people :)',
'@jaseygalore I know the home-based office busy feeling :-) Pity about your knee - what happened?',
'SALE FLEUR DRESS CREAM #Readystock_hijabmart\nIDR 325.000 ====> IDR 200.000 :) <http://t.co/AGp51NQMbS>',
'@pprabha014 Thankyou :)',
'@fernandeznoemi4 follow @jnlazts & <http://t.co/RCvcYY00Iq> follow u back :)',
'Is Tompolo meeting aimed at stopping the sale of the oil that we cannot find buyers for? :D',
"@Centerfxld that's true, @johnngreen doesn't disappoint! Looking forward to Paper Towns? :)",
"That's all I need to know, is that everything is going to be okay :)",
'@LTBeautyBlog @FDNCoffee I say less slacking & getting cracking :)',
"@JulieWestern I don't know the name but it is particularly striking. Happy days :)",
"@misshollylou Hey, here's your invite to join Scope as an influencer :) <http://t.co/ipJ2yOiGet>",
'@DeewaniVeronica 31* My Bad Mam :p',
'@FrancesBeeton Lovely looking cake, bet it tastes good too :-)',
'FeyTyaz Follback ya :)',
'@dalenahal so I found this last night, lets just say there was an instant stiffening of my interest :) <https://t.co/sw501Bz4y9>',
'Rettweet :-) <http://t.co/zBOvLw0y5S>',
'@CHUBANHES fback? :)',
'Rettweet :-) <http://t.co/CGTjR664Kj>',
'ricky_febs Follback ya :)',
'Got Secrets of Grindea, Courier of the Crypts and possibly some Arma 3 to record today..... Gosh! And a new game that looks like Limbo :)',
'@siaramelatienza follow @jnlazts & <http://t.co/RCvcYY00Iq> follow

u back :)',
'@MyriadPhoto thanks for retweeting @madsenjewellery orchard art show, have a super weekend :)',
'Karachi ka Venice after rains :) @rizz_javaaid "@JaagAlerts: Several parts of Karachi witness accumulated rain water,http://t.co/WionrlevBo"',
'maroon cocktail dresses http://t.co/Ioj5YzNRWu #MidiDresses for @filipinaniah :) http://t.co/VjlU5fIzBw',
'@IamPatmae_ fback po? :)',
'0-100 real quick :)',
'@Iron_Vein Morning! :) Mine is 1100D. Usually auto-focus. I only use manual for really close up like shooting veins on crackle glaze. :)',
'the new layout looks bomb! :-) \n-g',
"Thanks for connecting @garrowlscq Hope you're having an Great Day! Have a social/website question? Just ask :-)",
'@Tweetnesian pake :)',
'@gabrielaliuw hi we made some changes in our design, hope you like it :) https://t.co/EXt098Yqlb',
'joim me while I feed the troops. :) https://t.co/ZlcsRuUpPY via @audioBoom',
'Any brands wanting me to review BEAUTY products on my blog? mail me at: ladolcevitainluxembourg@hotmail.com #prrequest #journorequest :)',
'The_MadStork Follback ya :)',
'@SSalchli Good luck, Shaun! :)',
'@madziucha_5 yes he is :)',
'Anyone who wants to be added to the bot just DM me!! :) #bot',
'@ChloeGMoretz Chloe I watched "Let me in" yesterday and you were really awesome! Really talented and intelligent actress, beautiful too! :)',
'@hesfallenangel could i get some free solo dms? Any to give away? :) xoxo',
'@TripVerse @outboundapp thanks for sharing! Wishing you a wicked weekend :)',
"Hola juan.. sending you a big Hi from Houston tx! :) I've been a fan of jenni and the family for year's. I stumble upon a video of you",
'@padaleckbye. No prob.nice choker btw :)',
'@seoulsjin @seouljins seouljins :) both are fine tbh',
'Photoset: sadomasochistsparadise: Wynter bottoms- and an outtake :) Sadomasochist's Paradise Cuties http://t.co/GNWllwjFK1',
'You make my day by just smiling :)',
'@ghostkidluke fback? :)',
'@itsRebeccaRayne :D ty bby!',
'Please enjoy this clip of me losing my shit during cypher :) http://t.co/8FIyPQ6kkn',
'@athrawestokio @AdeccoWaytoWork @AdeccoJapan next week, i will be at my office ! so lets go :)',
'@DanielCWest thank you for following me :D',
'Stats for the day have arrived. 2 new followers and NO unfollowers :) via http://t.co/e644DJI0zw.',
'@purehaire Amen. Thanks :)',
'Hi BAM ! @BarsAndMelody \nCan you follow my bestfriend @969Horan696 ? \nShe loves you a lot :) \nSee you in Warsaw &3 \nLove you &3 x3 2',
'@shyayen follow @jnlazts & http://t.co/RCvcYY00Iq follow u back :)',
'@DrenchinWine @2fai @Chompu_Kusuma paper girl :D',
'@gculloty87 I know would of been lovely to have her in that pic :))

```

x',
 '@adnanCad Planted people are allowed to do any thing and every thing
:p',
 '@mRpOrTeR7 "This Corner" is so fucking Dope!! Getting addicted to i
t..\nGreat Job :D',
 'My bby gurl :) http://t.co/S0IiU35MWw',
 'Hey hey :D',
 '@NickTheBullsFan @CashNastyGaming still suck at editing but if this t
urns into something special I owe it to you guys :)',
 '@ayokeykt Visit my blog http://t.co/UzOAgroWKx thanks :D',
 "daannymoncada @breannelaflare YOU'RE UGLY DANIEL, is it good ap
e?:)",
 'Happy bday @Cinemainmygenes Saar....\nHave a great year ahead...
:)',
 '@LucyLu_xx Thought you might! I saw it and I loved the verse. The but
terfly part was just a bonus :).',
 'Thank you :-)) OK \nHave fun!!\n@anvy2446 @4HUMANITEES @SexyAF12 @ki
kbella @adasamper @RachellFilsoof\nEnjoy day u all\nhttp://t.co/5Y5OAES
Azv',
 'well. good morning. :D',
 '@palakspatel would you follow me?:)',
 'Busy, productive day filled with a few tears, but hours and hours of
laughter. Today was a good day. :)',
 '@17bljpk hi. You have 5sos tickets?? Dm me :)',
 'Yummmyyy.... :-) - eating dosa',
 '@bbcdactorwho so do I :D',
 '@MegLovesGames its probably easier to meet at the station? Unless you
particularly want to show me your house? :)',
 'A Huge & Warm Welcome to @VodkaBlond :-))',
 'ACHI!!!! Im busy next week because of our exams. Hope you understand
that I cant tweet youuu, Bawi ako queenesther! :) @esthercarodan',
 '@LeeMcKenzieTV Looking sharp :-)',
 '@xWinnerMino yess im 1 year younger than u :-) no wonder youre huge b
oy',
 "I'm playing Brain Dots : ) #BrainDots\nhttp://t.co/ilDzDRHf9d http://
t.co/VTXNFCPFuI",
 'Ha! All in one picture :-) http://t.co/IgLPwLvSfz',
 '@Galatasaray @Podolski10 is ready :) #Poldi #Cimbom',
 '@LuvSocial_Media Thanks for the share :)',
 '@LOSTCHILLHORAN fback? :)',
 '@24f567234e3c410 follow @jnlazts & http://t.co/RCvcYYO0Iq follow
u back :)',
 '@graphure Happy birthday buddy! :D',
 '@waterrat77 Thank you :-)',
 '*sigh* "@Whykaysbeauty: Bruhhh"@Dopjones: Call me daddy one more time
:)"',
 ...]

```

In [10]:

```
rira_data.shape
```

Out[10]:

```
(203482, 16)
```

In [11]:

```
rand_data.shape
```

Out[11]:

```
(20050, 26)
```

In [12]:

```
rira_data.head(1)
```

Out[12]:

	user_id	user_key	created_at	created_str	retweet_count	retweeted	favorite_col
0	1.868981e+09	ryanmaxwell_1	1.458672e+12	2016-03-22 18:31:42	NaN	NaN	N

In [13]:

```
rira_IDS = pd.DataFrame(rira_data.user_key.unique(),columns = ["TwitterHandle"])
```

In [14]:

```
rira_IDS
```

Out[14]:

	TwitterHandle
0	ryanmaxwell_1
1	detroitdailynew
2	cookncooks
3	queenofthewo
4	mrclxdepratt
...	...
449	jon_underwood_
450	milwaukeevoice
451	horrorki
452	mrserverlat
453	zistti

454 rows × 1 columns

Cleaning the data

In [15]:

```
rira_data = rira_data[rira_data.text.isnull()==False] # drops Null text
```

In [16]:

```
rand_data = rand_data[rand_data.text.isnull() == False]
```

Random tweets cleaning

In [17]:

```
rand_tweets = rand_data.text
```

In [18]:

```
rand_data.text.isnull().any()
```

Out[18]:

False

In [19]:

```
rand_tweets = pd.DataFrame(rand_tweets)
```

In [20]:

```
rand_tweets['rira'] = 0
```

RIRA tweet cleaning

In [21]:

```
rira_tweets = rira_data.text
```

In [22]:

```
rira_tweets.head()
```

Out[22]:

```
0    #IslamKills Are you trying to say that there w...
1    Clinton: Trump should've apologized more, atta...
2    RT @ltapoll: Who was/is the best president of ...
3    RT @jww372: I don't have to guess your religio...
4    RT @Shareblue: Pence and his lawyers decided w...
Name: text, dtype: object
```

In [23]:

```
rira_tweets = pd.DataFrame(rira_tweets)
```

In [24]:

```
rira_tweets['rira']=1
```

In [25]:

```
rira_tweets.head()
```

Out[25]:

	text	rira
0	#IslamKills Are you trying to say that there w...	1
1	Clinton: Trump should've apologized more, atta...	1
2	RT @ltapoll: Who was/is the best president of ...	1
3	RT @jww372: I don't have to guess your religio...	1
4	RT @Shareblue: Pence and his lawyers decided w...	1

In [26]:

```
rira_text = rira_tweets.text
```

Corpus Tweets Cleaning

In [27]:

```
twit_sample_corpus_unlabeled = pd.DataFrame(twit_sample_corpus_unlabeled )
```

In [28]:

```
twit_sample_corpus_unlabeled.head()
```

Out[28]:

	0
0	#FollowFriday @France_Inte @PKuchly57 @Milipol...
1	@Lamb2ja Hey James! How odd :/ Please call our...
2	@DespiteOfficial we had a listen last night :)...
3	@97sides CONGRATS :)
4	yeaaaaah yippppy!!! my accnt verified rqst has...

Create tweet files for RIRA handles

In [29]:

```
rira_IDS = pd.DataFrame(rira_data.user_key.unique(), columns = ["TwitterHandle"])
```

In [30]:

```
### creates RIRA twitter files by handle
#### DO NOT NEED TO RUN AGAIN
for handle in rira_IDS['TwitterHandle']:
    tweets = rira_data[rira_data.user_key==handle]
    tweets=tweets.reset_index()
    del tweets['index']
    path = './RIRA_tweets/'
    ending = ".csv"
    tweets.to_csv(path_or_buf= path+handle+ending)
```

In [31]:

```
tweets=tweets.reset_index()
del tweets['index']
```

In [32]:

```
rira_data[rira_data.favorite_count==rira_data.favorite_count.max()]
```

Out[32]:

	user_id	user_key	created_at	created_str	retweet_count	retweeted	favorite
	101054	4.859142e+09	trayneshacole	1.479414e+12	2016-11-17 20:27:21	20494.0	False

top ten twitter accounts

source of 10 ten wikipedia data pulled using tweetscraper.ipynb

In [33]:

```
top_ten_accounts = !ls ./TopTenAccounts
```

In [34]:

```
for account in top_ten_accounts:
    print(account)
```

```
@ArianaGrande_tweets.csv
@BarackObama_tweets.csv
@Cristiano_tweets.csv
@TheEllenShow_tweets.csv
@justinbieber_tweets.csv
@katyperry_tweets.csv
@ladygaga_tweets.csv
@realDonaldTrump_tweets.csv
@rihanna_tweets.csv
@taylorswift13_tweets.csv
```

In [35]:

```
top_ten_tweets = pd.DataFrame({'handle':[], 'id':[], 'created_at':[], 'text':[], 'likes':[], 'in_reply_to':[], 'retweeted':[]})
```

In [36]:

```
top_ten_tweets
```

Out[36]:

handle	id	created_at	text	likes	in reply to	retweeted
--------	----	------------	------	-------	-------------	-----------

In [37]:

```
dfs=[]
for account in top_ten_accounts:
    data = pd.read_csv("./TopTenAccounts/"+account)
    handle = account.strip('@').split("_tweets.csv")[0]
    data['handle'] = handle
    dfs.append(data)
    print(account, handle)
top_ten_tweets = pd.concat(dfs)
```

```
@ArianaGrande_tweets.csv ArianaGrande
@BarackObama_tweets.csv BarackObama
@Cristiano_tweets.csv Cristiano
@TheEllenShow_tweets.csv TheEllenShow
@justinbieber_tweets.csv justinbieber
@katyperry_tweets.csv katyperry
@ladygaga_tweets.csv ladygaga
@realDonaldTrump_tweets.csvrealDonaldTrump
@rihanna_tweets.csv rihanna
@taylorswift13_tweets.csv taylorswift13
```

In [38]:

```
top_ten_tweets.handle.unique()
```

Out[38]:

```
array(['ArianaGrande', 'BarackObama', 'Cristiano', 'TheEllenShow',
      'justinbieber', 'katyperry', 'ladygaga', 'realDonaldTrump',
      'rihanna', 'taylorswift13'], dtype=object)
```

In [39]:

```
top_ten_tweets_random = shuffle(top_ten_tweets)
```

In [40]:

```
top_ten_tweets_random.head()
```

Out[40]:

	id	created_at	text	likes	in reply to	retweeted	handle
2763	1119027328128958465	2019-04-18 23:58:00	.@lildickytweets, @justinbieber, @MileyCyrus, ...	7080	NaN	False	TheEllenShow
2439	361644355276115968	2013-07-29 00:28:27	#TAKEOFF bed, pool, 420, ollie , here the phuc...	938	NaN	False	rihanna
2218	673710543589380096	2015-12-07 03:48:05	Happy Birthday Frank from backstage 🎂 Love, To...	10739	NaN	False	ladygaga
61	1289852785379295232	2020-08-02 09:17:22	RT @Heritage: Is Twitter censoring those who s...	0	NaN	False	realDonaldTrump
2671	578567102870622208	2015-03-19 14:42:01	America needs a budget that builds a stronger ...	2969	NaN	False	BarackObama

In [41]:

```
top_tweets = pd.DataFrame(top_ten_tweets_random.text)
```

In [42]:

```
top_tweets['rira']=0
```

In [43]:

```
top_tweets = top_tweets.reset_index()
del top_tweets['index']
```

In [85]:

```
top_tweets.head()
```

Out[85]:

	text	rira
0	.@lildickytweets, @justinbieber, @MileyCyrus, ...	0
1	#TAKEOFF bed, pool, 420, ollie , here the phuc...	0
2	Happy Birthday Frank from backstage 🎂 Love, To...	0
3	RT @Heritage: Is Twitter censoring those who s...	0
4	America needs a budget that builds a stronger ...	0

In [67]:

```
i=0
not_str = []
while i<26296:
    if type(top_tweets.text[i])!=str:
        not_str.append(i)
    i+=1
```

In [77]:

```
top_tweets.dtypes
```

Out[77]:

```
text      object
rira      int64
dtype: object
```

Tokenize the sets

In [80]:

```
nlTK.download("stopwords")
```

```
[nlTK_data] Downloading package stopwords to
[nltk_data]      /Users/stevenhansen/nltk_data...
[nltk_data]   Package stopwords is already up-to-date!
```

Out[80]:

```
True
```

In [81]:

```
stopwords = nlTK.corpus.stopwords.words("english")
```

In [82]:

```
def build_a_bag_of_words_features(words):  
    return {  
        word: True for word in words \  
        if not word in stopwords}
```

In [83]:

```
def token_bag_words(data,label):  
    i=0  
    length,col = data.shape  
    tokenized_tweets = []  
    while i<length:  
        tokenized_tweets.append(build_a_bag_of_words_features(nltk.word_tokenize(da  
ta.iloc[i,0])))  
        i+=1  
    #return tokenized_tweets  
    j=0  
    clean_tweets=list(np.arange(len(tokenized_tweets)))  
    while j<len(tokenized_tweets):  
        clean_tweets[j]=[tokenized_tweets[j],label]  
        j+=1  
    clean_tweets = tuple(clean_tweets)  
    return clean_tweets
```

In [84]:

```
rira_bag_of_words = token_bag_words(rira_tweets,'rira')
```

In [86]:

```
rand_bag_of_words = token_bag_words(rand_tweets,'rand')
```

In [87]:

```
top_bag_of_words = token_bag_words(top_tweets,'top_ten')
```

In [89]:

```
top_bag_of_words[0]
```

Out[89]:

```
[{'.': True,
 '@': True,
 'lildicktweets': True,
 ',': True,
 'justinbieber': True,
 'MileyCyrus': True,
 'katyperry': True,
 'ArianaGrande': True,
 'one': True,
 'music': True,
 'video': True,
 'My': True,
 'head': True,
 'm...': True,
 'https': True,
 ':': True,
 '//t.co/3KvDmQr4dh': True},
 'top_ten']
```

In [90]:

```
corpus_bag_of_words = token_bag_words(twit_sample_corpus_unlabeled, 'corpus')
```

In [91]:

```
def token_bag_words_notlabeled(data):
    i=0
    length,col = data.shape
    tokenized_tweets = []
    while i<length:
        tokenized_tweets.append(build_a_bag_of_words_features(nltk.word_tokenize(da
ta.iloc[i,0])))
        i+=1
```

Train Data

In [92]:

```
from nltk.classify import NaiveBayesClassifier
```

In [127]:

```
split = 1000
```

RIRA Classifier trained on Rand set

In [128]:

```
rira_bot_classifier = NaiveBayesClassifier.train(rira_bag_of_words[:split]+rand_bag_of_words[:split])
```

In [129]:

```
nlTK.classify.util.accuracy(rira_bot_classifier, rira_bag_of_words[split:]+rand_bag_of_words[split:])*100
```

Out[129]:

92.85362803653092

In [130]:

```
rand_MIF = rira_bot_classifier.show_most_informative_features()
```

Most Informative Features

1.0	Trump = True	rira : rand	=	81.0 :
1.0	Clinton = True	rira : rand	=	20.6 :
1.0	Hillary = True	rira : rand	=	15.8 :
1.0	UK = True	rand : rira	=	15.7 :
1.0	Group = True	rand : rira	=	15.0 :
1.0	largest = True	rand : rira	=	13.7 :
1.0	greatest = True	rand : rira	=	11.0 :
1.0	year = True	rand : rira	=	8.3 :
1.0	country = True	rira : rand	=	8.3 :
1.0	Street = True	rand : rira	=	7.8 :

Classifier RIRA trained on Corpus Set

In [133]:

```
rira_bot_corpus_classifier = NaiveBayesClassifier.train(rira_bag_of_words[:split]+corpus_bag_of_words[:split])
```

In [134]:

```
nlTK.classify.util.accuracy(rira_bot_corpus_classifier, rira_bag_of_words[split:]+corpus_bag_of_words[split:])*100
```

Out[134]:

88.8106419656011

In [135]:

```
rira_bot_corpus_classifier.show_most_informative_features()
```

Most Informative Features

1.0	Obama = True	rira : corpus =	37.0 :
1.0) = True	corpus : rira =	32.1 :
1.0	Hi = True	corpus : rira =	26.3 :
1.0	follow = True	corpus : rira =	21.3 :
1.0	hope = True	corpus : rira =	14.3 :
1.0	u = True	corpus : rira =	14.3 :
1.0	midnight = True	rira : corpus =	12.3 :
1.0	week = True	corpus : rira =	11.8 :
1.0	good = True	corpus : rira =	11.8 :
1.0	He = True	rira : corpus =	11.7 :

RIRA Classifier trained on Top Ten Accounts

In [136]:

```
rira_bot_top10_classifier = NaiveBayesClassifier.train(rira_bag_of_words[:split]+to  
p_bag_of_words[:split])
```

In [137]:

```
nlTK.classify.util.accuracy(rira_bot_corpus_classifier, rira_bag_of_words[split:]+t  
op_bag_of_words[split:])*100
```

Out[137]:

86.42763998472056

In [138]:

```
rira_bot_top10_classifier.show_most_informative_features()
```

Most Informative Features

1.0	Trump = True	rira : top_te =	48.6 :
1.0	realDonaldTrump = True	rira : top_te =	13.7 :
1.0	politics = True	rira : top_te =	13.0 :
1.0	said = True	rira : top_te =	9.7 :
1.0	u = True	top_te : rira =	9.2 :
1.0	tomorrow = True	top_te : rira =	9.0 :
1.0	Watch = True	top_te : rira =	9.0 :
1.0	album = True	top_te : rira =	8.3 :
1.0	No = True	rira : top_te =	7.7 :
1.0	election = True	rira : top_te =	7.7 :

Testing models

Questions

Does it just classify highly politicized tweets as rira?

At what point is it overfitting?

Would taking out stop words and punctuation help/hurt?

Can the Neive Bayes classifer differentiate between RIRA tweets and congress tweets?

tweet tester

make a tweet and test it

In [341]:

```
def tweet_tester(tweet):
    tokenized_tweet = build_a_bag_of_words_features(nltk.word_tokenize(tweet))
    rand_set_classification = rira_bot_classifier.classify(tokenized_tweet)
    corpus_set_classification = rira_bot_corpus_classifier.classify(tokenized_tweet)
    top10_set_classification = rira_bot_top10_classifier.classify(tokenized_tweet)
    p = "Rand set = "+rand_set_classification+"\ncorpus set = "+corpus_set_classification+"\ntop10 set = "+top10_set_classification
    print(p)
    rand = rand_set_classification
    corpus = corpus_set_classification
    top10 = top10_set_classification
    return rand, corpus, top10
```

In [343]:

```
rand, corpus, top10 = tweet_tester("make america great again")
```

```
Rand set = rira
corpus set = corpus
top10 set = rira
```

In [344]:

```
rand
```

Out[344]:

```
'rira'
```

In [345]:

```
tweet_tester("MAKE AMERICA GREAT AGAIN")
```

```
Rand set = rira
corpus set = rira
top10 set = rira
```

Out[345]:

```
('rira', 'rira', 'rira')
```

In [141]:

```
tweet_tester("Obama is the best")
```

```
Rand set = rira
corpus set = rira
top10 set = top_ten
```

In [142]:

```
tweet_tester("trump is terrible")
```

```
Rand set =  rira  
corpus set = rira  
top10 set = rira
```

In [143]:

```
tweet_tester("Clinton is a way better choice then trump")
```

```
Rand set =  rira  
corpus set = rira  
top10 set = rira
```

In [495]:

```
tweet_tester("This season of the Office was terrible")
```

```
Rand set =  rand  
corpus set = corpus  
top10 set = top_ten
```

Out[495]:

```
('rand', 'corpus', 'top_ten')
```

In [157]:

```
def is_user_rira(tweets):  
    i=0  
    classified=np.arange(len(tweets))  
    while i < len(tweets):  
        if rira_bot_classifier.classify(build_a_bag_of_words_features(nltk.word_tokenize(tweets[i]))=="rira":  
            classified[i] = 1  
        else:  
            classified[i]=0  
        i+=1  
    return (sum(classified)/len(classified))
```

In [158]:

```
def is_user_rira_corpus(tweets):  
    i=0  
    classified=np.arange(len(tweets))  
    while i < len(tweets):  
        if rira_bot_corpus_classifier.classify(build_a_bag_of_words_features(nltk.word_tokenize(tweets[i]))=="rira":  
            classified[i] = 1  
        else:  
            classified[i]=0  
        i+=1  
    return (sum(classified)/len(classified))
```

In [159]:

```
def is_user_rira_top10(tweets):
    i=0
    classified=np.arange(len(tweets))
    while i < len(tweets):
        if rira_bot_top10_classifier.classify(build_a_bag_of_words_features(nltk.word_tokenize(tweets[i]))=="rira":
            classified[i] = 1
        else:
            classified[i]=0
        i+=1
    return (sum(classified)/len(classified))
```

Perparing the sets

Analysis tweets from congressmembers. List complied using the tweetscraper.ipynb

In [146]:

```
import os
import pandas as pd
```

Congress Tweets

In [250]:

```
congress_twitter_handles = pd.read_csv("./116Congress.csv")
congress_twitter_handles['PercentTweetLikeRIRA']=0
congress_twitter_handles['PercentTweetLikeRIRA_corpus']=0
congress_twitter_handles['PercentTweetLikeRIRA_top10']=0
```

In [251]:

```
del_indexes = ["ODU-WSDL", "TweetCongress", "Github", "REMARK"]
for ind in del_indexes:
    del congress_twitter_handles[ind]
congress_twitter_handles.head()
```

Out[251]:

	Wikipedia Names	Position	Joined Congress	CSPAN	PercentTweetLikeRIRA	PercentTweetLikeRIRA_c
0	Doug Jones	Sen	3-Jan-18	sendougjones		0
1	Richard Shelby	Sen	3-Jan-87	SenShelby		0
2	Dan Sullivan	Sen	3-Jan-15	SenDanSullivan		0
3	Lisa Murkowski	Sen	20-Dec-02	LisaMurkowski		0
4	Kyrsten Sinema	Sen	3-Jan-19	SenatorSinema		0

In [252]:

```
congress_twitter_handles=congress_twitter_handles.rename(columns={congress_twitter_handles.columns[0]: "Name", "CSPAN": "TwitterHandle"})
```

In [317]:

```
congress_twitter_handles.isnull().sum()
```

Out[317]:

```
Name          0
Position      0
Joined Congress  0
TwitterHandle  4
PercentTweetLikeRIRA  0
PercentTweetLikeRIRA_corpus  0
PercentTweetLikeRIRA_top10  0
FilePath      0
dtype: int64
```

In [319]:

```
congress_twitter_handles=congress_twitter_handles.dropna()
```

In [320]:

```
congress_twitter_handles["FilePath"]=0
```

```
/Users/stevenhansen/opt/anaconda3/lib/python3.7/site-packages/ipykernel  
_launcher.py:1: SettingWithCopyWarning:  
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-d  
ocs/stable/user\_guide/indexing.html#returning-a-view-versus-a-copy  
"""Entry point for launching an IPython kernel.
```


In [352]:

```
i=0
while i<538:
    fp = "./Congress_tweets/@"
    suffix = "_tweets.csv"
    congress_twitter_handles.iloc[i,7]=fp+congress_twitter_handles.iloc[i,3]+suffix
    i+=1
```

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```

-----
----
IndexError                                Traceback (most recent call l
ast)
<ipython-input-352-330f327d3020> in <module>
      3     fp = "./Congress_tweets/@"
      4     suffix = "_tweets.csv"
----> 5     congress_twitter_handles.iloc[i,7]=fp+congress_twitter_hand
les.iloc[i,3]+suffix
      6     i+=1
      7     print(i)

~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in
__getitem__(self, key)
    1416         except (KeyError, IndexError, AttributeError):
    1417             pass
-> 1418         return self._getitem_tuple(key)
    1419     else:
    1420         # we by definition only have the 0th axis

~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in
_getitem_tuple(self, tup)
    2090     def _getitem_tuple(self, tup):
    2091
-> 2092         self._has_valid_tuple(tup)
    2093         try:
    2094             return self._getitem_lowerdim(tup)

~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in
_has_valid_tuple(self, key)
    233         raise IndexingError("Too many indexers")
    234         try:
--> 235             self._validate_key(k, i)
    236         except ValueError:
    237             raise ValueError(

~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in
_validate_key(self, key, axis)
    2012         return
    2013         elif is_integer(key):
-> 2014             self._validate_integer(key, axis)
    2015         elif isinstance(key, tuple):
    2016             # a tuple should already have been caught by this p
oint

~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in
_validate_integer(self, key, axis)
    2086         len_axis = len(self.obj._get_axis(axis))
    2087         if key >= len_axis or key < -len_axis:
-> 2088             raise IndexError("single positional indexer is out-
of-bounds")
    2089
    2090     def _getitem_tuple(self, tup):

IndexError: single positional indexer is out-of-bounds

```

In [322]:

```
congress_twitter_handles.iloc[186,3]
```

Out[322]:

```
'RepConorLamb'
```

In [366]:

```
congress_twitter_handles.tail()
```

Out[366]:

	Name	Position	Joined Congress	TwitterHandle	PercentTweetLikeRIRA	PercentTweetLikeRIRA
533	Will Hurd	Rep	3-Jan-15	hurdonthehill	0	
534	William Timmons	Rep	3-Jan-19	RepTimmons	0	
535	Xochitl Torres Small	Rep	3-Jan-19	RepTorresSmall	0	
536	Yvette Clarke	Rep	3-Jan-13	RepYvetteClarke	0	
537	Zoe Lofgren	Rep	3-Jan-95	RepZoeLofgren	0	

Top Tweeters

In [258]:

```
top_tweeters = top_ten_tweets.handle.unique()
```

In [260]:

```
top_tweeters_handles = {"Name":top_tweeters}
```

In [264]:

```
top_tweeters_handles=pd.DataFrame(top_tweeters_handles)
top_tweeters_handles["TwitterHandle"]= top_tweeters
```

In [272]:

```
top_tweeters_handles["PercentTweetLikeRIRA"]=0
top_tweeters_handles["PercentTweetLikeRIRA_corpus"]=0
top_tweeters_handles["PercentTweetLikeRIRA_top10"]=0
del top_tweeters_handles["PrecentTweetLikeRIRA_corpus"]
```

In [284]:

```
top_tweeters_handles["Position"] = "Top Twitter Account"
```

In [324]:

```
top_tweeters_handles["FilePath"] = 0
```

In [333]:

```
i=0
while i<10:
    fp = "./TopTenAccounts/@"
    suffix = "_tweets.csv"
    top_tweeters_handles.iloc[i,6]=fp+top_tweeters_handles.iloc[i,1]+suffix
    i+=1
```

In [400]:

```
top_tweeters_handles
```

Out[400]:

	Name	TwitterHandle	PercentTweetLikeRIRA	PercentTweetLikeRIRA_top10	PercentT
0	ArianaGrande	ArianaGrande	0.542981	0.126469	
1	BarackObama	BarackObama	0.858816	0.131628	
2	Cristiano	Cristiano	0.649416	0.076049	
3	TheEllenShow	TheEllenShow	0.493362	0.116703	
4	justinbieber	justinbieber	0.708849	0.181415	
5	katyperry	katyperry	0.579442	0.165465	
6	ladygaga	ladygaga	0.645356	0.212468	
7	realDonaldTrump	realDonaldTrump	0.845000	0.665000	
8	rihanna	rihanna	0.793275	0.145081	
9	taylorswift13	taylorswift13	0.664706	0.211765	

RIRA Tweeters

In [281]:

```
rira_IDs["Name"] = "RIRA"
```

In [282]:

```
rira_IDs["PercentTweetLikeRIRA"] = 0  
rira_IDs["PercentTweetLikeRIRA_top10"] = 0  
rira_IDs["PercentTweetLikeRIRA_corpus"] = 0
```

In [286]:

```
rira_IDs["Position"] = "RIRA Account"
```

In [336]:

```
rira_IDs["FilePath"] = 0
```

In [339]:

```
i=0  
while i < 454:  
    fp = "./RIRA_tweets/"  
    suffix = ".csv"  
    rira_IDs.iloc[i,6] = fp+rira_IDs.iloc[i,0]+suffix  
    i+=1
```

In [399]:

```
rira_IDs
```

Out[399]:

	TwitterHandle	Name	PercentTweetLikeRIRA	PercentTweetLikeRIRA_top10	PercentTweetLik
0	ryanmaxwell_1	RIRA	0.875360	0.830522	
1	detroitdailynew	RIRA	0.970930	0.959302	
2	cookncooks	RIRA	0.988228	0.943366	
3	queenofthewo	RIRA	0.927376	0.906961	
4	mrclydepratt	RIRA	0.995403	0.884769	
...	
449	jon_underwood_	RIRA	1.000000	1.000000	
450	milwaukeevoice	RIRA	0.000000	1.000000	
451	horroraki	RIRA	1.000000	1.000000	
452	mrservelat	RIRA	1.000000	1.000000	
453	zistti	RIRA	1.000000	1.000000	

454 rows × 7 columns

In [356]:

```
def tweeter_classifier(fp):
    tweet_file = pd.read_csv(fp)
    PercentTweetLikeRIRA_rand = is_user_rira(tweet_file.text)
    PercentTweetLikeRIRA_corpus = is_user_rira_corpus(tweet_file.text)
    PercentTweetLikeRIRA_top10 = is_user_rira_top10(tweet_file.text)
    return PercentTweetLikeRIRA_rand, PercentTweetLikeRIRA_corpus, PercentTweetLikeRIRA_top10
```

In [357]:

```
tweeter_classifier(congress_twitter_handles.FilePath[0])
```

Out[357]:

```
(0.6719613259668509, 0.8957182320441989, 0.4116022099447514)
```


In [360]:

```
tweeter_classifier(top_tweeters_handles.FilePath[2])
```

Out[360]:

```
(0.6494162196276428, 0.5153045124644998, 0.07604922688545282)
```

In [391]:

```
i=0
while i<10:
    PercentTweetLikeRIRA,PercentTweetLikeRIRA_corpus,PercentTweetLikeRIRA_top10 = t
weeter_classifier(top_tweeters_handles.FilePath[i])
    top_tweeters_handles.iloc[i,2]=PercentTweetLikeRIRA
    top_tweeters_handles.iloc[i,3]=PercentTweetLikeRIRA_top10
    top_tweeters_handles.iloc[i,4]=PercentTweetLikeRIRA_corpus
    i+=1
```

In [392]:

top_tweeters_handles

Out[392]:

	Name	TwitterHandle	PercentTweetLikeRIRA	PercentTweetLikeRIRA_top10	Percent1
0	ArianaGrande	ArianaGrande	0.542981	0.126469	
1	BarackObama	BarackObama	0.858816	0.131628	
2	Cristiano	Cristiano	0.649416	0.076049	
3	TheEllenShow	TheEllenShow	0.493362	0.116703	
4	justinbieber	justinbieber	0.708849	0.181415	
5	katyperry	katyperry	0.579442	0.165465	
6	ladygaga	ladygaga	0.645356	0.212468	
7	realDonaldTrump	realDonaldTrump	0.845000	0.665000	
8	rihanna	rihanna	0.793275	0.145081	
9	taylorswift13	taylorswift13	0.664706	0.211765	

In [398]:

```
i=0
while i<538:
    try:
        PercentTweetLikeRIRA,PercentTweetLikeRIRA_corpus,PercentTweetLikeRIRA_top10
= tweeter_classifier(congress_twitter_handles.FilePath[i])
        congress_twitter_handles.iloc[i,4]=PercentTweetLikeRIRA
        #congress_twitter_handles.iloc[i,6]=PercentTweetLikeRIRA_top10
        #congress_twitter_handles.iloc[i,5]=PercentTweetLikeRIRA_corpus
    except:
        print(congress_twitter_handles.iloc[i,3],i)
    i+=1
```

```
/Users/stevenhansen/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py:494: SettingWithCopyWarning:  
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/stable/user_guide/indexing.html#returning-a-view-versus-a-copy

```
self.obj[item] = s
```

```
RepChrisCollins 177  
RepConorLamb 186  
RepDustyJohnson 231  
RepGregStanton 264  
GReschenthaler 269  
JanSchakowsky 286  
RepSarbanes 329  
RepLeeZeldin 363  
RepGallagher 404  
RepRickCrawford 445  
RepRobinKelly 453  
RepRonWright 459  
RosaDeLauro 460  
JacksonLeeTX18 476
```

```

-----
----
FileNotFoundError                                Traceback (most recent call l
ast)
<ipython-input-398-5e9c3b91c6ec> in <module>
      3     try:
----> 4         PercentTweetLikeRIRA,PercentTweetLikeRIRA_corpus,Perce
ntTweetLikeRIRA_top10 = tweeter_classifier(congress_twitter_handles.File
Path[i])
      5         congress_twitter_handles.iloc[i,4]=PercentTweetLikeRIRA

<ipython-input-356-e5d089eabd40> in tweeter_classifier(fp)
      1 def tweeter_classifier(fp):
----> 2     tweet_file = pd.read_csv(fp)
      3     PercentTweetLikeRIRA_rand = is_user_rira(tweet_file.text)

~/opt/anaconda3/lib/python3.7/site-packages/pandas/io/parsers.py in par
ser_f(filepath_or_buffer, sep, delimiter, header, names, index_col, use
cols, squeeze, prefix, mangle_dupe_cols, dtype, engine, converters, tru
e_values, false_values, skipinitialspace, skiprows, skipfooter, nrows,
na_values, keep_default_na, na_filter, verbose, skip_blank_lines, pars
e_dates, infer_datetime_format, keep_date_col, date_parser, dayfirst, c
ache_dates, iterator, chunksize, compression, thousands, decimal, linet
erminator, quotechar, quoting, doublequote, escapechar, comment, encodi
ng, dialect, error_bad_lines, warn_bad_lines, delim_whitespace, low_mem
ory, memory_map, float_precision)
    684
--> 685     return _read(filepath_or_buffer, kwds)
    686

~/opt/anaconda3/lib/python3.7/site-packages/pandas/io/parsers.py in _re
ad(filepath_or_buffer, kwds)
    456     # Create the parser.
--> 457     parser = TextFileReader(fp_or_buf, **kwds)
    458

~/opt/anaconda3/lib/python3.7/site-packages/pandas/io/parsers.py in __i
nit__(self, f, engine, **kwds)
    894
--> 895     self._make_engine(self.engine)
    896

~/opt/anaconda3/lib/python3.7/site-packages/pandas/io/parsers.py in _ma
ke_engine(self, engine)
    1134     if engine == "c":
--> 1135         self._engine = CParserWrapper(self.f, **self.option
s)
    1136     else:

~/opt/anaconda3/lib/python3.7/site-packages/pandas/io/parsers.py in __i
nit__(self, src, **kwds)
    1916
--> 1917     self._reader = parsers.TextReader(src, **kwds)
    1918     self.unnamed_cols = self._reader.unnamed_cols

pandas/_libs/parsers.pyx in pandas._libs.parsers.TextReader.__cinit__()

```

```
pandas/_libs/parsers.pyx in pandas._libs.parsers.TextReader._setup_parser_source()
```

```
FileNotFoundError: [Errno 2] File b'./Congress_tweets/@RepTimmons_tweets.s.csv' does not exist: b'./Congress_tweets/@RepTimmons_tweets.csv'
```

During handling of the above exception, another exception occurred:

```
IndexError                                Traceback (most recent call last)
```

```
<ipython-input-398-5e9c3b91c6ec> in <module>
```

```

    7         #congress_twitter_handles.iloc[i,5]=PercentTweetLikeRIR
A_corpus
    8     except:
---->  9         print(congress_twitter_handles.iloc[i,3],i)
    10     i+=1
    11
```

```
~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in _getitem__(self, key)
```

```

   1416         except (KeyError, IndexError, AttributeError):
   1417             pass
->  1418         return self._getitem_tuple(key)
   1419     else:
   1420         # we by definition only have the 0th axis
```

```
~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in _getitem_tuple(self, tup)
```

```

   2090     def _getitem_tuple(self, tup):
   2091
->  2092         self._has_valid_tuple(tup)
   2093         try:
   2094             return self._getitem_lowerdim(tup)
```

```
~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in _has_valid_tuple(self, key)
```

```

   233         raise IndexingError("Too many indexers")
   234     try:
->  235         self._validate_key(k, i)
   236     except ValueError:
   237         raise ValueError(
```

```
~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in _validate_key(self, key, axis)
```

```

   2012         return
   2013     elif is_integer(key):
->  2014         self._validate_integer(key, axis)
   2015     elif isinstance(key, tuple):
   2016         # a tuple should already have been caught by this point
```

```
~/opt/anaconda3/lib/python3.7/site-packages/pandas/core/indexing.py in _validate_integer(self, key, axis)
```

```

   2086         len_axis = len(self.obj._get_axis(axis))
   2087         if key >= len_axis or key < -len_axis:
->  2088             raise IndexError("single positional indexer is out-of-bounds")
```

2089

2090

def _getitem_tuple(self, tup):

IndexError: single positional indexer is out-of-bounds

In [397]:

```
print(congress_twitter_handles.iloc[100,3],100)
```

RepFinkenauer 100

In [401]:

```
congress_twitter_handles
```

Out[401]:

	Name	Position	Joined Congress	TwitterHandle	PercentTweetLikeRIRA	PercentTweetLikeRIR
0	Doug Jones	Sen	3-Jan-18	sendougjones	0.671961	
1	Richard Shelby	Sen	3-Jan-87	SenShelby	0.800224	
2	Dan Sullivan	Sen	3-Jan-15	SenDanSullivan	0.762880	
3	Lisa Murkowski	Sen	20-Dec-02	LisaMurkowski	0.656143	
4	Kyrsten Sinema	Sen	3-Jan-19	SenatorSinema	0.609650	
...	
533	Will Hurd	Rep	3-Jan-15	hurdonthehill	0.778176	
534	William Timmons	Rep	3-Jan-19	RepTimmons	0.731790	
535	Xochitl Torres Small	Rep	3-Jan-19	RepTorresSmall	0.806969	
536	Yvette Clarke	Rep	3-Jan-13	RepYvetteClarke	0.808464	
537	Zoe Lofgren	Rep	3-Jan-95	RepZoeLofgren	0.732110	

534 rows × 8 columns

In []:

```

i=0
while i<455:
    try:
        PercentTweetLikeRIRA,PercentTweetLikeRIRA_corpus,PercentTweetLikeRIRA_top10
    = tweeter_classifier(rira_IDS.FilePath[i])
        rira_IDS.iloc[i,2]=PercentTweetLikeRIRA
        #rira_IDS.iloc[i,3]=PercentTweetLikeRIRA_top10
        #rira_IDS.iloc[i,4]=PercentTweetLikeRIRA_corpus
    except:
        print(rira_IDS.iloc[i,0],i)
    i+=1

```

In [494]:

```
rira_IDS.Position.unique()
```

Out[494]:

```
array(['RIRA Account'], dtype=object)
```

In [406]:

```

all_tweets = [rira_IDS,congress_twitter_handles,top_tweeters_handles]
all_tweets_df = pd.concat(all_tweets)

```

/Users/stevenhansen/opt/anaconda3/lib/python3.7/site-packages/ipykernel_launcher.py:2: FutureWarning: Sorting because non-concatenation axis is not aligned. A future version of pandas will change to not sort by default.

To accept the future behavior, pass 'sort=False'.

To retain the current behavior and silence the warning, pass 'sort=True'.

In [407]:

```
all_tweets_df_nonzero= all_tweets_df[all_tweets_df["PercentTweetLikeRIRA_corpus"]!=0]
```

In [497]:

```
all_tweets_df_nonzero['Position'].unique()
```

Out[497]:

```
array(['RIRA Account', 'Sen', 'Rep', 'Top Twitter Account'], dtype=object)
```


In [493]:

```
rira_stats = all_tweets_df_nonzero[all_tweets_df_nonzero["Position"]=="RIRA Account"].describe()  
rira_stats
```

Out[493]:

	PercentTweetLikeRIRA	PercentTweetLikeRIRA_corpus	PercentTweetLikeRIRA_top10
count	445.000000	445.000000	445.000000
mean	0.950675	0.987582	0.922661
std	0.145355	0.036278	0.154226
min	0.000000	0.666667	0.000000
25%	0.963636	0.995934	0.918361
50%	1.000000	1.000000	0.977273
75%	1.000000	1.000000	1.000000
max	1.000000	1.000000	1.000000

In [499]:

```
Sen_stats = all_tweets_df_nonzero[all_tweets_df_nonzero['Position']=="Sen"].describe()  
Sen_stats
```

Out[499]:

	PercentTweetLikeRIRA	PercentTweetLikeRIRA_corpus	PercentTweetLikeRIRA_top10
count	100.000000	100.000000	100.000000
mean	0.777008	0.925688	0.517474
std	0.056730	0.039853	0.089503
min	0.609650	0.799751	0.304094
25%	0.750607	0.897550	0.454741
50%	0.781998	0.929922	0.511490
75%	0.808130	0.960977	0.569549
max	0.919002	0.986769	0.755735

In [502]:

```
Rep_stats = all_tweets_df_nonzero[all_tweets_df_nonzero['Position']=="Rep"].describe()  
Rep_stats
```

Out[502]:

	PercentTweetLikeRIRA	PercentTweetLikeRIRA_corpus	PercentTweetLikeRIRA_top10
count	420.000000	420.000000	420.000000
mean	0.772188	0.896514	0.520307
std	0.071496	0.061413	0.097350
min	0.514344	0.631171	0.266851
25%	0.725478	0.863890	0.448167
50%	0.777269	0.909997	0.516574
75%	0.820292	0.942118	0.583243
max	0.935834	0.987620	0.782420

In [503]:

```
top_ten_stats = all_tweets_df_nonzero[all_tweets_df_nonzero['Position']=="Top Twitter Account"].describe()  
top_ten_stats
```

Out[503]:

	PercentTweetLikeRIRA	PercentTweetLikeRIRA_corpus	PercentTweetLikeRIRA_top10
count	10.000000	10.000000	10.000000
mean	0.678120	0.737227	0.203204
std	0.124239	0.153581	0.167781
min	0.493362	0.494707	0.076049
25%	0.595921	0.637778	0.127758
50%	0.657061	0.764453	0.155273
75%	0.772169	0.838329	0.204177
max	0.858816	0.925000	0.665000

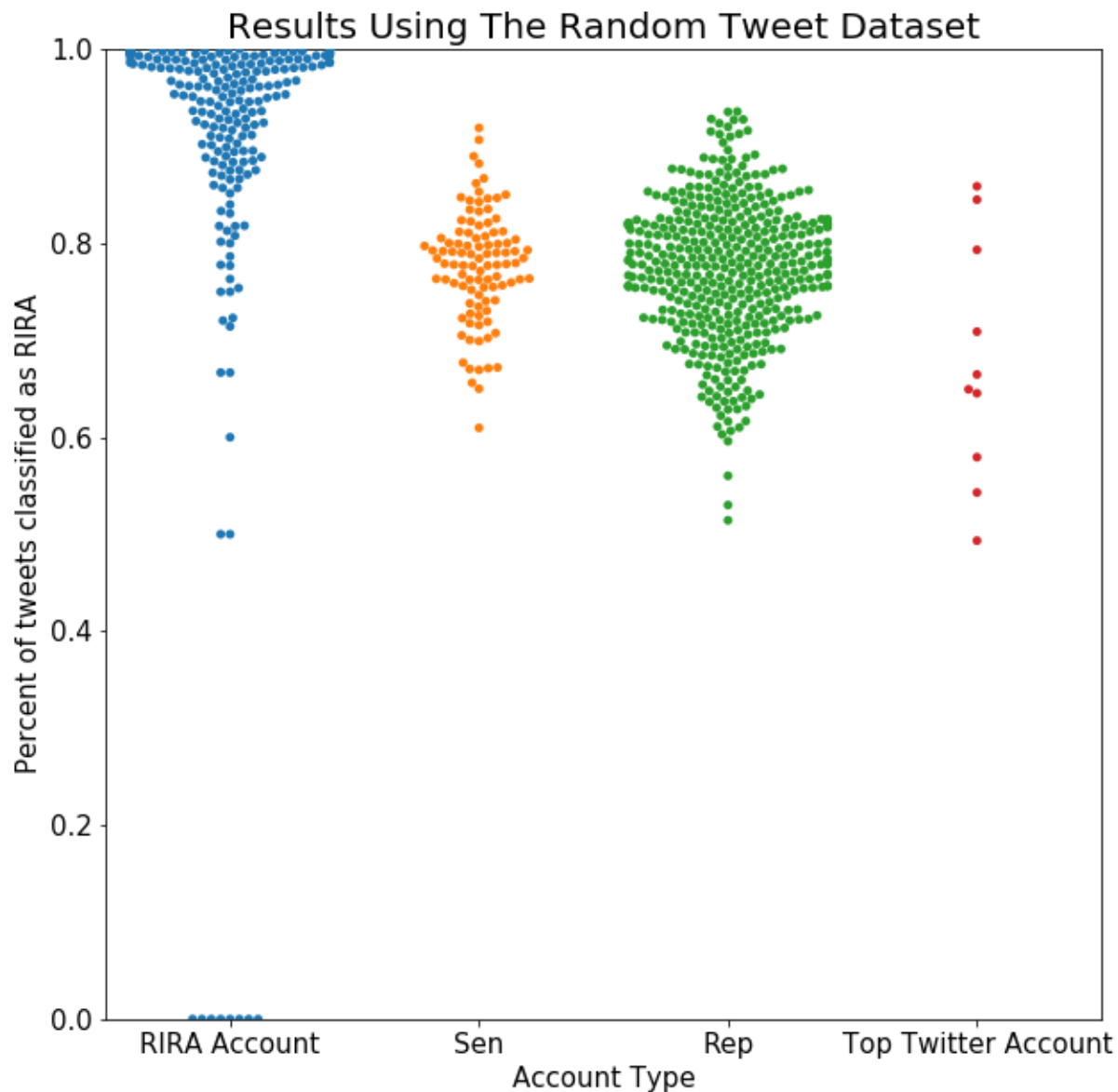
Visualizations

In [375]:

```
import seaborn as sns
```

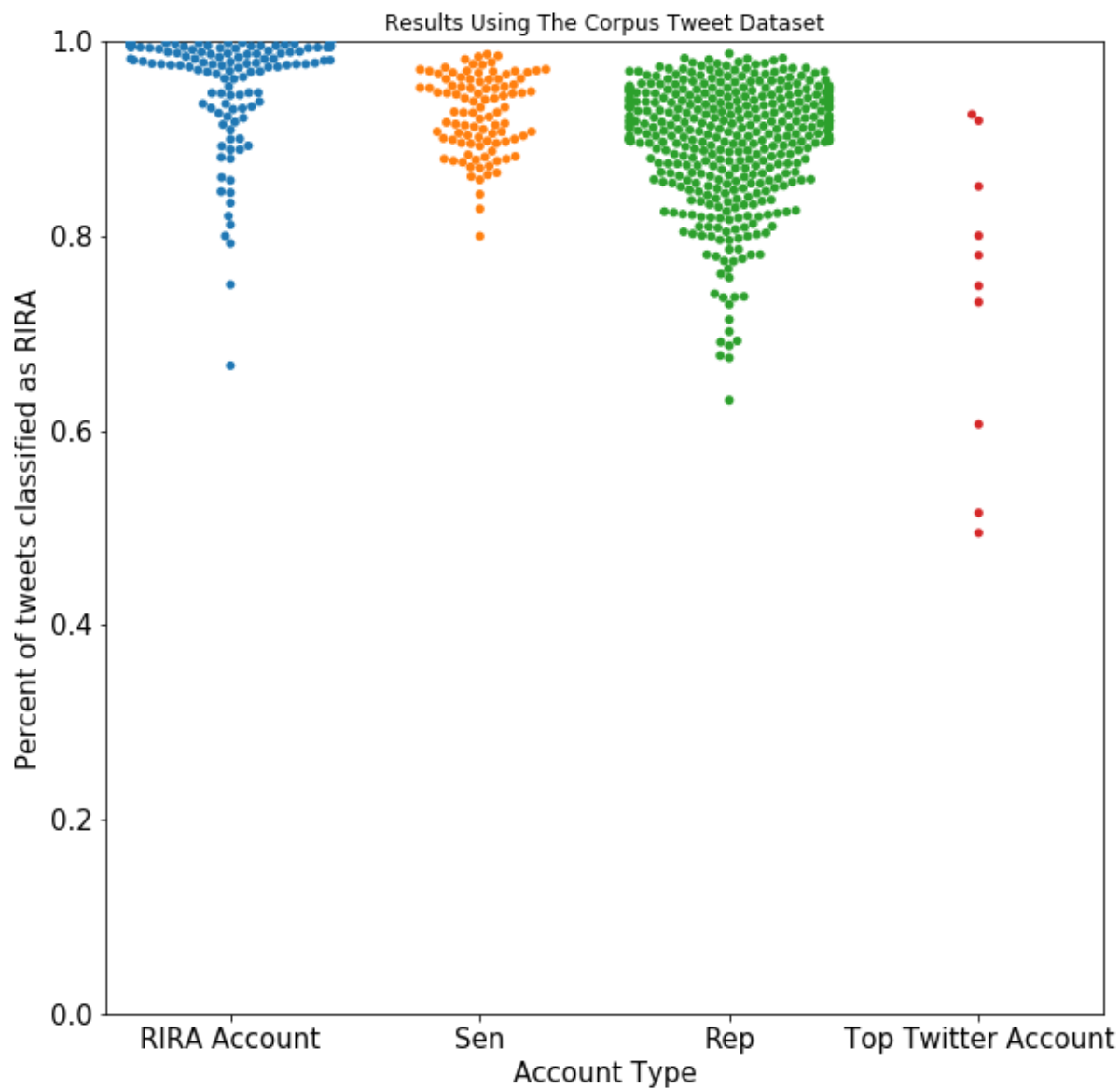
In [532]:

```
plt.figure(figsize=(10,10))
axes = plt.gca()
axes.set_ylim([0,1])
randplot = sns.swarmplot(x="Position",y="PercentTweetLikeRIRA",data=all_tweets_df_n
onzero)
randplot.axes.set_title("Results Using The Random Tweet Dataset",fontsize=20)
randplot.set_ylabel("Percent of tweets classified as RIRA",fontsize=15)
randplot.set_xlabel("Account Type",fontsize=15)
randplot.tick_params(labelsize=15)
#plt.title("Results Using The Random Tweet Dataset")
plt.savefig("RandTweetResults")
plt.show()
```



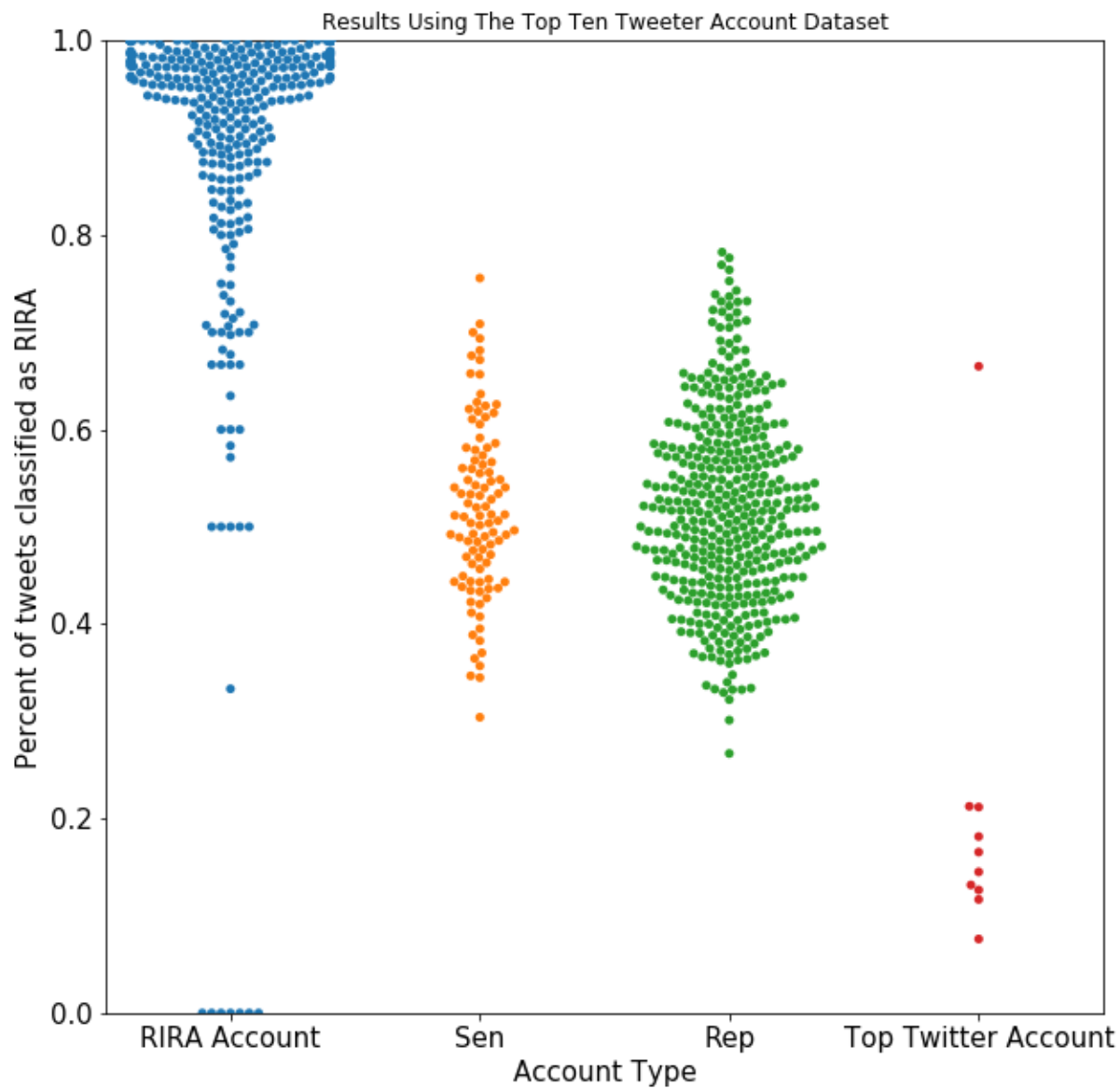
In [536]:

```
plt.figure(figsize=(10,10))
axes = plt.gca()
axes.set_ylim([0,1])
corpus_plot = sns.swarmplot(x="Position",y="PercentTweetLikeRIRA_corpus",data=all_tweets_df_nonzero)
corpus_plot.set_title("Results Using The Random Tweet Dataset",fontsize=20)
corpus_plot.set_ylabel("Percent of tweets classified as RIRA",fontsize=15)
corpus_plot.set_xlabel("Account Type",fontsize=15)
corpus_plot.tick_params(labelsize=15)
plt.title("Results Using The Corpus Tweet Dataset")
plt.savefig("CorpusTweetResults")
plt.show()
```



In [535]:

```
plt.figure(figsize=(10,10))
axes = plt.gca()
axes.set_ylim([0,1])
topten_plot = sns.swarmplot(x="Position",y="PercentTweetLikeRIRA_top10",data=all_tweets_df_nonzero)
topten_plot.axes.set_title("Results Using The Random Tweet Dataset",fontsize=20)
topten_plot.set_ylabel("Percent of tweets classified as RIRA",fontsize=15)
topten_plot.set_xlabel("Account Type",fontsize=15)
topten_plot.tick_params(labelsize=15)
plt.title("Results Using The Top Ten Tweeter Account Dataset")
plt.savefig("TopTenTweetResults")
plt.show()
```



In [546]:

```
congress_data_Dem[congress_data_Dem.PercentTweetLikeRIRA==congress_data_Dem.Percent
TweetLikeRIRA.min() ]
```

Out[546]:

	Wikipedia Names	Position	Joined Congress	ODU-WSDL	CSPAN	TweetCongress	Githu
121	Andy Kim	Rep	3-Jan-19	RepAndyKimNJ	RepAndyKimNJ	RepAndyKimNJ	RepAndyKimN

In [547]:

```
congress_data_Dem[congress_data_Dem.PercentTweetLikeRIRA==congress_data_Dem.Percent
TweetLikeRIRA.max() ]
```

Out[547]:

	Wikipedia Names	Position	Joined Congress	ODU-WSDL	CSPAN	TweetCongress	Github	REMARKS
362	Lacy Clay	Rep	3-Jan-01	LacyClayMO1	LacyClayMO1	NaN	NaN	(Name is present with no Twitter handle in Git..

In [548]:

```
congress_data_GOP[congress_data_GOP.PercentTweetLikeRIRA==congress_data_GOP.Percent
TweetLikeRIRA.min() ]
```

Out[548]:

	Wikipedia Names	Position	Joined Congress	ODU-WSDL	CSPAN	TweetCongress	Github
130	Anthony Gonzalez	Rep	3-Jan-19	RepAGonzalez	RepAGonzalez	RepAGonzalez	RepAGonzalez

In [549]:

```
congress_data_GOP[congress_data_GOP.PercentTweetLikeRIRA==congress_data_GOP.Percent
TweetLikeRIRA.max() ]
```

Out[549]:

	Wikipedia Names	Position	Joined Congress	ODU-WSDL	CSPAN	TweetCongress	Github	REMARKS
488	Steve Scalise	Rep	3-May-08	SteveScalise	SteveScalise	SteveScalise	SteveScalise	

In [551]:

```
congress_data_GOP[congress_data_GOP.PercentTweetLikeRIRA>0.80].shape
```

Out[551]:

(115, 10)

In [552]:

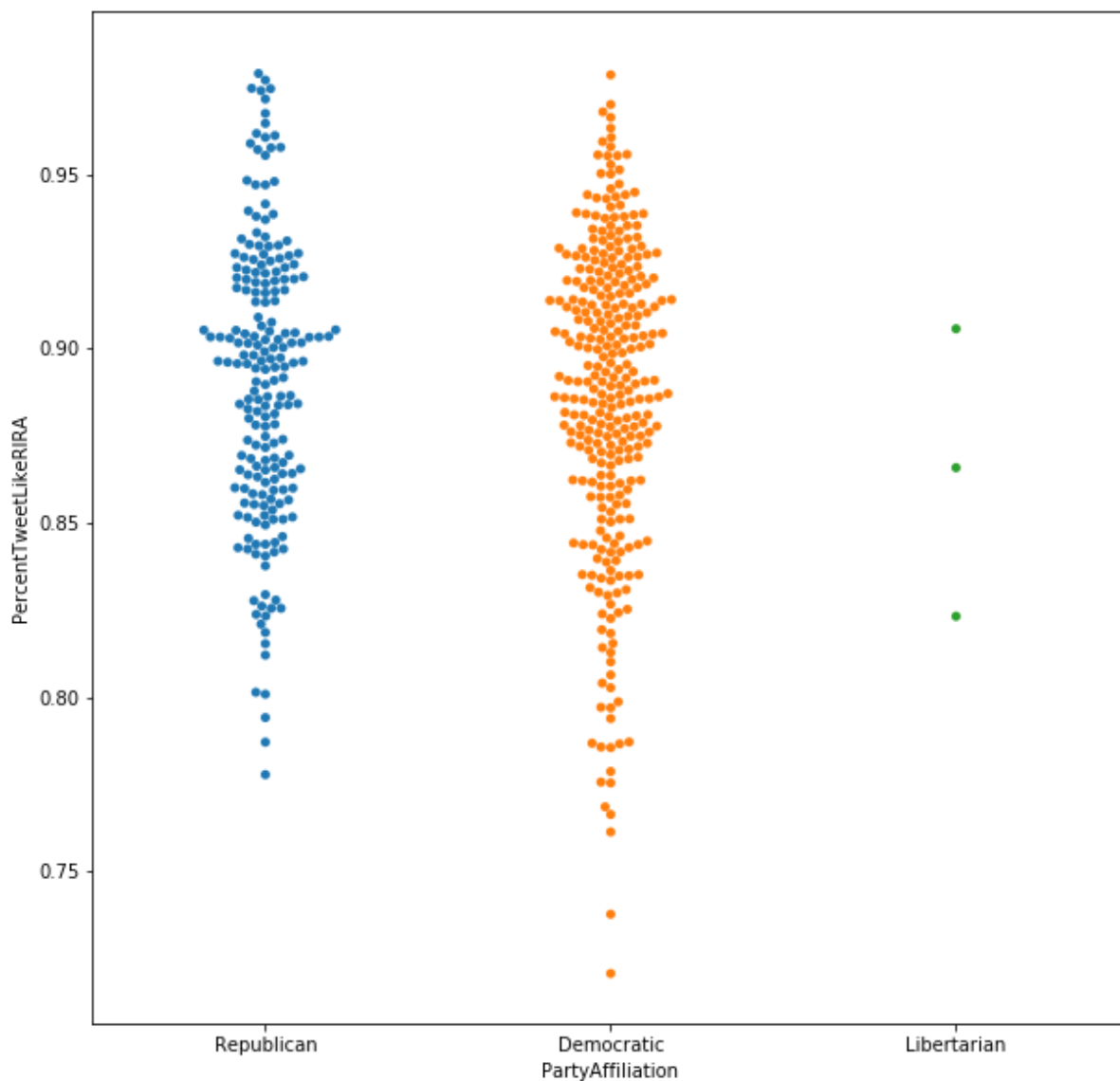
```
congress_data_Dem[congress_data_Dem.PercentTweetLikeRIRA>0.80].shape
```

Out[552]:

(183, 10)

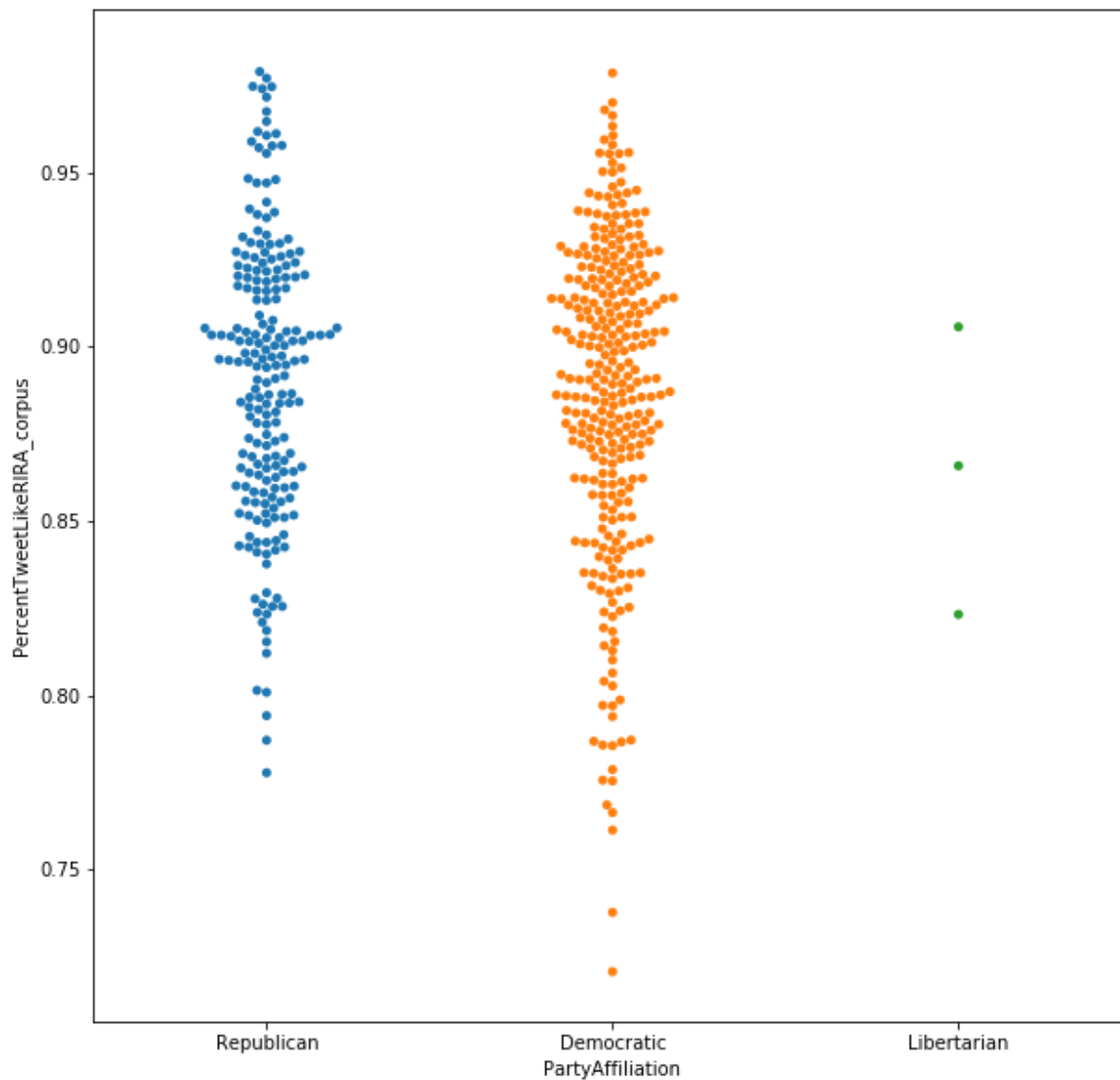
In [620]:

```
# removing stopwords training = 10,000  
plt.figure(figsize=(10,10))  
sns.swarmplot(x="PartyAffiliation",y="PercentTweetLikeRIRA",data=congress_data)  
plt.show()
```



In [676]:

```
plt.figure(figsize=(10,10))  
sns.swarmplot(x="PartyAffiliation",y="PercentTweetLikeRIRA_corpus",data=congress_data)  
plt.show()
```



In []: