Spam_Detection_Project

July 12, 2020

```
[142]: import pandas as pd
       import numpy as np
       import matplotlib.pyplot as plt
       from sklearn.feature_extraction.text import CountVectorizer
       from sklearn.feature_extraction.text import TfidfVectorizer
       from sklearn.model_selection import train_test_split
       from sklearn.naive_bayes import MultinomialNB
       from sklearn.ensemble import AdaBoostClassifier
       from wordcloud import WordCloud
[143]: ## Importing the data
       data = pd.read_csv("/Users/snigdhacheekoty/Documents/GitHub/SpamDetector/spam.
       ⇔csv", encoding = "latin-1")
       ## If we use the defauot encoding, it gives an error because there are few \Box
        \rightarrow invalid characters in the file
       # Invalid characters like: emojis and non standard symbols
[144]: data.head(10)
[144]:
                                                                 v2 Unnamed: 2 \
               Go until jurong point, crazy.. Available only ...
                                                                         NaN
           ham
       1
           ham
                                     Ok lar... Joking wif u oni...
                                                                       NaN
          spam Free entry in 2 a wkly comp to win FA Cup fina...
       2
                                                                         NaN
           ham U dun say so early hor... U c already then say...
                                                                       NaN
       3
           ham Nah I don't think he goes to usf, he lives aro...
                                                                         NaN
          spam FreeMsg Hey there darling it's been 3 week's n...
       5
                                                                         NaN
           ham Even my brother is not like to speak with me. ...
                                                                         NaN
           ham As per your request 'Melle Melle (Oru Minnamin...
                                                                         NaN
          spam WINNER!! As a valued network customer you have...
                                                                         NaN
          spam Had your mobile 11 months or more? U R entitle...
                                                                         NaN
         Unnamed: 3 Unnamed: 4
       0
                NaN
                           NaN
                NaN
                           NaN
       1
                NaN
                           NaN
       3
                NaN
                            NaN
```

```
5
                NaN
                            NaN
       6
                NaN
                            NaN
       7
                NaN
                            {\tt NaN}
       8
                NaN
                            NaN
       9
                NaN
                            NaN
[145]: ## Dropping the unnamed columns 2, 3,4
       data = data.drop(["Unnamed: 2", "Unnamed: 3", "Unnamed: 4"], axis = 1)
       data.head(10)
[145]:
            v1
                                                                 v2
               Go until jurong point, crazy.. Available only ...
           ham
       1
                                     Ok lar... Joking wif u oni...
           ham
       2 spam Free entry in 2 a wkly comp to win FA Cup fina...
           ham U dun say so early hor... U c already then say...
       3
           ham Nah I don't think he goes to usf, he lives aro...
       5 spam FreeMsg Hey there darling it's been 3 week's n...
           ham Even my brother is not like to speak with me. ...
       6
       7
           ham As per your request 'Melle Melle (Oru Minnamin...
       8 spam WINNER!! As a valued network customer you have...
          spam Had your mobile 11 months or more? U R entitle...
[146]: ## renaming columns
       data.columns = ["labels", "data"]
       data.head(6)
[146]:
         labels
                                                                data
                 Go until jurong point, crazy.. Available only ...
            ham
                                      Ok lar... Joking wif u oni...
       1
            ham
       2
                Free entry in 2 a wkly comp to win FA Cup fina...
           spam
       3
                 U dun say so early hor... U c already then say...
            ham
                 Nah I don't think he goes to usf, he lives aro...
       4
           spam FreeMsg Hey there darling it's been 3 week's n...
[147]: # Create a column: binary labels
       # Representing the lables numerically: Always better to do this!
       data["binary_labels"] = data["labels"].map({"spam": 1, "ham":0})
       # creating y matrix( or y vector)
       y = data["binary_labels"]
[148]: data.head(10)
```

4

 ${\tt NaN}$

NaN

```
[148]:
         labels
                                                                 data binary_labels
            ham
                 Go until jurong point, crazy.. Available only ...
                                                                                  0
       1
                                      Ok lar... Joking wif u oni...
                                                                                0
            ham
       2
           spam
                Free entry in 2 a wkly comp to win FA Cup fina...
                                                                                  1
                 U dun say so early hor... U c already then say...
       3
                                                                               0
       4
            ham
                 Nah I don't think he goes to usf, he lives aro...
                                                                                 0
       5
           spam
                 FreeMsg Hey there darling it's been 3 week's n...
       6
            ham Even my brother is not like to speak with me. ...
                                                                                 0
       7
                 As per your request 'Melle Melle (Oru Minnamin...
                                                                                 0
            ham
       8
           spam
                 WINNER!! As a valued network customer you have...
                                                                                 1
           spam Had your mobile 11 months or more? U R entitle...
                                                                                 1
       9
[149]: # We have to create the X matrix
       # Firstly, trying CountVectorize()
       count_vectorizer = CountVectorizer(decode_error = "ignore")
       X = count_vectorizer.fit_transform(data["data"])
       # if any UTF-8 characters are found , we want to ignore them
[150]: # Secondly, let's try Tfidf vectorizer
       tfidf_vectorizer = TfidfVectorizer(decode_error= 'ignore')
       X_tf = tfidf_vectorizer.fit_transform(data["data"])
[151]: print(X)
        (0, 3550)
                       1
        (0, 8030)
                       1
        (0, 4350)
                       1
        (0, 5920)
        (0, 2327)
        (0, 1303)
        (0, 5537)
                       1
        (0, 4087)
                       1
        (0, 1751)
                       1
        (0, 3634)
                       1
        (0, 8489)
        (0, 4476)
        (0, 1749)
        (0, 2048)
                       1
        (0, 7645)
                       1
        (0, 3594)
                       1
        (0, 1069)
                       1
        (0, 8267)
                       1
        (1, 5504)
                       1
        (1, 4512)
```

```
(1, 4318)
               1
(1, 8392)
               1
(1, 5533)
               1
(2, 4087)
               1
(2, 3358)
(5570, 4218)
(5570, 8313)
               1
(5570, 1084)
               1
(5570, 4615)
               1
(5570, 7039)
               1
(5570, 3308)
(5570, 7627)
               1
(5570, 1438)
(5570, 5334)
               1
(5570, 2592)
               1
(5570, 8065)
               1
(5570, 1778)
               1
(5570, 7049)
               1
(5570, 2892)
(5570, 3470)
(5570, 1786)
               1
(5570, 3687)
               1
(5570, 4161)
               1
(5570, 903)
               1
(5570, 1546)
               1
(5571, 7756)
(5571, 5244)
(5571, 4225)
               2
(5571, 7885)
               1
(5571, 6505)
```

[152]: print(X_tf)

```
(0, 8267)
              0.18238655630689804
(0, 1069)
              0.3264252905795869
(0, 3594)
              0.15318864840197105
(0, 7645)
              0.15566431601878158
(0, 2048)
              0.2757654045621182
(0, 1749)
              0.3116082237740733
(0, 4476)
              0.2757654045621182
(0, 8489)
              0.22080132794235655
(0, 3634)
              0.1803175103691124
(0, 1751)
              0.2757654045621182
(0, 4087)
              0.10720385321563428
(0, 5537)
              0.15618023117358304
(0, 1303)
              0.24415547176756056
(0, 2327)
              0.25279391746019725
```

```
(0, 8030)
                      0.22998520738984352
        (0, 3550)
                      0.1481298737377147
        (1, 5533)
                      0.5465881710238072
        (1, 8392)
                      0.4316010362639011
        (1, 4318)
                      0.5236458071582338
        (1, 4512)
                      0.4082988561907181
        (1, 5504)
                      0.27211951321382544
        (2, 77)
                      0.23012628226525952
        (2, 1156)
                      0.16541257593676326
        (5570, 1786) 0.2829205787072918
        (5570, 3470) 0.2752778321471703
        (5570, 2892)
                      0.24400995680638932
        (5570, 7049) 0.20534386872930602
        (5570, 1778)
                      0.1366456751602606
        (5570, 8065)
                      0.20880862098597563
        (5570, 2592)
                      0.1845863450431389
        (5570, 5334)
                      0.21003730857873565
        (5570, 1438)
                      0.1429585509124154
        (5570, 7627)
                      0.10242646659763288
        (5570, 3308) 0.12172172618634512
        (5570, 7039)
                      0.18426763178390448
        (5570, 4615)
                      0.15965529817341642
        (5570, 1084)
                      0.11225268140936365
        (5570, 8313)
                      0.18723687600522526
        (5570, 4218)
                      0.1224661019112692
        (5570, 3781)
                      0.17077863975758362
        (5570, 7756) 0.0837337985706596
        (5570, 3358)
                      0.15948934578787605
        (5570, 4087)
                      0.11172931760302046
        (5571, 6505)
                      0.5565029307246047
        (5571, 7885)
                      0.4275291317643216
        (5571, 4225)
                      0.5773238083586979
        (5571, 5244)
                      0.3900900272638623
        (5571, 7756) 0.14849350328973987
[153]: # train-test split
       X_train, X_test, y_train, y_test = train_test_split(X,y, test_size = 0.3) # for_
       \rightarrow count_vectorizer
       \# X\_train, X\_test, y\_train, y\_test = train\_test\_split(X\_tf,y, test\_size = 0.3)_{\sqcup}
        →# for tfidf_vectorizer
```

(0, 5920)

(0, 4350)

0.2553151503985779

0.3264252905795869

1 Mutlinomial Naive Bayes Classification

```
[154]: # Training Multinomial Naive Bayes model
       model mnb = MultinomialNB()
       model_mnb.fit(X_train, y_train)
       print("Training score (using count Vectorizer): ", model_mnb.score(X_train,_
       print("Test score: (using count Vectorizer)", model_mnb.score(X_test, y_test))
      Training score (using count Vectorizer): 0.9951282051282051
      Test score: (using count Vectorizer) 0.9820574162679426
[155]: # Now training the model with on the data created by TFIDF
       # splitting the data
       X_tf_train, X_tf_test, y_train, y_test = train_test_split(X_tf, y , test_size_
       \rightarrow = 0.3)
[156]: # training the model: Multinomial Naive Bayes
       model_mnb = MultinomialNB() # model constructor
       model_mnb.fit(X_tf_train, y_train)
[156]: MultinomialNB(alpha=1.0, class_prior=None, fit_prior=True)
[157]: print("Training Score: (using TFIDF Vectorizer)", model_mnb.score(X_tf_train,_
       →y_train))
       print("Test Score (using TFIDF Vectorizer)", model_mnb.score(X_tf_test, y_test))
      Training Score: (using TFIDF Vectorizer) 0.9674358974358974
      Test Score (using TFIDF Vectorizer) 0.9593301435406698
 []:
 []:
```

2 AdaBoost Classification

```
[158]: # Training the model
# With Count vectorized data
model_ab = AdaBoostClassifier()
model_ab.fit(X_train, y_train)
print("Training Score: (using Count Vectorizer)", model_ab.score(X_train, \u00cd
\u00f3y_train))
```

```
print("Test Score (using Count Vectorizer):", model_ab.score(X_test, y_test))
      Training Score: (using Count Vectorizer) 0.8684615384615385
      Test Score (using Count Vectorizer): 0.8624401913875598
[159]: # With TFIDF vectorized data
      model_ab = AdaBoostClassifier()
      model_ab.fit(X_tf_train,y_train)
      print("Training Score: (using TFIDF Vectorizer)", model_ab.score(X_tf_train,_
       print("Test Score (using TFIDF Vectorizer)", model_ab.score(X_tf_test, y_test))
      Training Score: (using TFIDF Vectorizer) 0.9817948717948718
      Test Score (using TFIDF Vectorizer) 0.9748803827751196
 []:
 []:
[161]: ## Visualize the data
       # Seeing the most common words in the messages
      def visualize(label):
          words = ''
          for msg in data[data["labels"] == label] ["data"]: # This helps print spam
       → and ham message words separately
              msg = msg.lower()
              words += msg + ' ' # Concatenating the words to the string
               #.... wordcloud needs a string of words as the input
          wordcloud = WordCloud(width = 600, height = 400).generate(words)
          plt.imshow(wordcloud)
          plt.axis('off')
          plt.show()
      visualize('spam')
```



[162]: visualize('ham')



```
[170]: ## See what we're getting wrong
data["predictions"] = model_ab.predict(X_tf)
```

```
# Messages that should be SPAM (But were predicted incorrectly as ham by our_u → classifier)

# Because, even though our AdaBoost Classifier has an test accuracy of 97%, u → there were few incorrect predictions made

sneaky_spam = data[(data["predictions"] == 0) & (data["binary_labels"] == u → 1)]["data"]

for msg in sneaky_spam:
    print(msg)
```

FreeMsg Hey there darling it's been 3 week's now and no word back! I'd like some fun you up for it still? Tb ok! XxX std chgs to send, å£1.50 to rcv England v Macedonia - dont miss the goals/team news. Txt ur national team to 87077 eg ENGLAND to 87077 Try:WALES, SCOTLAND 4txt/̼1.20 POBOXox36504W45WQ 16+ SMS. ac Sptv: The New Jersey Devils and the Detroit Red Wings play Ice Hockey. Correct or Incorrect? End? Reply END SPTV

Did you hear about the new \Divorce Barbie\"? It comes with all of Ken's stuff!" BangBabes Ur order is on the way. U SHOULD receive a Service Msg 2 download UR content. If U do not, GoTo wap. bangb. tv on UR mobile internet/service menu 100 dating service cal;1 09064012103 box334sk38ch

You will recieve your tone within the next 24hrs. For Terms and conditions please see Channel U Teletext Pg 750

XCLUSIVE@CLUBSAISAI 2MOROW 28/5 SOIREE SPECIALE ZOUK WITH NICHOLS FROM PARIS.FREE ROSES 2 ALL LADIES !!! info: 07946746291/07880867867

Todays Vodafone numbers ending with 4882 are selected to a receive a å£350 award. If your number matches call 09064019014 to receive your å£350 award. 88800 and 89034 are premium phone services call 08718711108

occord and ogost are premium phone services carr oction

SMS. ac sun0819 posts HELLO:\You seem cool

08714712388 between 10am-7pm Cost 10p

Do you realize that in about 40 years, we'll have thousands of old ladies running around with tattoos?

U were outbid by simonwatson5120 on the Shinco DVD Plyr. 2 bid again, visit sms. ac/smsrewards 2 end bid notifications, reply END OUT $\frac{1}{2}$

Hello. We need some posh birds and chaps to user trial prods for champneys. Can i put you down? I need your address and dob asap. Ta r

Reminder: You have not downloaded the content you have already paid for. Goto http://doit. mymoby. tv/ to collect your content.

Filthy stories and GIRLS waiting for your

18 days to Euro2004 kickoff! U will be kept informed of all the latest news and results daily. Unsubscribe send GET EURO STOP to 83222.

1000's of girls many local 2 u who r virgins 2 this & r ready 2 4fil ur every sexual need. Can u 4fil theirs? text CUTE to 69911(å£1.50p. m)

You have 1 new voicemail. Please call 08719181503

You have 1 new voicemail. Please call 08719181513.

Can U get 2 phone NOW? I wanna chat 2 set up meet Call me NOW on 09096102316 U can cum here 2moro Luv JANE xx Callså£1/minmoremobsEMSP0Box45P0139WA network operator. The service is free. For T & C's visit 80488.biz

For sale - arsenal dartboard. Good condition but no doubles or trebles! As a registered optin subscriber ur draw 4 &£100 gift voucher will be entered on receipt of a correct ans to 80062 Whats No1 in the BBC charts

CLAIRE here am havin borin time & am now alone U wanna cum over 2nite? Chat now 09099725823 hope 2 C U Luv CLAIRE xx Callså£1/minmoremobsEMSP0Box45P0139WA

Hi its LUCY Hubby at meetins all day Fri & I will B alone at hotel U fancy cumin over? Pls leave msg 2day 09099726395 Lucy x Callså£1/minMobsmoreLKPOBOX177HP51FL OA\$NETWORKS allow companies to bill for SMS, so they are responsible for their \suppliers\"

Free msg. Sorry, a service you ordered from 81303 could not be delivered as you do not have sufficient credit. Please top up to receive the service.

Would you like to see my XXX pics they are so hot they were nearly banned in the

TheMob>Yo yo yo-Here comes a new selection of hot downloads for our members to get for FREE! Just click & open the next link sent to ur fone...

Hi ya babe x u 4goten bout me?' scammers getting smart.. Though this is a regular vodafone no, if you respond you get further prem rate msg/subscription. Other nos used also. Beware!

SplashMobile: Choose from 1000s of gr8 tones each wk! This is a subscrition service with weekly tones costing 300p. U have one credit - kick back and ENJOY 88066 FROM 88066 LOST 3POUND HELP

Download as many ringtones as u like no restrictions, 1000s 2 choose. U can even send 2 yr buddys. Txt Sir to 80082 å£3

Fantasy Football is back on your TV. Go to Sky Gamestar on Sky Active and play ± 250 k Dream Team. Scoring starts on Saturday, so register now!SKY OPT OUT to 88088

This message is brought to you by GMW Ltd. and is not connected to the Hello darling how are you today? I would love to have a chat, why dont you tell me what you look like and what you are in to sexy?

New Tones This week include: 1)McFly-All Ab.., 2) Sara Jorge-Shock.. 3) Will Smith-Switch.. To order follow instructions on next message FROM 88066 LOST å£12 HELP

18 days to Euro2004 kickoff! U will be kept informed of all the latest news and results daily. Unsubscribe send GET EURO STOP to 83222.

Burger King - Wanna play footy at a top stadium? Get 2 Burger King before 1st Sept and go Large or Super with Coca-Cola and walk out a winner

How come it takes so little time for a child who is afraid of the dark to become a teenager who wants to stay out all night?

FreeMsg>FAV XMAS TONES!Reply REAL

Call FREEPHONE 0800 542 0578 now!

ROMCAPspam Everyone around should be responding well to your presence since you are so warm and outgoing. You are bringing in a real breath of sunshine.

Adult 18 Content Your video will be with you shortly

Do you ever notice that when you're driving, anyone going slower than you is an idiot and everyone driving faster than you is a maniac?

You have 1 new voicemail. Please call 08719181513.

Camera - You are awarded a SiPix Digital Camera! call 09061221066 fromm landline. Delivery within 28 days

RCT' THNQ Adrian for U text. Rgds Vatian

Welcome! Please reply with your AGE and GENDER to begin. e.g 24M Camera - You are awarded a SiPix Digital Camera! call 09061221066 fromm landline. Delivery within 28 days.

Get a FREE mobile video player FREE movie. To collect text GO to 89105. Its free! Extra films can be ordered t's and c's apply. 18 yrs only Xmas & New Years Eve tickets are now on sale from the club, during the day from 10am till 8pm, and on Thurs, Fri & Sat night this week. They're selling fast! Rock yr chik. Get 100's of filthy films &XXXX pics on yr phone now. rply FILTH to 69669. Saristar Ltd, E14 9YT 08701752560. 450p per 5 days. Stop2 cancel Auction round 4. The highest bid is now å£54. Next maximum bid is å£71. To bid, send BIDS e. g. 10 (to bid å£10) to 83383. Good luck. 2/2 146tf150p

Fantasy Football is back on your TV. Go to Sky Gamestar on Sky Active and play &250k Dream Team. Scoring starts on Saturday, so register now!SKY OPT OUT to 88088

Oh my god! I've found your number again! I'm so glad, text me back xafter this msgs cst std ntwk chg å£1.50

(Bank of Granite issues Strong-Buy) EXPLOSIVE PICK FOR OUR MEMBERS *****UP OVER 300% ******** Nasdaq Symbol CDGT That is a \$5.00 per..

TBS/PERSOLVO. been chasing us since Sept for \$28 definitely not paying now thanks to your information. We will ignore them. Kath. Manchester.

FreeMsg Today's the day if you are ready! I'm horny & live in your town. I love sex fun & games! Netcollex Ltd 08700621170150p per msg reply Stop to end In The Simpsons Movie released in July 2007 name the band that died at the start of the film? A-Green Day, B-Blue Day, C-Red Day. (Send A, B or C) Show ur colours! Euro 2004 2-4-1 Offer! Get an England Flag & 3Lions tone on ur phone! Click on the following service message for info!

Text PASS to 69669 to collect your polyphonic ringtones. Normal gprs charges apply only. Enjoy your tones

Block Breaker now comes in deluxe format with new features and great graphics from T-Mobile. Buy for just å£5 by replying GET BBDELUXE and take the challenge As one of our registered subscribers u can enter the draw 4 a 100 G.B. gift voucher by replying with ENTER. To unsubscribe text STOP

3. You have received your mobile content. Enjoy

Want explicit SEX in 30 secs? Ring 02073162414 now! Costs 20p/min Mobile Club: Choose any of the top quality items for your mobile. 7cfca1a Money i have won wining number 946 wot do i do next

\URGENT! This is the 2nd attempt to contact U!U have WON å£1000CALL 09071512432 b4 300603t&csBCM4235WC1N3XX.callcost150ppmmobilesvary. maxå£7. 50\""

Camera - You are awarded a SiPix Digital Camera! call 09061221066 fromm landline. Delivery within 28 days.

Your weekly Cool-Mob tones are ready to download !This weeks new Tones include:

1) Crazy Frog-AXEL F>>> 2) Akon-Lonely>>> 3) Black Eyed-Dont P >>>More info in n
Todays Vodafone numbers ending with 4882 are selected to a receive a å£350
award. If your number matches call 09064019014 to receive your å£350 award.
Warner Village 83118 C Colin Farrell in SWAT this wkend @Warner Village & get 1
free med. Popcorn!Just show msg+ticket@kiosk.Valid 4-7/12. C t&c @kiosk. Reply

SONY 4 mre film offers

Goal! Arsenal 4 (Henry, 7 v Liverpool 2 Henry scores with a simple shot from 6 yards from a pass by Bergkamp to give Arsenal a 2 goal margin after 78 mins.

You can donate å£2.50 to UNICEF's Asian Tsunami disaster support fund by texting DONATE to 864233. å£2.50 will be added to your next bill

PRIVATE! Your 2003 Account Statement for 078

Camera - You are awarded a SiPix Digital Camera! call 09061221066 fromm landline. Delivery within 28 days.

The current leading bid is 151. To pause this auction send OUT. Customer Care: 08718726270

Latest News! Police station toilet stolen, cops have nothing to go on! http//tms. widelive.com/index. wml?id=820554ad0a1705572711&first=trueåÁC C RingtoneåÁ

Want explicit SEX in 30 secs? Ring 02073162414 now! Costs 20p/min Gsex POBOX 2667 WC1N 3XX

ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE MINS. INDIA CUST SERVS SED YES. L8ER GOT MEGA BILL. 3 DONT GIV A SHIT. BAILIFF DUE IN DAYS. I 0 å£250 3 WANT å£800

It will stop on itself. I however suggest she stays with someone that will be able to give ors for every stool.

Hi the way I was with u 2day, is the normal way&this is the real me. UR unique&I hope I know u 4 the rest of mylife. Hope u find wot was lost.

Yes:)from last week itself i'm taking live call.

Hi hope u get this txt~journey hasnt been gd,now about 50 mins late I think. 1.20 that call cost. Which i guess isnt bad. Miss ya, need ya, want ya, love ya You should know now. So how's anthony. Are you bringing money. I've school fees to pay and rent and stuff like that. Thats why i need your help. A friend in need…

Macha dont feel upset.i can assume your mindset.believe me one evening with me and i have some wonderful plans for both of us.LET LIFE BEGIN AGAIN.call me anytime

Hey i booked the kb on sat already... what other lessons are we going for ah? Keep your sat night free we need to meet and confirm our lodging

I love u 2 babe! R u sure everything is alrite. Is he being an idiot? Txt bak girlie

Am not working but am up to eyes in philosophy so will text u later when a bit more free for chat...

Then get some cash together and I'll text jason

Lol please do. Actually send a pic of yourself right now. I wanna see. Pose with a comb and hair dryer or something.

\HELLO U.CALL WEN U FINISH WRK.I FANCY MEETIN UP WIV U ALL TONITE AS I NEED A BREAK FROM DABOOKS. DID 4 HRS LAST NITE+2 TODAY OF WRK!\""

I got a call from a landline number. . . I am asked to come to anna nagar . . . I will go in the afternoon

Also sir, i sent you an email about how to log into the usc payment portal. I.ll send you another message that should explain how things are back home. Have a great weekend.

Oh thats late! Well have a good night and i will give u a call tomorrow. Iam now going to go to sleep night night

Honey ? Sweetheart ? Darling ? Sexy buns ? Sugar plum ? Loverboy ? I miss you, boytoy ... *smacks your ass* Did you go to the gym too ?

I got a call from a landline number. . . I am asked to come to anna nagar . . . I will go in the afternoon

Forgot you were working today! Wanna chat, but things are ok so drop me a text when you're free / bored etc and i'll ring. Hope all is well, nose essay and all xx

Wot u up 2? Thout u were gonna call me!! Txt bak luv K

Hey sexy buns! Have I told you? I adore you, loverboy. I hope you remember to thank your sister in law for those meatballs *grins* ... i love you, babe Are you happy baby? Are you alright? Did you take that job? I hope your fine. I send you a kiss to make you smile from across the sea ... *kiss* *kiss* Send ur birthdate with month and year, I will tel u ur LIFE PARTNER'S name. and the method of calculation. Reply must.

Hi.:)technical support.providing assistance to us customer through call and email:)

Sounds like there could be a lot of time spent in that chastity device boy ... *grins* ... Or take your beatings like a good dog. Going to lounge in a nice long bath now ?

K k:) sms chat with me.

Well keep in mind I've only got enough gas for one more round trip barring a sudden influx of cash

[]: