

# ixit-gondaliya-spam-classification

October 7, 2023

```
[1]: import pandas as pd
import numpy as np
```

```
[2]: dataset = pd.read_csv("SMSSpamCollection" , sep="\t" , names=['label' ,
↪ 'messege'])
dataset
```

```
[2]:      label      messege
0      ham  Go until jurong point, crazy.. Available only ...
1      ham                Ok lar... Joking wif u oni...
2     spam  Free entry in 2 a wkly comp to win FA Cup fina...
3      ham  U dun say so early hor... U c already then say...
4      ham  Nah I don't think he goes to usf, he lives aro...
...    ...
5567  spam  This is the 2nd time we have tried 2 contact u...
5568  ham                Will ü b going to esplanade fr home?
5569  ham  Pity, * was in mood for that. So...any other s...
5570  ham  The guy did some bitching but I acted like i'd...
5571  ham                Rofl. Its true to its name

[5572 rows x 2 columns]
```

```
[3]: dataset.isnull().sum()
```

```
[3]: label      0
messege      0
dtype: int64
```

```
[4]: dataset.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 5572 entries, 0 to 5571
Data columns (total 2 columns):
#   Column      Non-Null Count  Dtype
---  -
0   label      5572 non-null   object
1   messege    5572 non-null   object
```

```
dtypes: object(2)
memory usage: 87.2+ KB
```

```
[5]: dataset.describe()
```

```
[5]:
```

	label	messege
count	5572	5572
unique	2	5169
top	ham	Sorry, I'll call later
freq	4825	30

```
[6]: dataset['label'] = dataset['label'].map({"spam":0 , "ham":1})
```

```
[7]: dataset
```

```
[7]:
```

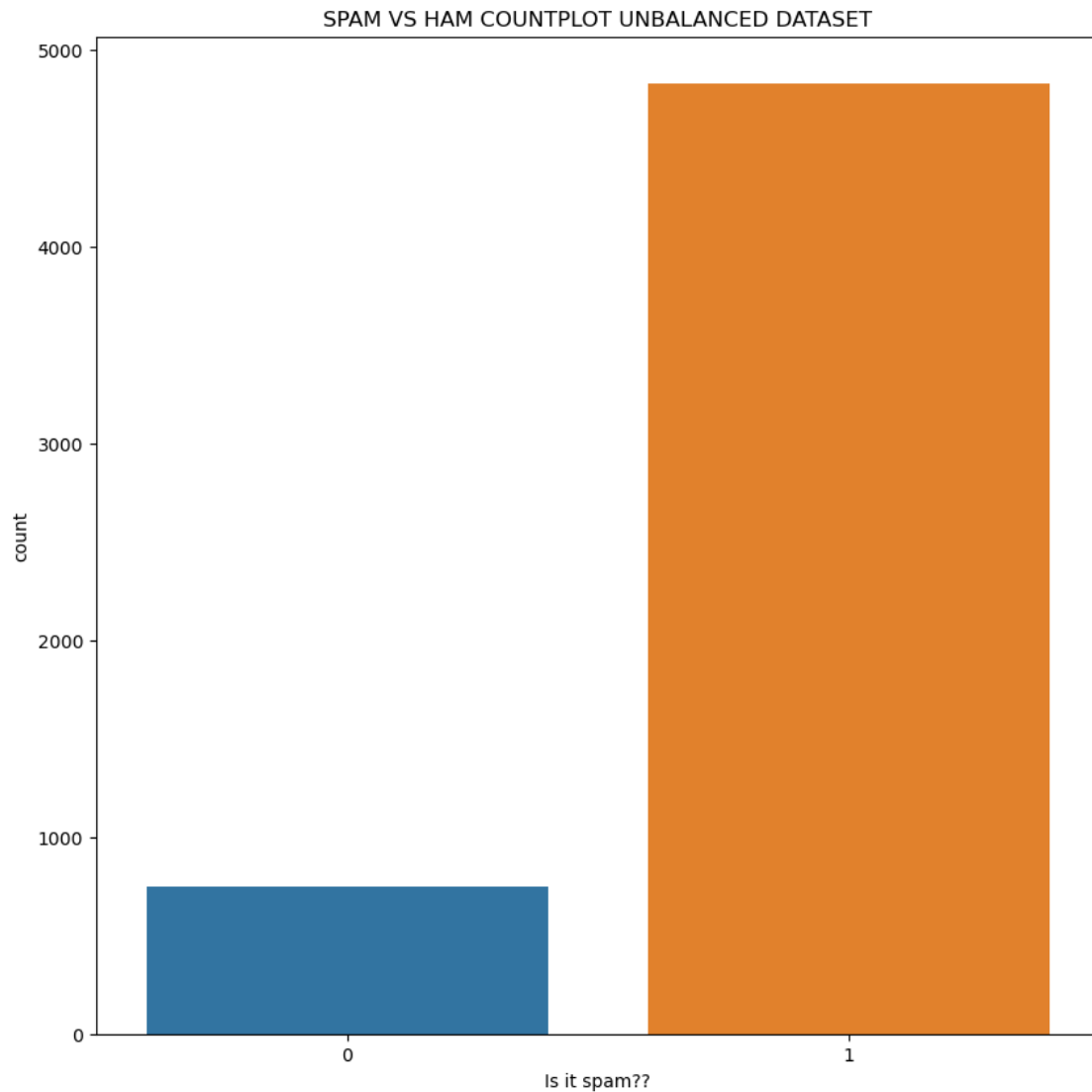
	label	messege
0	1	Go until jurong point, crazy.. Available only ...
1	1	Ok lar... Joking wif u oni...
2	0	Free entry in 2 a wkly comp to win FA Cup fina...
3	1	U dun say so early hor... U c already then say...
4	1	Nah I don't think he goes to usf, he lives aro...
...	...	...
5567	0	This is the 2nd time we have tried 2 contact u...
5568	1	Will ü b going to esplanade fr home?
5569	1	Pity, * was in mood for that. So...any other s...
5570	1	The guy did some bitching but I acted like i'd...
5571	1	Rofl. Its true to its name

```
[5572 rows x 2 columns]
```

```
[8]: import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
```

```
[9]: plt.figure(figsize=(10,10))
g = sns.countplot(x='label' , data=dataset)
p = plt.title("SPAM VS HAM COUNTPLOT UNBALANCED DATASET")
plt.xlabel("Is it spam??")
plt.ylabel("count")
```

```
[9]: Text(0, 0.5, 'count')
```



## 1 handling the imbalance dataset using oversampling

```
[10]: only_spam = dataset[dataset['label']==0]
      only_spam
```

```
[10]:
```

	label	messege
2	0	Free entry in 2 a wkly comp to win FA Cup fina...
5	0	FreeMsg Hey there darling it's been 3 week's n...
8	0	WINNER!! As a valued network customer you have...
9	0	Had your mobile 11 months or more? U R entitle...
11	0	SIX chances to win CASH! From 100 to 20,000 po...
...	...	...

```

5537      0  Want explicit SEX in 30 secs? Ring 02073162414...
5540      0  ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE ...
5547      0  Had your contract mobile 11 Mnths? Latest Moto...
5566      0  REMINDER FROM 02: To get 2.50 pounds free call...
5567      0  This is the 2nd time we have tried 2 contact u...

```

```
[747 rows x 2 columns]
```

```
[11]: len(dataset) - len(only_spam)
```

```
[11]: 4825
```

```
[12]: (dataset.shape[0] - only_spam.shape[0])/only_spam.shape[0]
```

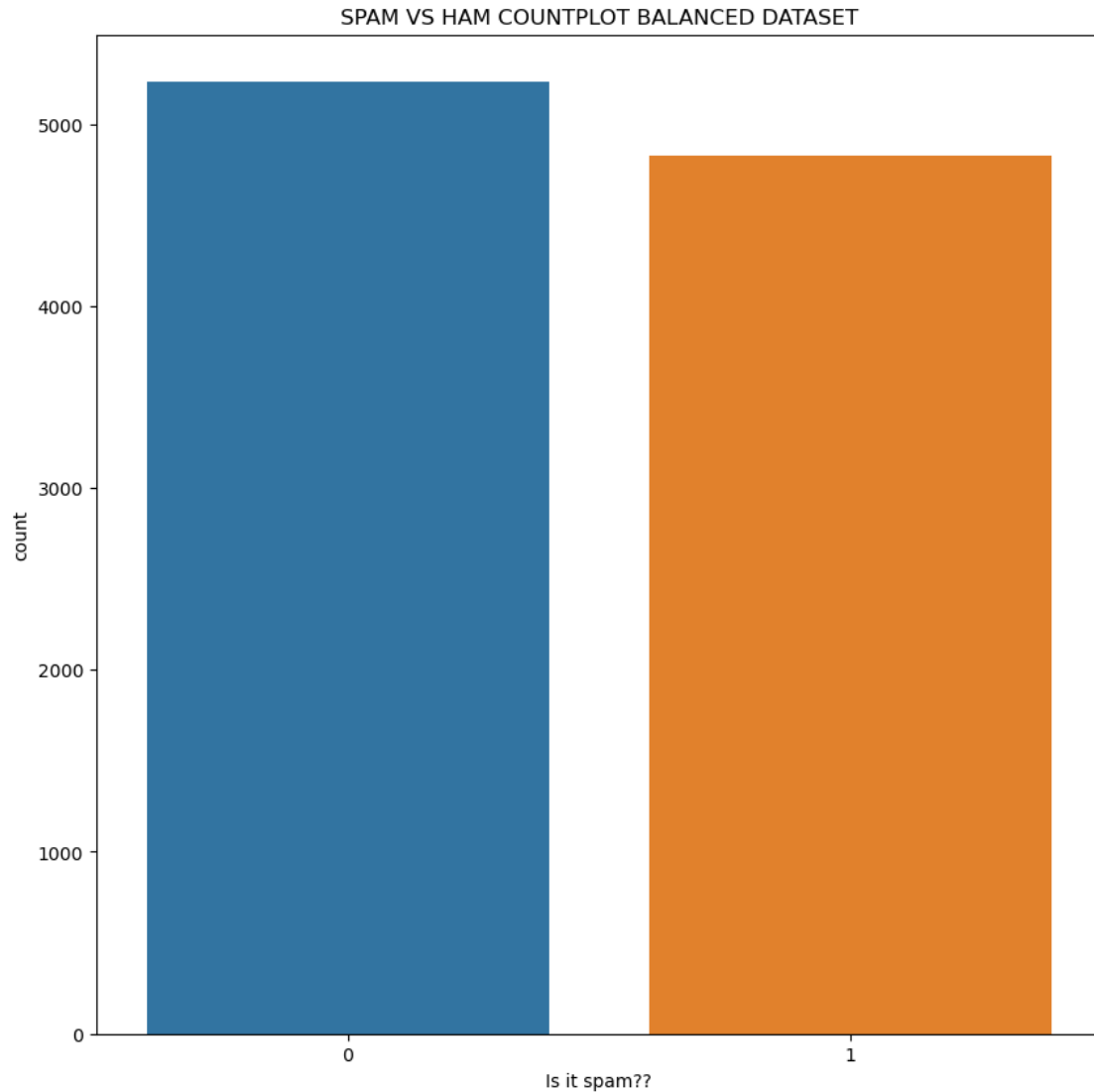
```
[12]: 6.459170013386881
```

```
[13]: for i in range(6):
        dataset = pd.concat([dataset , only_spam])
        dataset.shape
```

```
[13]: (10054, 2)
```

```
[14]: plt.figure(figsize=(10,10))
        g = sns.countplot(x='label' , data=dataset)
        p = plt.title("SPAM VS HAM COUNTPLOT BALANCED DATASET")
        plt.xlabel("Is it spam??")
        plt.ylabel("count")
```

```
[14]: Text(0, 0.5, 'count')
```



## 2 creating new feature

```
[15]: dataset['word_count'] = dataset['messege'].apply(lambda x: len(x.split()))
dataset
```

```
[15]:
```

	label	messege	word_count
0	1	Go until jurong point, crazy.. Available only ...	20
1	1	Ok lar... Joking wif u oni...	6
2	0	Free entry in 2 a wkly comp to win FA Cup fina...	28
3	1	U dun say so early hor... U c already then say...	11
4	1	Nah I don't think he goes to usf, he lives aro...	13
...	...	...	...

5537	0	Want explicit SEX in 30 secs? Ring 02073162414...	16
5540	0	ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE ...	33
5547	0	Had your contract mobile 11 Mnths? Latest Moto...	28
5566	0	REMINDER FROM 02: To get 2.50 pounds free call...	28
5567	0	This is the 2nd time we have tried 2 contact u...	30

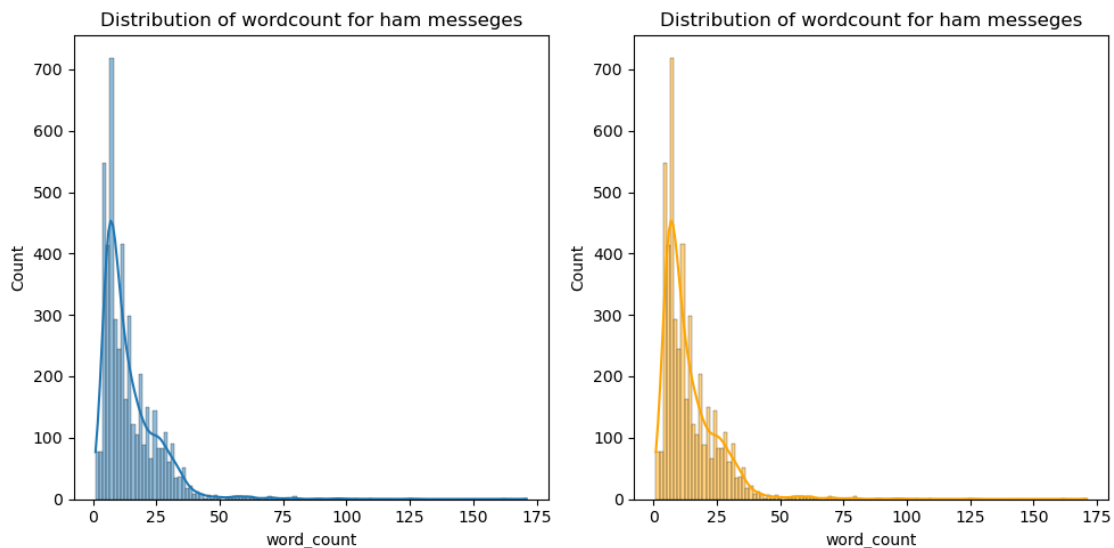
[10054 rows x 3 columns]

```
[16]: plt.figure(figsize = (10,5))

#(1,1)
plt.subplot(1,2,1)
g = sns.histplot(dataset[dataset['label']==1].word_count , kde=True)
p = plt.title("Distribution of wordcount for ham messegas")

#(1,2)
plt.subplot(1,2,2)
g = sns.histplot(dataset[dataset['label']==1].word_count , color='orange' ,
                 kde=True)
p = plt.title("Distribution of wordcount for ham messegas")

plt.tight_layout()
plt.show()
```



```
[17]: def currency_symbol(data):
        currency_symbols = ['£', ' ', '¥', '€', '$']
        for i in currency_symbols:
            if i in data: return 1
```

```
return 0
```

```
[18]: dataset['contain_currency_symbol'] = dataset['messege'].apply(currency_symbol)
dataset
```

```
[18]:
```

	label	messege	word_count	\
0	1	Go until jurong point, crazy.. Available only ...	20	
1	1	Ok lar... Joking wif u oni...	6	
2	0	Free entry in 2 a wkly comp to win FA Cup fina...	28	
3	1	U dun say so early hor... U c already then say...	11	
4	1	Nah I don't think he goes to usf, he lives aro...	13	
...	...	...	...	
5537	0	Want explicit SEX in 30 secs? Ring 02073162414...	16	
5540	0	ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE ...	33	
5547	0	Had your contract mobile 11 Mnths? Latest Moto...	28	
5566	0	REMINDER FROM 02: To get 2.50 pounds free call...	28	
5567	0	This is the 2nd time we have tried 2 contact u...	30	

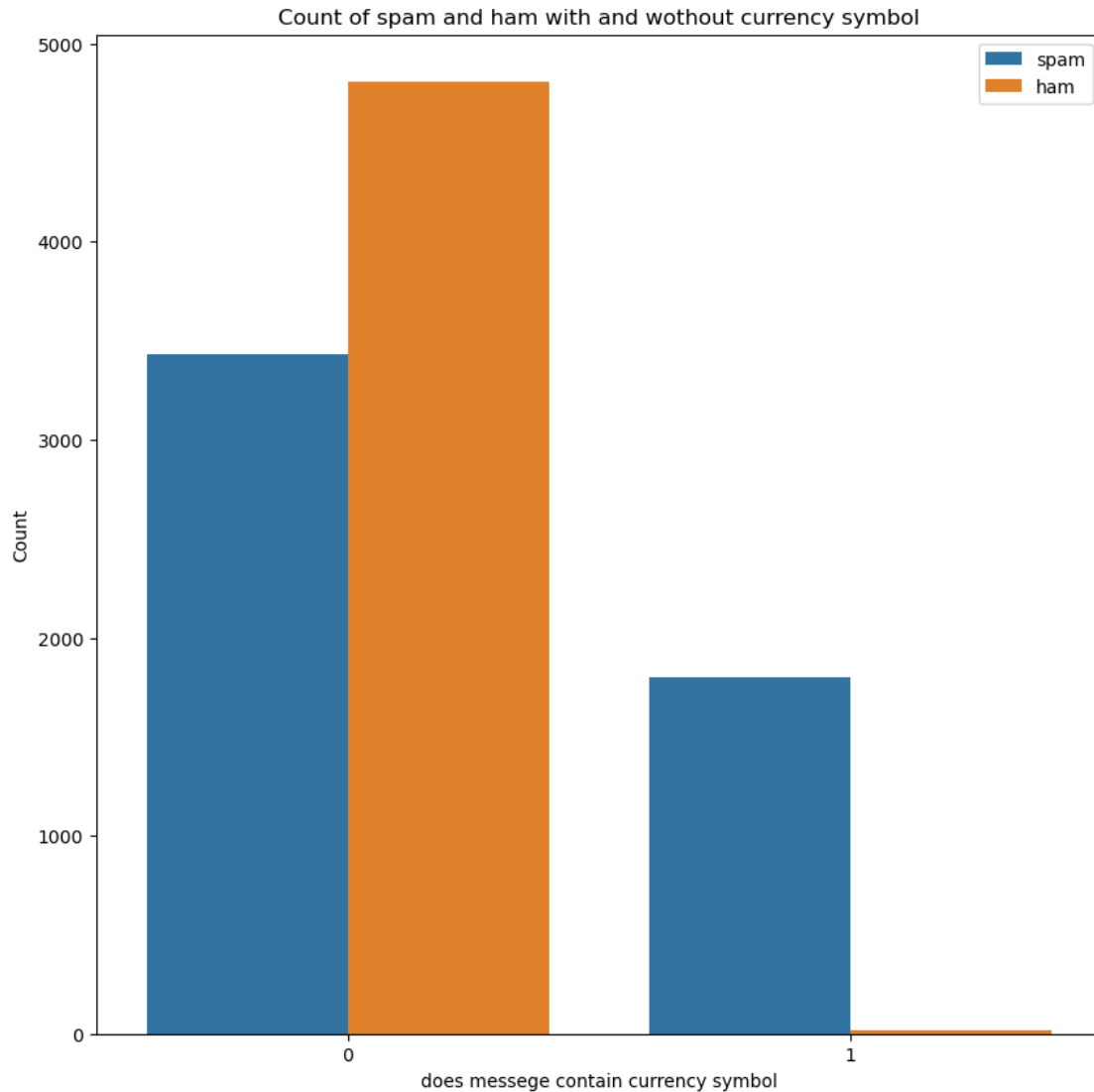
  

	contain_currency_symbol
0	0
1	0
2	0
3	0
4	0
...	...
5537	0
5540	1
5547	0
5566	0
5567	1

```
[10054 rows x 4 columns]
```

```
[19]: plt.figure(figsize=(10,10))
g = sns.countplot(x='contain_currency_symbol' , data=dataset , hue='label')
p = plt.title("Count of spam and ham with and without currency symbol")
p = plt.xlabel("does messege contain currency symbol")
p = plt.ylabel("Count")
p = plt.legend(labels = ['spam' , 'ham'])
plt.show()
```



```
[20]: def check_numbers(data):
      for i in data:
          if 48 <= ord(i) <=57: return 1
      return 0
```

```
[21]: dataset['contain_number'] = dataset['messege'].apply(check_numbers)
dataset
```

```
[21]:
```

	label	messege	word_count	\
0	1	Go until jurong point, crazy.. Available only ...	20	
1	1	Ok lar... Joking wif u oni...	6	
2	0	Free entry in 2 a wkly comp to win FA Cup fina...	28	
3	1	U dun say so early hor... U c already then say...	11	

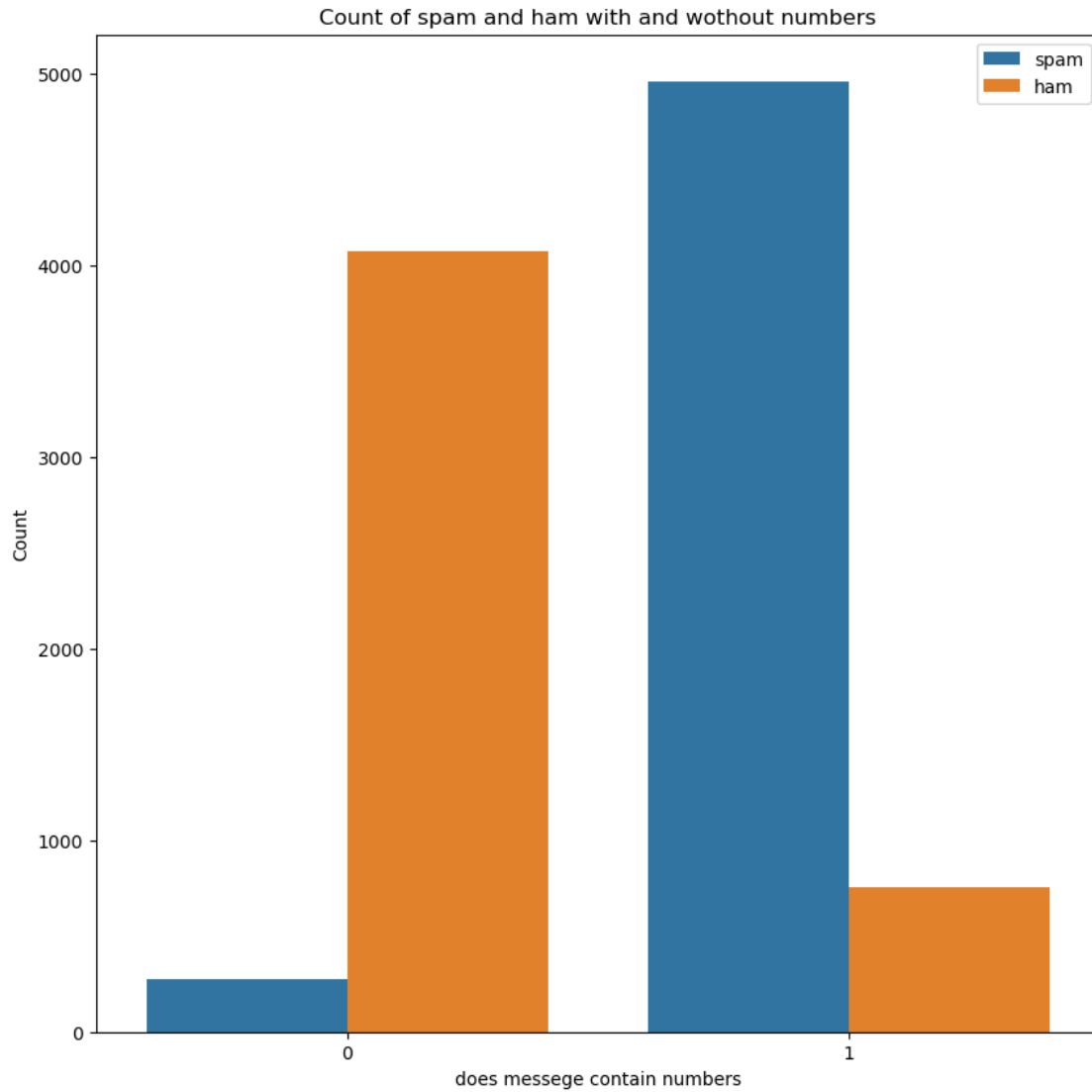


4	1	Nah I don't think he goes to usf, he lives aro...	13
...	...	...	...
5537	0	Want explicit SEX in 30 secs? Ring 02073162414...	16
5540	0	ASKED 3MOBILE IF 0870 CHATLINES INCLU IN FREE ...	33
5547	0	Had your contract mobile 11 Mnths? Latest Moto...	28
5566	0	REMINDER FROM 02: To get 2.50 pounds free call...	28
5567	0	This is the 2nd time we have tried 2 contact u...	30

	contain_currency_symbol	contain_number
0	0	0
1	0	0
2	0	1
3	0	0
4	0	0
...	...	...
5537	0	1
5540	1	1
5547	0	1
5566	0	1
5567	1	1

[10054 rows x 5 columns]

```
[22]: plt.figure(figsize=(10,10))
g = sns.countplot(x='contain_number' , data=dataset , hue='label')
p = plt.title("Count of spam and ham with and without numbers")
p = plt.xlabel("does messege contain numbers")
p = plt.ylabel("Count")
p = plt.legend(labels = ['spam' , 'ham'])
plt.show()
```



### 3 DATA CLEANING

```
[23]: import nltk
import re
from nltk.corpus import stopwords
from nltk.stem import WordNetLemmatizer
```

```
[24]: corpus = list()
wnl = WordNetLemmatizer()

for sms in list(dataset.messege):
```

```

    messege = re.sub(pattern = '^a-zA-Z' , repl=" " , string=sms) #filtering
↳all the special charactors and numbers
    messege = messege.lower()
    messege = messege.split()
    messege = [word for word in messege if word not in set(stopwords.
↳words('english'))]
    messege = [wnl.lemmatize(word) for word in messege]
    messege = " ".join(messege)

    corpus.append(messege)

```

[25]: corpus

```

[25]: ['go jurong point, crazy.. available bugis n great world la e buffet... cine got
amore wat...',
'ok lar... joking wif u oni...',
'free entry 2 wkly comp win fa cup final tkts 21st may 2005. text fa 87121
receive entry question(std txt rate)t&c's apply 08452810075over18's",
'u dun say early hor... u c already say...',
'nah think go usf, life around though',
'freemsg hey darling 3 week's word back! i'd like fun still? tb ok! xxx std
chgs send, £1.50 rcv",
'even brother like speak me. treat like aid patent.',
'per request 'melle melle (oru minnaminunginte nurungu vettam)' set callertune
callers. press *9 copy friend callertune",
'winner!! valued network customer selected receivea £900 prize reward! claim
call 09061701461. claim code kl341. valid 12 hour only.',
'mobile 11 month more? u r entitled update latest colour mobile camera free!
call mobile update co free 08002986030',
'i'm gonna home soon want talk stuff anymore tonight, k? i've cried enough
today."',
'six chance win cash! 100 20,000 pound txt> csh11 send 87575. cost 150p/day,
6days, 16+ tsandcs apply reply hl 4 info',
'urgent! 1 week free membership £100,000 prize jackpot! txt word: claim no:
81010 t&c www.dbuk.net lccltd pobox 4403ldnwla7rw18',
'i've searching right word thank breather. promise wont take help granted
fulfil promise. wonderful blessing times."',
'date sunday will!!',
'xxxmobilemovieclub: use credit, click wap link next txt message click here>>
http://wap. xxxmobilemovieclub.com?n=qjkgighjjgcb1',
'oh k...i'm watching here:)',
'eh u remember 2 spell name... yes did. v naughty make v wet.',
'fine that\x92s way u feel. that\x92s way gota b',
'england v macedonia - dont miss goals/team news. txt ur national team 87077 eg
england 87077 try:wales, scotland 4txt/ú1.20 poboxox36504w45wq 16+',
'seriously spell name?',
'i'm going try 2 month ha ha joking',

```

'ü pay first lar... da stock comin...',  
 'aft finish lunch go str lor. ard 3 smth lor. u finish ur lunch already?',  
 'ffffff. alright way meet sooner?',  
 "forced eat slice. i'm really hungry tho. sucks. mark getting worried. know i'm  
 sick turn pizza. lol",  
 'lol always convincing.',  
 "catch bus ? frying egg ? make tea? eating mom's left dinner ? feel love ?",  
 "i'm back & we're packing car now, i'll let know there's room",  
 'ahhh. work. vaguely remember that! feel like? lol',  
 "wait that's still clear, sure sarcastic that's x want live u",  
 'yeah got 2 v apologetic. n fallen actin like spoilt child got caught that.  
 till 2! go there! badly cheers. you?',  
 'k tell anything you.',  
 'fear fainting housework did? quick cuppa',  
 'thanks subscription ringtone uk mobile charged £5/month please confirm  
 replying yes no. reply charged',  
 'yup... ok go home look timing msg ü again... xuhui going learn 2nd may lesson  
 8am',  
 "oops, i'll let know roommate's done",  
 'see letter b car',  
 'anything lor... u decide...',  
 "hello! how's saturday go? texting see decided anything tomo. i'm trying invite  
 anything!",  
 'pls go ahead watts. wanted sure. great weekend. abiola',  
 'forget tell ? want , need you, crave ... .. love sweet arabian steed ...  
 mmmmmmm ... yummy',  
 '07732584351 - rodger burn - msg = tried call reply sm free nokia mobile + free  
 camcorder. please call 08000930705 delivery tomorrow',  
 'seeing?',  
 'great! hope like man well endowed. & inches...',  
 'calls..messages..missed call',  
 'get hep b immunisation nigeria.',  
 'fair enough, anything going on?',  
 "yeah hopefully, tyler can't could maybe ask around bit",  
 "u know stubborn am. even want go hospital. kept telling mark i'm weak sucker.  
 hospital weak suckers.",  
 'thanked me. first time saw class.',  
 'gram usually run like & , half eighth smarter though get almost whole  
 second gram &',  
 "k fyi x ride early tomorrow morning he's crashing place tonight",  
 'wow. never realized embarassed accomodations. thought liked it, since best  
 could always seemed happy "the cave". i\'m sorry give. i\'m sorry offered. i\'m  
 sorry room embarrassing.',  
 'sms. ac sptv: new jersey devil detroit red wing play ice hockey. correct  
 incorrect? end? reply end sptv',  
 'know mallika sherawat yesterday? find @ &url&',  
 'congrats! 1 year special cinema pas 2 yours. call 09061209465 now! c supрман

v, matrix3, starwars3, etc 4 free! bx420-ip4-5we. 150pm. dont miss out!',  
 "sorry, i'll call later meeting.",  
 'tell reached',  
 'yes..gauti sehwaq odi series.',  
 "gonna pick \$1 burger way home. can't even move. pain killing me.",  
 'ha ha ha good joke. girl situation seekers.',  
 'part checking iq',  
 'sorry roommate took forever, ok come now?',  
 'ok lar double check wif da hair dresser already said wun cut v short. said cut  
 look nice.',  
 'valued customer, pleased advise following recent review mob no. awarded £1500  
 bonus prize, call 09066364589',  
 'today "song dedicated day.." song u dedicate me? send ur valuable frnds first  
 rply me...',  
 'urgent ur awarded complimentary trip eurodisinc trav, aco&entry41 £1000. claim  
 txt dis 87121 18+6\*£1.50(morefrmmob. shracomorsglstpl)10, ls1 3aj',  
 'hear new "divorce barbie"? come ken\'s stuff!',  
 'plane give month end.',  
 'wah lucky man... save money... hee...',  
 'finished class you.',  
 'hi babe im home wanna something? xx',  
 'k..k:)where you?how performed?',  
 'u call now...',  
 'waiting machan. call free.',  
 'thats cool. gentleman treat dignity respect.',  
 'like people much:) shy pa.',  
 'operate &#x26;',  
 "here. still looking job. much ta's earn there.",  
 "sorry, i'll call later",  
 'k. call ah?',  
 'ok way home hi hi',  
 'place man',  
 'yup next stop.',  
 'call later, network. urgnt, sm me.',  
 "real u getting yo? need 2 ticket one jacket i'm done. already used multis.",  
 "yes started send request make pain came back i'm back bed. double coin factory  
 too. gotta cash nitros.",  
 "i'm really still tonight babe",  
 'ela kano.,il download, come wen ur free..',  
 'yeah do! don't stand close tho- you'll catch something!',  
 'sorry pain. ok meet another night? spent late afternoon casualty mean done  
 stuff42moro includes time sheet that. sorry.',  
 'smile pleasure smile pain smile trouble pours like rain smile sum1 hurt u  
 smile becoz someone still love see u smiling!!',  
 'please call customer service representative 0800 169 6031 10am-9pm guaranteed  
 £1000 cash £5000 prize!',  
 'havent planning buy later. check already lido got 530 show e afternoon. u

finish work already?',  
 'free ringtone waiting collected. simply text password "mix" 85069 verify. get  
 usher britney. fml, po box 5249, mk17 92h. 450ppw 16',  
 'watching telugu movie..wat abt u?',  
 'see. finish load loan pay',  
 'hi. wk ok - hols now! yes bit run. forgot hairdresser appointment four need  
 get home n shower beforehand. cause prob u?"',  
 'see cup coffee animation',  
 'please text anymore. nothing else say.',  
 'okay name ur price long legal! wen pick up? u ave x am xx',  
 "i'm still looking car buy. gone 4the driving test yet.",  
 "per request 'melle melle (oru minnaminunginte nurungu vettam)' set callertune  
 callers. press \*9 copy friend callertune",  
 'wow. right! mean that. guess gave boston men changed search location nyc,  
 something changed. cuz signin page still say boston.',  
 'umma life vava umma love lot dear',  
 'thanks lot wish birthday. thanks making birthday truly memorable.',  
 "aight, i'll hit get cash",  
 'would ip address test considering computer minecraft server',  
 'know! grumpy old people. mom like better lying. always one play jokes...',  
 "dont worry. guess he's busy.",  
 'plural noun research?',  
 'going dinner.msg after.',  
 "i'm ok wif co like 2 try new things. scared u dun like mah. co u said loud.",  
 'gent! trying contact you. last weekend draw show £1000 prize guaranteed. call  
 09064012160. claim code k52. valid 12hrs only. 150ppm',  
 "wa, ur openin sentence formal... anyway, i'm fine too, juz tt i'm eatin much n  
 puttin weight...haha... anythin special happened?",  
 "entered cabin pa said, '' happy b'day bos !!!'. felt special. askd 4 lunch.  
 lunch invited apartment. went there.",  
 'winner u specially selected 2 receive £1000 4\* holiday (flights inc) speak  
 live operator 2 claim 0871277810910p/min (18+)',  
 'godo! yes must speak friday - egg-potato ratio tortilla needed!',  
 "hmm...my uncle informed he's paying school directly. pls buy food.",  
 'private! 2004 account statement 07742676969 show 786 unredeemed bonus points.  
 claim call 08719180248 identifier code: 45239 expires',  
 'urgent! mobile no. awarded £2000 bonus caller prize 5/9/03 final try contact  
 u! call landline 09064019788 box42wr29c, 150ppm',  
 'new address -apples&pairs&all malarky',  
 'today voda number ending 7548 selected receive \$350 award. match please call  
 08712300220 quoting claim code 4041 standard rate app',  
 'going sao mu today. done 12',  
 "ü predict wat time ü'll finish buying?",  
 'good stuff, do.',  
 'know,yetunde sent money yet. sent text bother sending. over, dont involve  
 anything. imposed anything first place that, apologise.',  
 'room.',

'hey girl. r u? hope u r well del r bak! long time c! give call sum time  
 lucyxx',  
 'k..k:)how much cost?',  
 "i'm home.",  
 'dear, call tmorrow.pls accomodate.',  
 'first answer question.',  
 'sunshine quiz wkly q! win top sony dvd player u know country algarve in? txt  
 ansr 82277. £1.50 sp:tyrone',  
 "want 2 get laid tonight? want real dogging location sent direct 2 ur mob? join  
 uk's largest dogging network bt txtng gravel 69888! nt. ec2a. 31p.msg@150p",  
 'haf msn. yijue@hotmail.com',  
 'there. call meet',  
 'no. check room befor activity',  
 'rcv msg chat svc. free hardcore service text go to: 69988 u get nothing u must  
 age verify yr network & try',  
 'got c... lazy type... forgot ü lect... saw pouch like v nice...',  
 'k, text way',  
 'sir, waiting mail.',  
 'swt thought: "nver get tired little thing 4 lovable persons.." coz..sometmes  
 little thing occupy biggest part hearts.. gud ni8',  
 'know are. pls open back?',  
 'yes see ya dot',  
 'whats staff name taking class us?',  
 "freemsg replied text? i'm randy, sexy, female live local. luv hear u.  
 netcollex ltd 08700621170150p per msg reply stop end",  
 'ummma.will call check in.our life begin qatar pls pray hard.',  
 'k..i deleted contact why?',  
 'sindu got job birla soft ..',  
 "wine flowing i'm nevering..",  
 'yup thk cine better co need 2 go 2 plaza mah.',  
 'ok... ur typical reply...',  
 "per request 'melle melle (oru minnaminunginte nurungu vettam)' set callertune  
 callers. press \*9 copy friend callertune",  
 'everywhere dirt, floor, windows, even shirt. sometimes open mouth, come  
 flowing out. dream world without you, half chore too. time joy me, lot tv show  
 i.ll see. guess like thing must exist, like rain, hail mist, time done, become  
 one.',  
 'aaoooooright work?',  
 "i'm leaving house now...",  
 'hello, love. doing? get interview today? happy? good boy? think me?are missing  
 ?',  
 'customer service annoncement. new year delivery waiting you. please call  
 07046744435 arrange delivery',  
 'winner u specially selected 2 receive £1000 cash 4\* holiday (flights inc)  
 speak live operator 2 claim 0871277810810',  
 "keep safe need miss already envy everyone see's real life",  
 'new car house parents.:)i new job hand:)',

"i'm love you. i'm excited day spend you. make happy.",  
 '-pls stop bootydelious (32/f) inviting friend. reply yes-434 no-434 see her:  
 www.sms.ac/u/bootydelious stop? send stop frnd 62468',  
 'bangbabes ur order way. u receive service msg 2 download ur content. u not,  
 goto wap. bangb. tv ur mobile internet/service menu',  
 'place ur point e culture module already.',  
 'urgent! trying contact you. last weekend draw show £900 prize guaranteed. call  
 09061701939. claim code s89. valid 12hrs',  
 "hi frnd, best way avoid missunderstnding wit beloved one's?",  
 'great escape. fancy bridge need lager. see tomo',  
 'yes :)it completely form:)clark also utter waste.',  
 'sir, need axis bank account bank address.',  
 'hmmm.. thk sure got time hop ard... ya, go 4 free abt... muz call u discus  
 liao...',  
 'time coming later?',  
 'bloody hell, cant believe forgot surname mr . ill give u clue, spanish begin  
 m...',  
 "well, i'm gonna finish bath now. good...fine night.",  
 'let know got money carlos make call',  
 'u still going mall?',  
 'turn friend staying whole show back til ~ &#x26; , feel free go ahead smoke  
 \$ &#x26; worth',  
 'text her. doesnt reply let know log',  
 "hi! spoke maneesha v. we'd like know satisfied experience. reply toll free yes  
 no.",  
 'lifted hope offer money. need. especially end month approach hurt studying.  
 anyways gr8 weekend',  
 'lol no. u trust me.',  
 'ok. gentleman treat dignity respect.',  
 'will, guy close?',  
 'going nothing great.bye',  
 "hello handsome ! finding job ? lazy ? working towards getting back net mummy ?  
 where's boytoy ? miss ?",  
 'haha awesome, minute',  
 'please call customer service representative freephone 0808 145 4742 9am-11pm  
 guaranteed £1000 cash £5000 prize!',  
 'got xmas radio times. get',  
 'jus reached home. go bathe first. si using net tell u finish k...',  
 'unique enough? find 30th august. www.areyouunique.co.uk',  
 "i'm sorry. i've joined league people dont keep touch. mean great deal me.  
 friend time even great personal cost. great week.",  
 'hi :)finally completed course:)',  
 'stop itself. however suggest stay someone able give or every stool.',  
 'doing? hope settled new school year. wishin gr8 day',  
 'gud mrng dear hav nice day',  
 'u got person story',  
 'hamster dead? hey tmr meet 1pm orchard mrt?',



'hi kate evening? hope see tomorrow bit bloody babyjontet! txt back u can. :)  
 xxx',  
 'found it, enc & , at?',  
 'sent & buck',  
 'hello darlin ive finished college txt u finish u love kate xxx',  
 'account refilled successfully inr & . keralacircle prepaid  
 account balance r & . transaction id kr & .',  
 'goodmorning sleeping ga.',  
 'u call alter 11 ok.',  
 'ü say like dat dun buy ericsson oso cannot oredi lar...',  
 'entered cabin pa said, '' happy b'day bos !!!'. felt special. askd 4 lunch.  
 lunch invited apartment. went there.",  
 'aight yo, dat straight dogg',  
 'please give u connection today & refund bill',  
 ':) shoot big load get ready!',  
 "what's bruv, hope great break. rewarding semester.",  
 'home always chat',  
 'k:)k:)good:)study well.',  
 'yup... ü noe leh...',  
 'sound great! home now?',  
 'finally match heading towards draw prediction.',  
 'tired. slept well past nights.',  
 'easy ah?sen got selected mean good..',  
 'take exam march 3',  
 "yeah should. think use gt atm register. sure there's anyway help let know.  
 sure ready.",  
 'ok prob. take ur time.',  
 'o called ubandu run without installing hard disk...you use o copy important  
 file system give repair shop..',  
 "sorry, i'll call later",  
 'u say leh... course nothing happen lar. say v romantic jus bit lor. thk e nite  
 scenery nice leh.',  
 '500 new mobile 2004, must go! txt: nokia no: 89545 & collect today!from £1  
 www.4-tc.biz 2optout 087187262701.50gbp/mtmsg18',  
 'would really appreciate call me. need someone talk to.',  
 'u meet ur dream partner soon? ur career 2 flyng start? 2 find free, txt horo  
 followed ur star sign, e. g. horo aries',  
 'hey company elama po mudyadhu.',  
 'life strict teacher... bcoz teacher teach lesson & conduct exam, life  
 first conduct exam & teach lessons. happy morning. . .',  
 'dear good morning',  
 'get gandhipuram walk cross cut road. right side & street road turn  
 first right.',  
 'dear going rubber place',  
 "sorry battery died, yeah i'm",  
 'yes:)here tv always available work place..',  
 'text & meet someone sexy today. u find date even flirt u. join 4 10p. reply

name & age eg sam 25. 18 -msg recd@thirtyeight penny',  
 'printed oh. &#x26; come upstairs',  
 'ill little closer like bus stop street',  
 'you?when wil reach here?',  
 "new theory: argument win situation, loses person. dont argue ur friend just..  
 . . . kick & say, i'm always correct.!",  
 'u 447801259231 secret admirer looking 2 make contact u-find r\*reveal think ur  
 special-call 09058094597',  
 'tomorrow final hearing laptop case cant.',  
 'pleasssssssseeeee tel v avent done sportsx',  
 'okay. no, shining on. meant signing, sound better.',  
 "although told u dat i'm baig face watch really like e watch u gave co fr u.  
 thanx 4 everything dat u've done today, i'm touched...",  
 'u remember old commercial?',  
 'late. said website. dont slipper',  
 'asked call ok',  
 'kallis wont bat 2nd innings.',  
 'didnt work oh. ok goodnight then. i.ll fix ready time wake up. dearly missed  
 good night sleep.',  
 'congratulation ur awarded 500 cd voucher 125gift guaranteed & free entry 2 100  
 wkly draw txt music 87066 tncs www.ldew.com1win150ppmx3age16',  
 'ranjith cal drpd deeraj deepak 5min hold',  
 'wen ur lovable bcums angry wid u, dnt take seriously.. coz angry childish n  
 true way showing deep affection, care n luv!.. kettoda manda... nice day da.',  
 'doing?how you?',  
 'ups 3days also, shipping company take 2wks. way usps take week get lag may  
 bribe nipost get stuff.',  
 "i'm back, lemme know ready",  
 "necessarily expect done get back though i'm headin",  
 'mmm yummy babe ... nice jolt suzy',  
 'lover ? need ...',  
 'tried contact reply offer video handset? 750 anytime network mins? unlimited  
 text? camcorder? reply call 08000930705',  
 'i'm parked next mini!!!! coming today think?',  
 'yup',  
 "anyway i'm going shopping now. co si done yet. dun disturb u liao.",  
 'no. luton 0125698789 ring ur around! h\*',  
 'hey really horny want chat see naked text hot 69698 text charged 150pm  
 unsubscribe text stop 69698',  
 'dint come us.',  
 'same. wana plan trip sometme',  
 'sure yet, still trying get hold',  
 'ur ringtone service changed! 25 free credits! go club4mobiles.com choose  
 content now! stop? txt club stop 87070. 150p/wk club4 po box1146 mk45 2wt',  
 'evo. download flash. jealous?',  
 'ringtone club: get uk single chart mobile week choose top quality ringtone!  
 message free charge.',

"come mu, we're sorting narcotic situation",  
 'night ended another day, morning come special way. may smile like sunny ray  
 leaf worry blue blue bay.',  
 'hmv bonus special 500 pound genuine hmv voucher won. answer 4 easy questions.  
 play now! send hmv 86688 info:www.100percent-real.com',  
 'usf guess, might well take 1 car',  
 'objection. bf coming.',  
 'thanx...',  
 'tell rob mack gf theater',  
 "awesome, i'll see bit",  
 'sent it. type food like?',  
 'done? handed in? celebration full swing yet?',  
 'got called tool?',  
 'wen u miss someone, person definitely special u... person special, miss  
 them, keep-in-touch gdeve..',  
 'ok. asked money far',  
 'okie...',  
 "yeah think usual guy's still passed last night, get ahold anybody let know  
 i'll throw",  
 'k, might come tonight class let early',  
 'ok..',  
 'hi baby im cruisin girl friend r u 2? give call hour home thats alright fone  
 fone love jenny xxx',  
 'life mean lot me, love life, love people life, world call friends, call  
 world:-).. ge:-)..',  
 'dear,shall mail tonite.busy street,shall update tonite.things looking  
 ok.varunnathu edukukayee raksha ollu.but good one real sense.',  
 'hey told name gautham ah?',  
 'haf u found him? feel stupid da v cam working.',  
 'oops. 4 got bit.',  
 'much buzy',  
 'accidentally deleted message. resend please.',  
 "t-mobile customer may claim free camera phone upgrade & pay & go sim card  
 loyalty. call 0845 021 3680.offer end 28thfeb.t&c's apply",  
 'unless situation go gurl would appropriate',  
 'hurt me... tease me... make cry... end life die plz keep one rose grave say  
 stupid miss u.. nice day bslvyl',  
 'cant pick phone right now. pls send message',  
 "need coffee run tomo?can't believe time week already",  
 'awesome, remember last time got somebody high first time diesel :v',  
 'shit really shocking scary, cant imagine second. def night out. u think  
 somewhere could crash night, save taxi?',  
 'oh way food fridge! want go meal tonight?',  
 'womdarfull actor',  
 'sms. ac blind date 4u!: rodts1 21/m aberdeen, united kingdom. check  
 http://img. sms. ac/w/icmb3cktz8r7!-4 blind date send hide',  
 'yup... remb... think book...',

'jos ask u wana meet up?',  
 'lol yes. friendship hanging thread cause u buy stuff.',  
 'themob> check newest selection content, games, tones, gossip, babe sport, keep  
 mobile fit funky text wap 82468',  
 'garage keys? bookshelf',  
 'today accept day..u accept as? brother sister lover dear1 best1 clos1  
 lvblefrnd jstfrnd cutefrnd lifpartnr belovd swtheart bstfrnd rply mean enemy',  
 'think ur smart ? win £200 week weekly quiz, text play 85222 now!t&cs  
 winnersclub po box 84, m26 3uz. 16+. gbp1.50/week',  
 "say he'll give call friend's got money he's definitely buying end week",  
 'hi way u 2day, normal way&this real me. ur unique&i hope know u 4 rest mylife.  
 hope u find wot lost.',  
 'made day. great day too.',  
 'k.k:)advance happy pongal.',  
 'hmmm... guess go 4 kb n power yoga... haha, dunno tahan power yoga anot... thk  
 got lo oso, forgot liao...',  
 "really dude, friend i'm afraid :(",  
 'december only! mobile 11mths+? entitled update latest colour camera mobile  
 free! call mobile update co free 08002986906',  
 'coffee cake, guess...',  
 'merry christmas babe, love ya \*kisses\*',  
 'hey... dont go watch x men lunch... haha',  
 'cud u tell ppl im gona b bit l8 co 2 bus hav gon past co full & im still  
 waitin 4 1. pete x',  
 "would great. we'll guild. could meet bristol road somewhere - get touch  
 weekend. plan take flight! good week",  
 'problem. doing?',  
 'calls..messages..missed call',  
 'hi da:)how today class?',  
 "i'd say that's good sign but, well, know track record reading woman",  
 'cool, text parked',  
 "i'm reading text sent you. meant joke. read light",  
 'k.k:)apo k.good movie.',  
 'maybe could get book tomo return immediately ..? something.',  
 'call germany 1 penny per minute! call fixed line via access number 0844 861 85  
 85. prepayment. direct access!',  
 "chance might evaporated soon violated privacy stealing phone number employer's  
 paperwork. cool all. please contact report supervisor.",  
 'valentine day special! win £1000 quiz take partner trip lifetime! send go  
 83600 now. 150p/msg rcvd. custcare:08718720201.',  
 'ta-daaaaa! home babe, still ?',  
 'cool. come havent wined dined before?',  
 'sleeping..and surfing',  
 "sorry, i'll call later",  
 'u calling right? call hand phone...',  
 "ok that's great thanx lot.",  
 'take post come then! must 1000 text now! happy reading. one wiv hello caroline

end favourite. bless',  
 'u hiding stranger?',  
 'interested like that.',  
 'sister cleared two round birla soft yesterday.',  
 'gudnite...tc...practice going',  
 'dis yijue. jus saw ur mail. case huiming havent sent u num. dis num.',  
 'one small prestige problem now.',  
 'fancy shag? do.interested? sextextuk.com txt xxuk suzy 69876. txts cost 1.50  
 per msg. tnscs website. x',  
 'checking you. really miss seeing jeremiah. great month',  
 "nah can't help there, i've never iphone",  
 "car hour half i'm going apeshit",  
 "today sorry day.! ever angry you, ever misbehaved hurt you? plz plz slap  
 urself bcoz, ur fault, i'm basically good",  
 'yo guy ever figure much need alcohol? jay trying figure much safely spend  
 weed',  
 '&#x26; ish minute 5 minute ago. wtf.',  
 'thank calling.forgot say happy onam sirji.i fine remembered met insurance  
 person.meet qatar insha allah.rakshesh, ex tata aig joined tissco,tayseer.',  
 'congratulation ur awarded 500 cd voucher 125gift guaranteed & free entry 2 100  
 wkly draw txt music 87066 tnscs www.ldew.com1win150ppmx3age16',  
 'ur cash-balance currently 500 pound - maximize ur cash-in send cash 86688  
 150p/msg. cc: 08708800282 hg/suite342/2lands row/w1j6hl',  
 "i'm actor. work, work evening sleep late. since i'm unemployed moment, always  
 sleep late. unemployed, every day saturday.",  
 'hello! got here, st andrews-boy long way! cold. keep posted',  
 'ha ha cool cool chikku chikku:-):-db-)',  
 'oh ok prob..',  
 "check audrey's status right",  
 'busy here. trying finish new year. looking forward finally meeting you...',  
 'good afternoon sunshine! dawn day ? refreshed happy alive? breathe air smile ?  
 think you, love ... always',  
 'well know z take care me. worries.',  
 'update\_now - xmas offer! latest motorola, sonyericsson & nokia & free  
 bluetooth! double min & 1000 txt orange. call mobileupd8 08000839402  
 call2optout/f4q=',  
 'discount code rp176781. stop message reply stop. www.regalportfolio.co.uk.  
 customer service 08717205546',  
 'wat uniform? get?',  
 'cool, text ready',  
 'hello boytoy ... geeee miss already woke up. wish bed me, cuddling me. love  
 ...',  
 'spoil bed well :)',  
 "i'm going bath msg next &#x26; min..",  
 'cant keep talking people sure pay agree price. pls tell want really buy much  
 willing pay',  
 'thanks ringtone order, reference t91. charged gbp 4 per week. unsubscribe

anytime calling customer service 09057039994',  
 'say happen',  
 "could seen me..i didn't recognise face.:)",  
 "well there's lot thing happening lindsay new year \*sighs\* bar ptbo blue heron  
 something going",  
 'keep payasam rinu brings',  
 'taught ranjith sir called me. sm like that. because he verifying project. prabu  
 told today pa dont mistake me..',  
 "guess that's worried. must know there's way body repair itself. i'm quite sure  
 worry. we'll take slow. first tests, guide ovulation relax. nothing said reason  
 worry i.ll keep followin up.",  
 'yeah sure, give couple minute track wallet',  
 'hey leave it. big deal:-) take care.',  
 'hey late ah... meet 945+',  
 'double min txts 4 6months free bluetooth orange. available sony, nokia  
 motorola phones. call mobileupd8 08000839402 call2optout/n9dx',  
 'took mr owl 3 lick',  
 'customer place call you.',  
 'mm time dont like fun',  
 '4mths half price orange line rental & latest camera phone 4 free. phone 11mths  
 ? call mobilesdirect free 08000938767 update now! or2stoptxt',  
 'yup lunch buffet now.. u eat already?',  
 'huh late... fr dinner?',  
 'hey sat going intro pilate only? kickboxing too?',  
 'morning ok.',  
 'yes think so. office lap room think thats last days. didnt shut',  
 'pick bout 7.30ish? time going?',  
 'performance award calculated every two month.not current one month period..',  
 'actually sleeping still might u call back. text gr8. rock sis. send u text wen  
 wake.',  
 "always putting business there. put picture as facebook. one open people i've  
 ever met. would think picture room would hurt you, make feel violated.",  
 'good evening sir, al salam wahleykkum.sharing happy news.by grace god, got  
 offer tayseer,tissco joined.hope fine.inshah allah,meet sometime.rakhesh,visitor  
 india.',  
 'hmmm...k...but want change field quickly da:-)i wanna get system administrator  
 network administrator..',  
 'free ringtone text first 87131 poly text get 87131 true tone! help? 0845  
 2814032 16 1st free, tone 3x£150pw e&nd txt stop',  
 'dear chechi. talk',  
 'hair cream shipped.',  
 "none that's happening til get though",  
 'yep, great loxahatchee xmas tree burning &lt;#&gt; start hour',  
 'haha get used driving usf man, know lot stoner',  
 "well slightly disastrous class pm fav darlings! hope day ok. coffee wld good  
 can't stay late tomorrow. time + place always?",  
 'hello! good week? fancy drink something later?',

'headin towards busetop',  
 'message:some text missing\* sender:name missing\* \*number missing \*sent:date  
 missing \*missing u lot thats everything missing sent via fullonsms.com',  
 'come room point iron plan weekend',  
 'co want thing',  
 "okies... i'll go yan jiu too... skip ard oso, go cine den go mrt one, blah  
 blah blah...",  
 'bring home wendy =d',  
 '100 dating service cal;l 09064012103 box334sk38ch',  
 'whatsup there. dont u want sleep',  
 'alright new goal',  
 'free entry £250 weekly competition text word win 80086 now. 18 t&c  
 www.txttowin.co.uk',  
 "alright, i'll head minutes, text meet",  
 'send logo 2 ur lover - 2 name joined heart. txt love name1 name2 mobno eg love  
 adam eve 07123456789 87077 yahoo! pobox36504w45wq txtno 4 ad 150p',  
 "yes:)from last week i'm taking live call.",  
 'someone contacted dating service entered phone fancy you! find call landline  
 09111032124 . pobox12n146tf150p',  
 'siva hostel aha:-.',  
 'urgent! mobile number awarded £2000 prize guaranteed. call 09058094455 land  
 line. claim 3030. valid 12hrs',  
 'send ur friend receive something ur voice... speaking expression? 1.childish  
 2.naughty 3.sentiment 4.rowdy 5.ful attitude 6.romantic 7.shy 8.attractive  
 9.funny &#x26; .irritating &#x26; .lovable. reply me..',  
 "ok. she'll ok. guess",  
 'aathi..where dear..',  
 'pain urination thing else?',  
 '7 esplanade.. ü mind giving lift co got car today..',  
 'wnt buy bmw car urgently..its vry urgent.but hv shortage &#x26; lacs.there  
 source arng dis amt. &#x26; lacs..thats prob',  
 'home watching tv lor.',  
 'usually take fifteen fucking minute respond yes question',  
 'congrats! nokia 3650 video camera phone call 09066382422 call cost 150ppm ave  
 call 3mins vary mobile 16+ close 300603 post bcm4284 ldn wc1n3xx',  
 'booked ticket pongal?',  
 "available now? i'm like right around hillsborough &#x26; th",  
 'message sent askin &#x26; dollars. shoul pay &#x26; &#x26; ?',  
 "ask g iouri, i've told story like ten time already",  
 'long applebees fucking take',  
 'hi hope u get txt~journey hasnt gd,now 50 min late think.',  
 'to. like love arrange.',  
 'yes..he really great..bhaji told kallis best cricketer sachin world:).very  
 tough get out.',  
 'supposed wake &#x26;:',  
 'oic... saw tot din c me... found group liaoo..',  
 "sorry, i'll call later",

'hey hey werethe monkeespeople say monkeyaround! howdy gorgeous, howu doin?  
 foundourself jobyet sausage?love jen xxx',  
 "sorry, battery died, come i'm getting gram now, where's place?",  
 'well done, blimey, exercise, yeah, kinda remember wot is, hmm.',  
 'wont get concentration dear know mind everything :-)',  
 'lol ... made plan new years?',  
 '10 min later k...',  
 'hank lotsly!',  
 'thanks hope good day today',  
 'k:)k:)what detail want transfer?acc enough?',  
 'ok tell stay out. yeah tough optimistic thing improve month.',  
 "loan purpose £500 - £75,000. homeowner + tenant welcome. previously refused?  
 still help. call free 0800 1956669 text back 'help'",  
 'si si. think ill go make oreo truffles.',  
 'look amy ure beautiful, intelligent woman like u lot. know u don\x92t like  
 like don\x92t worry.',  
 "hope that's result consistently intelligent kind. start asking practicum link  
 keep ear open best. ttyl",  
 '1.20 call cost. guess isnt bad. miss ya, need ya, want ya, love ya',  
 'going thru different feeling.wavering decision coping individual.time heal  
 everything believe.',  
 'u go? phone gonna die stay',  
 'great. never better. day give even reason thank god',  
 "upgrdcentre orange customer, may claim free camera phone upgrade loyalty. call  
 0207 153 9153. offer end 26th july. t&c's apply. opt-out available",  
 "sorry, i'll call later ok bye",  
 'ok way railway',  
 'great princess! love giving receiving oral. doggy style fave position. you?  
 enjoy making love &#x26; time per night :)',  
 'put stuff road keep getting slippery there?',  
 'going ride bike?',  
 "yup, need. i'll jus wait 4 e rain 2 stop.",  
 'many company. tell language.',  
 'okmail: dear dave final notice collect 4\* tenerife holiday #5000 cash award!  
 call 09061743806 landline. tc sae box326 cw25wx 150ppm',  
 'long since screamed, princess?',  
 'nothing. meant money enters account here, bank remove flat rate. someone  
 transfered &#x26; account &#x26; dollar got removed. bank differ charge  
 also differ.be sure trust 9ja person sending account detail cos...',  
 "want 2 get laid tonight? want real dogging location sent direct 2 ur mob? join  
 uk's largest dogging network txtng moan 69888nyt. ec2a. 31p.msg@150p",  
 'nice line said broken heart- plz cum 1 time infront me... wise trust u... good  
 9t:)',  
 "ok i'm gonna head usf like fifteen minute",  
 'love aathi..love u lot..',  
 'tension ah?what machi?any problem?',  
 'k, pick another 8th done?',



"when're guy getting back? g said thinking staying mcr",  
 'almost there, see u sec',  
 'yo carlos, friend already asking you, working weekend?',  
 'watching tv lor...',  
 'thank baby! cant wait taste real thing...',  
 'change fb jaykwon thuglyfe falconerf',  
 'win really 1 side long time.',  
 'free message activate 500 free text message replying message word free term &  
 conditions, visit [www.07781482378.com](http://www.07781482378.com)',  
 'dear reached railway. happen',  
 'depends quality. want type sent boye, faded glory, 6. want ralphps maybe 2',  
 "think i've fixed send test message?",  
 "sorry man account's dry would, want could trade back half could buy shit  
 credit card",  
 'congrats! 1 year special cinema pas 2 yours. call 09061209465 now! c suprman  
 v, matrix3, starwars3, etc 4 free! bx420-ip4-5we. 150pm. dont miss out!',  
 "sorry,in meeting i'll call later",  
 'class &#x2013; reunion?',  
 'free now?can call now?',  
 'got meh... when?',  
 'nope... think go monday... sorry replied late',  
 'told accenture confirm. true.',  
 'kate jackson rec center 7ish, right?',  
 'dear reache room',  
 'fighting world easy, u either win lose bt fightng some1 close u difficult u  
 lose - u lose u win - u still lose.',  
 'ü come out?',  
 'check nuerologist.',  
 'lolnice. went fish ..water.?',  
 "+123 congratulation - week's competition draw u £1450 prize claim call  
 09050002311 b4280703. t&cs/stop sm 08718727868. 18 150ppm",  
 "waiting e car dat's bored wat. co wait outside got nothing 2 do. home stuff  
 watch tv wat.",  
 'maybe westshore hyde park village, place near house?',  
 "know now. how's anthony. bringing money. i've school fee pay rent stuff like  
 that. thats need help. friend need...|",  
 "what's significance?",  
 'opinion me? 1. 2. jada 3. kusruthi 4. lovable 5. silent 6. spl character 7.  
 matured 8. stylish 9. simple pls reply..',  
 "8 latest, g's still scrounge ammo want give new ak try",  
 "prabha..i'm soryda..really..frm heart i'm sory",  
 'lol ok forgiven :)',  
 'no..jst change tat only..',  
 'guaranteed latest nokia phone, 40gb ipod mp3 player £500 prize! txt word:  
 collect no: 83355! ibhltd ldnw15h 150p/mtmsgrcvd18+',  
 's:)no competition him.',  
 'boltblue tone 150p reply poly# mono# eg poly3 1. cha cha slide 2. yeah 3. slow

jamz 6. toxic 8. come stop 4 tone txt',  
 'credit topped http://www.bubbletext.com renewal pin tgxxrz',  
 'way transport le problematic sat night. way, u want ask n join bday, feel  
 free. need know definite no booking fri.',  
 "usually person unconscious that's child adult may behave abnormally. i.ll  
 call",  
 "that's ebay might le elsewhere.",  
 'shall come get pickle',  
 'gonna go get taco',  
 "that's rude, campus?",  
 'urgent!: mobile no. awarded £2,000 bonus caller prize 02/09/03! 2nd attempt  
 contact you! call 0871-872-9755 box95qu',  
 "hi b ard 4 christmas. enjoy n merry x'mas.",  
 "today's offer! claim ur £150 worth discount vouchers! text yes 85023 now!  
 savamob, member offer mobile! c 08717898035. £3.00 sub. 16 . unsub reply x",  
 'yes! pretty lady like single?',  
 'recieve tone within next 24hrs. term condition please see channel u teletext  
 pg 750',  
 'jay say double-faggot',  
 'private! 2003 account statement 07815296484 show 800 un-redeemed s.i.m.  
 points. call 08718738001 identifier code 41782 expires 18/11/04',  
 'today-sunday..sunday holiday..so work..',  
 'gudnite...tc...practice going',  
 "i'll late...",  
 "i've called while. hoping l8r malaria know miss guys. miss ban big, pls give  
 love especially. great day.",  
 'good afternoon, love! go day ? hope maybe got lead job. think you, boytoy send  
 passionate kiss across sea',  
 'probably gonna while, see later tonight &lt;)',  
 'maybe fat finger press button know do.',  
 'ummmmmaah many many happy return day dear sweet heart.. happy birthday dear',  
 'tirupur da, started office call me.',  
 'www.applausestore.com monthlysubscription@50p/msg max6/month t&csc web age16  
 2stop txt stop',  
 "famous quote : develop ability listen 'anything' unconditionally without  
 losing temper self confidence, mean ... 'married'",  
 'going college pa. do. else ill come self. pa.',  
 '4 oclock mine. bash flat plan.',  
 'girl stay bed. girl need recovery time. id rather pas fun cooped bed',  
 'special there?',  
 "know need get hotel now. got invitation apologise. cali sweet come english  
 bloke's weddin",  
 'sorry took long, omw',  
 'wait &lt;#&gt; min..',  
 'ok give 5 minute think see her. btw alibi. cutting hair whole time.',  
 'imagine finally get sink bath put paces, maybe even eat left ... also imagine  
 feel cage cock surrounded bath water, reminding always owns ... enjoy, cuck',

"hurry up, i've weed-deficient like three day",  
 'sure, get acknowledgement astoundingly tactless generally faggy demand blood oath fo',  
 'ok. every night take warm bath drink cup milk see work magic. still need loose weight. know',  
 'i'll look frying pan case it's cheap book perhaps. that's silly frying pan isn't likely book',  
 'o. well uv cause mutations. sunscreen like essential thesedays',  
 'lunch:)you online?why?',  
 'know friend already told that.',  
 'hi princess! thank pics. pretty. you?',  
 'aiyo... u always c ex one... dunno abt mei, reply... first time u reply fast... lucky workin huh, got bao ur sugardad ah...gee..',  
 "hi msg me:)i'm office..",  
 'thanx 4 e brownie v nice...',  
 'geeeee ... love much barely stand',  
 'gent! trying contact you. last weekend draw show £1000 prize guaranteed. call 09064012160. claim code k52. valid 12hrs only. 150ppm',  
 "fuck babe ... miss already, know ? can't let send money towards net ? need ... want ... crave ...",  
 'ill call u 2mrw ninish, address icky american freek wont stop callin 2 bad jen k eh?',  
 'oohh bed ridden ey? thinking of?',  
 'anyways, go gym whatever, love \*smiles\* hope ok good day babe ... miss much already',  
 'love it! daddy make scream pleasure! going slap as dick!',  
 'wot u wanna missy?',  
 'yar lor wait 4 mum 2 finish sch lunch lor... whole morning stay home clean room room quite clean... hee...',  
 'know lab goggles went',  
 'open door?',  
 'waiting call.',  
 'nope waiting sch 4 daddy...',  
 '?1,000 cash ?2,000 prize! claim, call09050000327',  
 "i'm tired arguing week week. want on, i'll same.",  
 'ü wait 4 sch finish ard 5..',  
 'mobile number £5000, claim call u back ring claim hot line 09050005321.',  
 'arngd marriage u r walkin unfortunty snake bite u. bt love marriage dancing frnt snake & sayin bite me, bite me.',  
 'huh early.. ü dinner outside izzit?',  
 'ok anyway need change said',  
 'tried contact reply offer 750 min 150 textand new video phone call 08002988890 reply free delivery tomorrow',  
 'ex-wife able kids. want kid one day?',  
 "how's scotland. hope showing jjc tendencies. take care. live dream",  
 'tell u headache want use 1 hour sick time.',  
 "dun thk i'll quit yet... hmmm, go jazz ? yogasana oso can... go meet em lesson

den...",  
 'pete please ring meive hardly gotany credit',  
 'ya srsly better yi tho',  
 "i'm meeting, call later",  
 "ur chance win £250 wkly shopping spree txt: shop 80878. t's&c's  
 www.txt-2-shop.com custcare 08715705022, 1x150p/wk",  
 'specially selected receive 2000 pound award! call 08712402050 line close. cost  
 10ppm. 16+. t&cs apply. ag promo',  
 'private! 2003 account statement 07753741225 show 800 un-redeemed s. i. m.  
 points. call 08715203677 identifier code: 42478 expires 24/10/04',  
 'still grand prix?',  
 'met stranger choose friend. long world stands, friendship never ends. let  
 friend forever!!! gud nitz...',  
 'great! you?',  
 'gud mrng dear nice day',  
 'important customer service announcement. call freephone 0800 542 0825 now!',  
 'do. exhausted train morning. much wine pie. sleep well',  
 "i'm going buy mum's present ar.",  
 'mind blastin.. tsunami occur on.. rajnikant stopped swimming indian  
 ocean...-d',  
 "u sending home first ok lor. i'm ready yet.",  
 'speaking cash yet?',  
 'happy there. come noon',  
 'meet lunch la...',  
 'take care n get well soon',  
 'xclusive@clubsaisai 2morow 28/5 soiree speciale zouk nichols paris.free rose 2  
 lady !!! info: 07946746291/07880867867',  
 'meant say cant wait see u getting bored bridgwater banter',  
 'neva mind ok..',  
 'fine, imma get drink somethin. want come find you?',  
 '22 day kick off! euro2004 u kept date latest news result daily. removed send  
 get txt stop 83222',  
 'valentine game. . . send dis msg ur friends. .. 5 answer r someone really love  
 u. ques- colour suit best?rply',  
 'many dependent',  
 'thanx4 today cer nice 2 catch ave 2 find time often oh well take care c u  
 soon.c',  
 'called said him:)then choose future.',  
 'happy valentine day know early hundred handsomes beauty wish. thought finish  
 aunty uncle 1st...',  
 'like v shock leh. co telling shuhui like telling leona also. like dat almost  
 know liao. got ask abt ur reaction lor.',  
 'family happiness..',  
 'come n pick ü up... come immediately aft ur lesson...',  
 'let snow. let snow. kind weather brings ppl together friendship grow.',  
 'dear got &lt;#&gt; dollar hi hi',  
 'good words... word may leave u dismay many times.',

'make sure alex know birthday fifteen minute far concerned',  
 'sorry, no, got thing do. may pub later.',  
 "nah straight, bring bud drink something that's actually little useful straight  
 cash",  
 "haha good hear, i'm officially paid market 8th",  
 'many lick take get center tootsie pop?',  
 'yup thk r e teacher said make face look longer. darren ask 2 cut short.',  
 'new textbuddy chat 2 horny guy ur area 4 25p free 2 receive search postcode  
 gaytextbuddy.com. txt one name 89693',  
 'today vodafone number ending 4882 selected receive £350 award. number match  
 call 09064019014 receive £350 award.',  
 'please dont say like that. hi hi hi',  
 'thank u!',  
 'oh forwarded message. thought send',  
 'got it. seventeen pound seven hundred ml - hope ok.',  
 'dear voucher holder, 2 claim week offer, pc go  
<http://www.e-tlp.co.uk/expressoffer> ts&cs apply.2 stop text txt stop 80062.',  
 'n funny...',  
 'sweetheart, hope kind day! one load reason smile. biola',  
 'ü login dat time... dad fetching ü home now?',  
 'shower, baby?',  
 'askd u question hour before. answer',  
 "well imma definitely need restock thanksgiving, i'll let know i'm",  
 "said kiss, kiss, can't sound effects! gorgeous man he! kind person need smile  
 brighten day!",  
 'probably gonna swing wee bit',  
 'ya nice. . .be ready thursday',  
 'allo! braved bus taken train triumphed. mean we're b'ham. jolly good rest  
 week',  
 'watching cartoon, listening music & eve go temple & church.. u?',  
 'mind ask happened? dont say uncomfortable.',  
 'private! 2003 account statement show 800 un-redeemed s. i. m. points. call  
 08715203694 identifier code: 40533 expires 31/10/04',  
 'prob. send email.',  
 '?1,000 cash ?2,000 prize! claim, call09050000327. t&c: rstm, sw7 3ss. 150ppm',  
 'thats cool! sometimes slow gentle. sonetimes rough hard :)',  
 "i'm gonna say no. sorry. would normal starting panic time. sorry again! seeing  
 tuesday?",  
 'wait, know wesley town? bet hella drugs!',  
 'fine miss much.',  
 'u got person story',  
 "tell drug dealer's getting impatient",  
 'sun cant come earth send luv rays. cloud cant come river send luv rain. cant  
 come meet u, send care msg u. gud evng',  
 'place man',  
 'doesnt make sense take unless free. need know more, wikipedia.com',  
 '88800 89034 premium phone service call 08718711108',

"sea, lay rock. rock, envelope. envelope, paper. paper, 3 words... '",  
 "mum's repent how?",  
 'sorry going home first... daddy come fetch ü later...',  
 'leave de:-). start prepare next:-)..',  
 'yes baby! study position kama sutra ;)',  
 'en chikku nange bakra msg kalstiya..then tea/coffee?',  
 "carlos'll minute still need buy",  
 'pay & decimal& lakhs:)',  
 'good evening! ttyl',  
 'u receive msg?',  
 'ho ho - big belly laugh! see ya tomo',  
 'sms. ac sun0819 post hello:"you seem cool, wanted say hi. hi!!!" stop? send  
 stop 62468',  
 'get ur 1st ringtone free now! reply msg tone. gr8 top 20 tone phone every week  
 £1.50 per wk 2 opt send stop 08452810071 16',  
 "ditto. worry saying anything anymore. like said last night, whatever want i'll  
 same. peace.",  
 "i've got &#& , way could pick up?",  
 'dont knw pa, drink milk..',  
 'maybe?! say hi find got card. great escape wetherspoons?',  
 "piggy, r u awake? bet u're still sleeping. i'm going 4 lunch now...",  
 "cause i'm freaky lol",  
 "missed call cause yelling scrappy. miss u. can't wait u come home. i'm lonely  
 today.",  
 "'hex' place talk of? explain!",  
 'ü log 4 wat. sdryb8i',  
 'xy going 4 e lunch?',  
 "hi i'm sue. 20 year old work lapdancer. love sex. text live - i'm bedroom now.  
 text sue 89555. textoperator g2 1da 150ppmsg 18+",  
 'wanted ask ü wait 4 finish lect. co lect finish hour anyway.',  
 'finished work yet? :)',  
 'every king cry baby every great building map.. imprtant u r today, u wil reach  
 tomorw. gud ni8',  
 'dear,me cherthala.in case u r coming cochin pls call bfore u start.i shall  
 also reach accordingly.or tell day u r coming.tmorow engaged an holiday.',  
 'thanks love. torch bold.',  
 '<forwarded 448712404000>please call 08712404000 immediately urgent message  
 waiting you.',  
 'farm open?',  
 'sorry trouble u again. buy 4d dad again? 1405, 1680, 1843. 2 big 1 small, sat  
 n sun. thanx.',  
 'sister law, hope great month. saying hey. abiola',  
 'purchase stuff today mail you. po box number?',  
 'ah poop. look like ill prob send laptop get fixed cuz gpu problem',  
 'good. good job. like entrepreneur',  
 "aight, close still around alex's place?",  
 'meet corporation st outside gap ... see mind working!',

'mum ask ü buy food home...',  
 'k..u also dont msg reply msg..',  
 'much r ü willing pay?',  
 "sorry, i'll call later",  
 'important prevent dehydration giving enough fluid',  
 'thats bit weird, even ?- supposed happening? good idea, sure pub!',  
 "true dear..i sat pray evening felt so.so sms'd time...",  
 'think get away trek long family town, sorry',  
 'wanna gym harri',  
 'quite late lar... ard 12 anyway wun b drivin...',  
 'review keep fantastic nokia n-gage game deck club nokia, go 2  
 www.cnupdates.com/newsletter. unsubscribe alert reply word',  
 '4mths half price orange line rental & latest camera phone 4 free. phone  
 11mths+? call mobilesdirect free 08000938767 update now! or2stoptxt t&cs',  
 'height confidence: aeronautics professor wer calld & wer askd 2 sit  
 aeroplane. aftr sat wer told dat plane w made students. dey hurried plane.. bt 1  
 didnt move... said:"if made students,this wont even start... datz  
 confidence..',  
 'seems like weird timing night g want come smoke day shitstorm attributed  
 always coming making everyone smoke',  
 '08714712388 10am-7pm cost 10p',  
 'save stress. person dorm account, send account detail money sent you.',  
 'also know lunch menu da. . know',  
 'stuff sell i.ll tell',  
 '+449071512431 urgent! 2nd attempt contact u!u £1250 call 09071512433 b4 050703  
 t&csbcm4235wc1n3xx. callcost 150ppm mobilesvary. max£7. 50',  
 "book lesson? msg me... call work sth... i'm going get specs. membership  
 px3748",  
 'guaranteed £1000 cash £2000 prize. claim yr prize call customer service  
 representative 08714712394 10am-7pm',  
 'macha dont feel upset.i assume mindset.believe one evening wonderful plan  
 us.let life begin again.call anytime',  
 'oh it? send address',  
 "s'fine. anytime. best it.",  
 'wondar full flim.',  
 'ya even cooky jelly',  
 'world running still.maybe feeling same,so it.or admit,i mad.then correction?or  
 let call life.and keep running world,may u r also running.lets run.',  
 'got it! look scrumptious... daddy want eat night long!',  
 "co lar i'm ba dao ok... 1 pm lor... u never ask go ah... said u would ask fri  
 said u ask today...",  
 'alright omw, gotta change order half8th',  
 'exactly. anyways far. jide study visiting',  
 'dunno u ask me.',  
 'email alertfrom: jeri stewartsize: 2kbsubject: low-cost prescripton drvgsto  
 listen email call 123',  
 "didn't. spring coming early yay!",

'lol feel bad use money take steak dinner =d',  
 'even u dont get trouble convincing..just tel twice tel neglect msg dont c read  
 it..just dont reply',  
 'leaving qatar tonite search opportunity.all went fast.pls add ur prayer  
 dear.rakhesh',  
 'one talking',  
 'thanks looking me. really appreciate.',  
 'hi. customer loyalty offer:the new nokia6650 mobile £10 txtauction! txt word:  
 start no: 81151 & get now! 4t&ctxt tc 150p/mtmsg',  
 'wish now!',  
 "haha mayb u're rite... u know well. da feeling liked someone gd lor. u faster  
 go find one gal group attached liao.",  
 'yes there. glad made it.',  
 'well :)all little time. thing good time ahead:',  
 'got up. room soon. .... put clock back til 8 shouted everyone get realised 7.  
 wahay. another hour bed.',  
 'ok. may free gym about.',  
 'men like shorter ladies. gaze eyes.',  
 'dunno jus say go lido. time 930.',  
 'promise take good care you, princess. run now. please send pic get chance.  
 ttyl!',  
 'u subscribed best mobile content service uk £3 per 10 day send stop 82324.  
 helpline 08706091795',  
 "reason we've spoken year? anyways great week best exam",  
 'monday next week. give full gist',  
 "realize 40 years, we'll thousand old lady running around tattoos?",  
 'important customer service announcement premier.',  
 'dont gimme lip caveboy',  
 'get library',  
 'realy sorry-i recognise number confused :) r u please?!',  
 'didnt holla?',  
 'cant think anyone \* spare room \* top head',  
 'faith make thing possible, hope make thing work, love make thing beautiful, may  
 three christmas! merry christmas!',  
 'u made appointment',  
 "call you/carlos is/are here, phone's vibrate acting might hear text",  
 'romantic paris. 2 nights, 2 flight £79 book 4 next year. call 08704439680ts&cs  
 apply.',  
 'grandmas. oh dear, u still ill? felt shit morning think hungover! another  
 night then. leave sat.',  
 'urgent ur £500 guaranteed award still unclaimed! call 09066368327  
 closingdate04/09/02 claimcode m39m51 £1.50pmmorefrommobile2bremoved-  
 mobypobox734ls27yf',  
 'nothing jus tot u would ask co u ba gua... went mt faber yest... yest jus went  
 already mah today going out... jus call lor...',  
 'wishing family merry "x" ma happy new year advance..',  
 'ur awarded city break could win £200 summer shopping spree every wk. txt store



88039 . skilgme. tscs087147403231winawk!age16 £1.50perwksub',  
 "i'm nt goin, got somethin on, unless meetin 4 dinner lor... haha, wonder go ti  
 time...",  
 "sorry, i'll call later",  
 'cant pick phone right now. pls send message',  
 "lol know! they're dramatic. school already closed tomorrow. apparently can't  
 drive inch snow supposed get.",  
 'getting anywhere damn job hunting here!',  
 'lol! u drunkard! hair moment. yeah still 4 tonight. wats plan?',  
 'idc get here, weaseling way shit twice row',  
 'wil & minutes. got space',  
 'sleeping..and surfing',  
 'thanks picking trash.',  
 'go tell friend sure want live smoke much spend hour begging come smoke',  
 'hi kate lovely see tonight ill phone tomorrow. got sing guy gave card! xxx',  
 'happy new year dear brother. really miss you. got number decided send text  
 wishing happiness. abiola',  
 'mean get door',  
 'opinion me? 1. 2. jada 3. kusruthi 4. lovable 5. silent 6. spl character 7.  
 matured 8. stylish 9. simple pls reply..',  
 'hmmm ... thought said 2 hour slave, 3 ... late ... punish ?',  
 'beerge?',  
 'important customer service announcement premier. call freephone 0800 542 0578  
 now!',  
 'dont think so. turn like randomlly within 5min opening',  
 'supposed make it, still town though',  
 'own. time fix spelling. sometimes get completely diff word. go figure',  
 'ever thought living good life perfect partner? txt back name age join mobile  
 community. (100p/sms)',  
 '5 free top polyphonic tone call 087018728737, national rate. get toppoly tune  
 sent every week, text subpoly 81618, £3 per pole. unsub 08718727870.',  
 'gud mrng dear hav nice day',  
 "hoping enjoyed game yesterday. sorry i've touch pls know fondly bein thot off.  
 great week. abiola",  
 'e best 4 ur driving tmr :-)',  
 'y?where u dogbreath? sounding like jan c that\x92s al!!!!!!!!!!!!',  
 'omg want scream. weighed lost weight! woohoo!',  
 'generally one. uncountable noun - u dictionary. piece research?',  
 'really getting hanging around.',  
 "orange customer, may claim free camera phone upgrade loyalty. call 0207 153  
 9996. offer end 14thmarch. t&c's apply. opt-out availa",  
 'petey boy whereare friendsare thekingshead come canlove nic',  
 'ok msg u b4 leave house.',  
 'gimme & minute ago',  
 'last chance! claim ur £150 worth discount voucher today! text shop 85023 now!  
 savamob, offer mobile! c savamob pobox84, m263uz. £3.00 sub. 16',  
 'appt & time& am. fault u listen. told u twice',

'free 1st week! no1 nokia tone 4 ur mobile every week txt nokia 8077 get txtting  
 tell ur mates. www.getzed.co.uk pobox 36504 w45wq 16+ norm150p/tone',  
 'guaranteed £200 award even £1000 cashto claim ur award call free 08000407165  
 (18+) 2 stop getstop 88222 php. rg21 4jx',  
 "k i'll 4.",  
 'dled 3d imp',  
 "sure, make sure know ain't smokin yet",  
 'boooo always work. quit.',  
 'taking half day leave bec well',  
 'ugh wanna get bed. warm.',  
 's:)s.nervous &#x26; :)',  
 "there's ring come guy costumes. gift future yowifes. hint hint",  
 'congratulation ur awarded either £500 cd gift voucher & free entry 2 £100  
 weekly draw txt music 87066 tnccs www.ldew.com1win150ppmx3age16',  
 'borrow ur bag ok.',  
 'u outbid simonwatson5120 shinco dvd plyr. 2 bid again, visit sms.  
 ac/smsrewards 2 end bid notifications, reply end',  
 "where's boytoy? miss ... happened?",  
 "lot used one babe, model help. youi bring he'll match",  
 'also bringing galileo dooby',  
 'responding',  
 'boo babe! u enjoyin yourjob? u seemed 2 b gettin well hunny!hope ure ok?take  
 care & i\92llspeak 2u soonlots loveme xxxx.',  
 "good afternoon starshine! how's boytoy? crave yet? ache fuck ? \*sips  
 cappuccino\* miss babe \*teasing kiss\*",  
 'road cant txt',  
 'smsservices. yourinclusive text credits, pls goto www.comuk.net login= 3qxj9  
 unsubscribe stop, extra charge. help 08702840625.comuk. 220-cm2 9ae',  
 "25p 4 alfie moon's child need song ur mob. tell ur m8s. txt tone charity 8007  
 nokias poly charity polys: zed 08701417012 profit 2 charity.",  
 'good evening! ttyl',  
 'hmm .. bit piece lol ... \*sighs\* ...',  
 'hahaha..use brain dear',  
 'hey. got mail?',  
 'sorry light turned green, meant another friend wanted &#x26; worth may  
 around',  
 'thanks yesterday sir. wonderful. hope enjoyed burial. mojibiola',  
 'u secret admirer. reveal think u r special. call 09065174042. opt reply reveal  
 stop. 1.50 per msg recd. cust care 07821230901',  
 'hi mate rv u hav nice hol message 3 say hello coz haven\92t sent u 1 age  
 started driving stay roads!rvx',  
 'dear voucher holder, claim week offer, pc please go  
 http://www.e-tlp.co.uk/expressoffer ts&cs apply. stop texts, txt stop 80062',  
 "thank much. skyped wit kz sura, didnt get pleasure company. hope good. we've  
 given ultimatum oh! countin aburo. enjoy! message sent day ago",  
 'surely result offer:)',  
 'good morning dear... great & successful day.',

'want 750 anytime network min 150 text new video phone five pound per week call 08002888812 reply delivery tomorrow',  
 "sir, late paying rent past month pay \$ &#x20; charge. felt would inconsiderate nag something give great cost that's didnt speak up. however recession wont able pay charge month hence askin well ahead month's end. please help. thanks",  
 'tried contact offer new video phone 750 anytime network min half price rental camcorder call 08000930705 reply delivery wed',  
 'last chance 2 claim ur £150 worth discount vouchers-text yes 85023 now!savamob-member offer mobile c 08717898035. £3.00 sub. 16 . remove txt x stop',  
 'luv u soo much u don\x92t understand special u r 2 ring u 2morrow luv u xxx',  
 "pls send comprehensive mail i'm paying, much.",  
 "prashanthettan's mother passed away last night. pray family.",  
 'urgent! call 09066350750 landline. complimentary 4\* ibiza holiday 10,000 cash await collection sae t&cs po box 434 sk3 8wp 150 ppm 18+',  
 'k.k:)when going?',  
 "meanwhile shit suite: xavier decided give u &#x20; second warning samantha coming playing jay's guitar impress shit. also think doug realizes live anymore",  
 "stomach thru much trauma swear can't eat. better lose weight.",  
 'office:)whats matter..msg now.i call break:).',  
 "yeah there's barely enough room two us, x many fucking shoes. sorry man, see later",  
 "today's offer! claim ur £150 worth discount vouchers! text yes 85023 now! savamob, member offer mobile! c 08717898035. £3.00 sub. 16 . unsub reply x",  
 'u reach orchard already? u wan 2 go buy ticket first?',  
 'real, baby! want bring inner tigress...',  
 'da run activate full version da.',  
 'ah poor baby!hope urfeeling bettersn luv! probthat overdose work hey go careful spk 2 u sn lot lovejen xxx.',  
 "stop story. i've told i've returned he's saying order it.",  
 'talk sexy!! make new friend fall love world discreet text dating service. text vip 83110 see could meet.',  
 'going take babe ?',  
 'hai ana tomarrow coming morning. &#x20;decimal&#x20; ill sathy go rto office. reply came home.',  
 'spoon okay?',  
 'say somebody named tampa',  
 'work now. going min.',  
 'brother genius',  
 "sorry, guess whenever get hold connections, maybe hour two? i'll text",  
 'u find time bus coz need sort stuff out.',  
 'dude ive seeing lotta corvette lately',  
 'congratulation ur awarded either yr supply cd virgin record mystery gift guaranteed call 09061104283 ts&cs www.smsco.net £1.50pm approx 3mins',  
 'here, consider wall bunker shit important never play peaceful guess place high

enough matter',  
 'private! 2003 account statement 07808 xxxxxx show 800 un-redeemed s. i. m.  
 points. call 08719899217 identifier code: 41685 expires 07/11/04',  
 'hello. need posh bird chap user trial prod champneys. put down? need address  
 dob asap. ta r',  
 'u want xmas? 100 free text message & new video phone half price line rental?  
 call free 0800 0721072 find more!',  
 'well officially philosophical hole, u wanna call home ready saved!',  
 'going good...no problem...but still need little experience understand american  
 customer voice...',  
 "i'll text drop x",  
 "ugh long day. i'm exhausted. want cuddle take nap",  
 'talk atleast day...!!! otherwise miss best friend world...!!! -shakespeare-  
 shesil &#x26;',  
 'shop till u drop, you, either 10k, 5k, £500 cash £100 travel voucher, call  
 now, 09064011000. ntt po box cr01327bt fixedline cost 150ppm mobile vary',  
 'castor? need see something',  
 'sunshine quiz wkly q! win top sony dvd player u know country liverpool played  
 mid week? txt ansr 82277. £1.50 sp:tyrone',  
 'u secret admirer looking 2 make contact u-find r\*reveal think ur special-call  
 09058094565',  
 'u secret admirer looking 2 make contact u-find r\*reveal think ur special-call  
 09065171142-stopsms-08',  
 'reminder: downloaded content already paid for. goto <http://doit.mymoby.tv/>  
 collect content.',  
 "see, knew giving break time woul lead always wanting miss curfew. gonna gibe  
 'til one, midnight movie gonna get til 2. need come home. need getsleep and,  
 anything, need b studdying ear training.",  
 'love give massages. use lot baby oil... fave position?',  
 'dude go sup',  
 'yoyyooo u know change permission drive mac. usb flash drive',  
 'gibbs unsold.mike hussey',  
 'like talk pa able to. dont know y.',  
 'dun cut short leh. u dun like ah? failed. quite sad.',  
 'unbelievable faglord',  
 'wife.how knew time murder exactly',  
 'ask princess?',  
 'great princess! thinking me? :)',  
 'nutter. cutter. ctter. cttergg. cttargg. ctargg. ctagg. ie',  
 "ok noe u're busy i'm really bored msg u. oso dunno wat colour choose 4 one.",  
 'g class early tomorrow thus trying smoke &#x26;',  
 'superb thought- "be grateful u dont everything u want. mean u still  
 opportunity happier tomorrow u today.":-)',  
 'hope good week. checking',  
 "i'm used it. hope agent drop since i've booked thing year. whole boston, nyc  
 experiment.",  
 "thursday night? yeah, sure thing, we'll work",

'free ringtone waiting collected. simply text password "mix" 85069 verify. get  
 usher britney. fml, po box 5249, mk17 92h. 450ppw 16',  
 'probably money worries. thing coming due several outstanding invoice work two  
 three month ago.',  
 'possible teach you. where.',  
 'wonder phone battery went dead ? tell you, love babe',  
 "lovely smell bus ain't tobacco...",  
 "we're getting worried here, derek taylor already assumed worst",  
 "hey what's charles sorry late reply.",  
 'lastest stereophonics, marley, dizzee racal, libertine strokes! win nookii  
 game flirt!! click themob wap bookmark text wap 82468',  
 'i.ll give it. plus said grinule greet whenever speak',  
 'white fudge oreo store',  
 'january male sale! hot gay chat cheaper, call 08709222922. national rate  
 1.5p/min cheap 7.8p/min peak! stop text call 08712460324 (10p/min)',  
 "love ! come took long leave zaher's? got word ym happy see sad left. miss",  
 'sorry hurt you.',  
 "can't. feel nauseous. i'm pissed. eat sweet week cause today planning pig out.  
 dieting week. i'm hungry :/",  
 'ok lor early. still project meeting now.',  
 'call da, waiting call.',  
 'could ask carlos could get anybody else chip',  
 'actually send reminder today. wonderful weekend',  
 "people see msgs, think iam addicted msging... wrong, bcoz don\\'t know iam  
 addicted sweet friends...!! bslvyl",  
 'hey gave photo registered driving ah? tmr wanna meet yck?',  
 'dont talk ever ok word.',  
 'u wana see',  
 "way school. pls send ashley's number",  
 'shall fine. avalarr now. hollalater',  
 "went attend another two round today..but still didn't reach home..",  
 'actually deleted old website..now blogging magicalsongs.blogspot.com',  
 'k, wait chikku..il send aftr &#x26; min',  
 "i'm diet. ate 1 many slice pizza yesterday. ugh i'm always diet.",  
 'k:)i give kvb acc details:)',  
 'oh come ah?',  
 'money!!! r lucky winner ! 2 claim prize text money 2 88600 £1million give away  
 ! ppt150x3+normal text rate box403 wlt1jy',  
 "i'm really sorry b able 2 friday.hope u find alternative.hope yr term's going  
 ok:-)",  
 'congratulation ore mo owo wa. enjoy wish many happy moment fro wherever go',  
 'samus shoulder yet',  
 'time think it? need know near campus',  
 'dear matthew please call 09063440451 landline, complimentary 4\*lux tenerife  
 holiday £1000 cash await collection. ppm150 sae t&cs box334 sk38xh.',  
 'dun wear jean lor...',  
 'since when, side, fever, vomitin.',

'k:)k.are college?',  
 'urgent! call 09061749602 landline. complimentary 4\* tenerife holiday £10,000  
 cash await collection sae t&cs box 528 hp20 1yf 150ppm 18+',  
 'better. made friday stuffed like pig yesterday. feel bleh. least writhing pain  
 kind bleh.',  
 "sell we'll ton coins. sell coin someone thru paypal. voila! money back life  
 pockets:)",  
 'theyre lot places. hospital medical place safe.',  
 'getting touch folk waiting company? txt back name age opt in! enjoy community  
 (150p/sms)',  
 "also i've sorta blown couple time recently id rather text blue looking weed",  
 'sent score sophas secondary application schools. think thinking applying,  
 research cost also. contact joke ogunrinde, school one le expensive one',  
 'cant wait see you! photo useful? :)',  
 'ur cash-balance currently 500 pound - maximize ur cash-in send go 86688  
 150p/msg. cc: 08718720201 po box 114/14 tcr/w1',  
 'hey booked kb sat already... lesson going ah? keep sat night free need meet  
 confirm lodging',  
 'chk ur belovd m dict',  
 'time want come?',  
 'awesome, lemme know whenever around',  
 'shb b ok lor... thanx...',  
 'beautiful truth gravity.. read carefully: "our heart feel light someone it..  
 feel heavy someone leaf it.." good night',  
 "also remember get doobby's bowl car",  
 'filthy story girl waiting',  
 "sorry c ur msg... yar lor poor thing... 4 one night... tmr u'll brand new room  
 2 sleep in...",  
 'love decision, feeling. could decide love, then, life would much simpler, le  
 magical',  
 'welp apparently retired',  
 "sort code acc . bank natwest. reply confirm i've sent right person!",  
 '@',  
 "u sure u can't take sick time?",  
 'urgent! trying contact u. today draw show £800 prize guaranteed. call  
 09050001808 land line. claim m95. valid12hrs',  
 'watching cartoon, listening music & eve go temple & church.. u?',  
 'yo chad gymnastics class wanna take? site say christian class full..',  
 'much buzy',  
 'better still catch let ask sell & me.',  
 'sure night menu. . . know noon menu',  
 'u want come back?.a beautiful necklace token heart you.thats give wife  
 liking.be see..no one give that.dont call me.i wait till come.',  
 'willing go aptitude class.',  
 'wont b 2.15 trying 2 sort house out, ok?',  
 'yar lor wan 2 go c horse racing today mah, eat earlier lor. ate chicken rice.  
 u?',

```

'haha awesome, omw back',
'yup thk e shop close lor.',
'account number?',
'eh u send wrongly lar...',
'hey ad crap nite borin without ya 2 boggy u boring biatch! thanx u wait til
nxt time il ave ya',
'ok shall talk',
'dont hesitate. know second time weakness like that. keep notebook eat day
anything changed day sure nothing',
'hey pay. salary de. <#> .',
'another month. need chocolate weed alcohol.',
'started searching get job days.he great potential talent.',
'reckon need town eightish walk * carpark.',
'congrats! 2 mobile 3g videophones r yours. call 09063458130 now! videochat wid
mates, play java games, dload polyph music, noline rentl.',
'look fuckin time. fuck think',
'yo guess dropped',
'carlos say he'll mu <#> minute",
'i'm office . call <#> min:)",
"geeee ... miss already, know ? think about. fuck, can't wait till next year
together ... *loving kiss*",
'yun ah.the ubi one say ü wan call tomorrow.call 67441233 look irene.ere got
bus8,22,65,61,66,382. ubi cres,ubi tech park.6ph 1st 5wkg days.èn',
'ugh. gotta drive back sd la. butt sore.',
'26th july',
'hi im relaxing time ever! get 7am every day! party good night? get home
tomorrow 5ish.',
'ü... ü wan come come lor... din c stripe skirt...',
'xmas story peace.. xmas msg love.. xmas miracle jesus.. hav blessed month
ahead & wish u merry xmas...',
"can't, number!",
'change again... e one next escalator...',
"yetunde i'm class run water make ok. pls now.",
'lot happened here. feel quiet. beth aunt charlie working lots. helen mo.
been?',
'ü wait 4 bus stop aft ur lect lar. dun c ü go get car come back n pick ü.',
...]
```

```

[26]: from sklearn.feature_extraction.text import TfidfVectorizer
tfidf = TfidfVectorizer()
vectors = tfidf.fit_transform(corpus).toarray()
feature_names = tfidf.get_feature_names_out()
```

```

[27]: x = pd.DataFrame(vectors , columns=feature_names)
y = dataset['label']
```

```
[28]: from sklearn.model_selection import cross_val_score , train_test_split
      from sklearn.metrics import confusion_matrix , classification_report

[29]: x_train , x_test , y_train , y_test = train_test_split(x , y , test_size=0.3 ,
      ↪random_state=30)
```

## 4 MODEL 1 NAIVE BAYES MODEL

```
[30]: from sklearn.naive_bayes import MultinomialNB
      model1 = MultinomialNB()
      cv = cross_val_score(model1 , x, y , scoring='f1' , cv=10)
      print(cv)
```

```
[0.9801877  0.98426023 0.98439126 0.98442368 0.99168399 0.98962656
 0.98117155 0.98117155 0.97997893 0.98647242]
```

```
[31]: print(cv.mean() , cv.std())
```

```
0.9843367855160725 0.0037786742723651275
```

```
[32]: model1.fit(x_train , y_train)
      y_pred = model1.predict(x_test)
```

```
[33]: print(classification_report(y_test , y_pred))
```

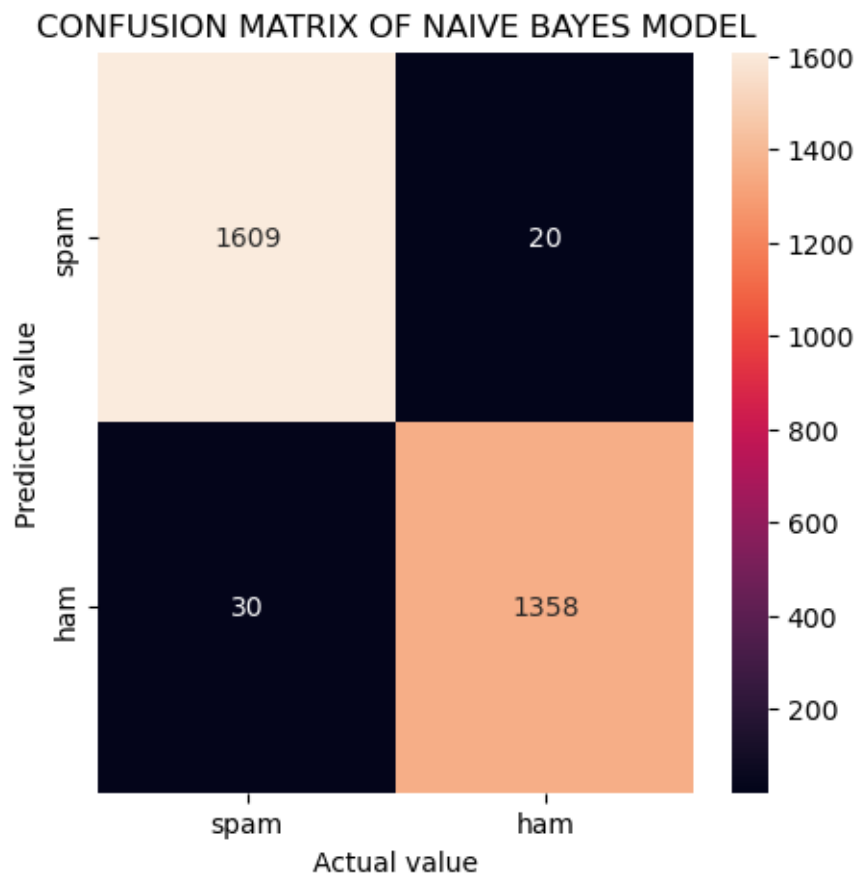
	precision	recall	f1-score	support
0	0.98	0.99	0.98	1629
1	0.99	0.98	0.98	1388
accuracy			0.98	3017
macro avg	0.98	0.98	0.98	3017
weighted avg	0.98	0.98	0.98	3017

```
[34]: cm = confusion_matrix(y_test , y_pred)

      plt.figure(figsize=(5,5))
      axis_labels = ['spam' , 'ham']
      g = sns.heatmap(data=cm , annot=True , xticklabels=axis_labels ,
      ↪yticklabels=axis_labels , fmt='g')
      plt.title("CONFUSION MATRIX OF NAIVE BAYES MODEL")
      plt.xlabel("Actual value")
      plt.ylabel("Predicted value")
```

```
[34]: Text(33.22222222222222, 0.5, 'Predicted value')
```





## 5 MODEL 2 DECISION TREE

```
[35]: from sklearn.tree import DecisionTreeClassifier
model2 = DecisionTreeClassifier()
cv = cross_val_score(model2 , x, y , scoring='f1' , cv=10)
```

```
[36]: print(cv.mean() , cv.std())
```

```
0.9833447042884096 0.002952414205627444
```

```
[44]: model2.fit(x_train , y_train)
y_pred1 = model2.predict(x_test)
```

```
[45]: print(classification_report(y_test , y_pred1))
```

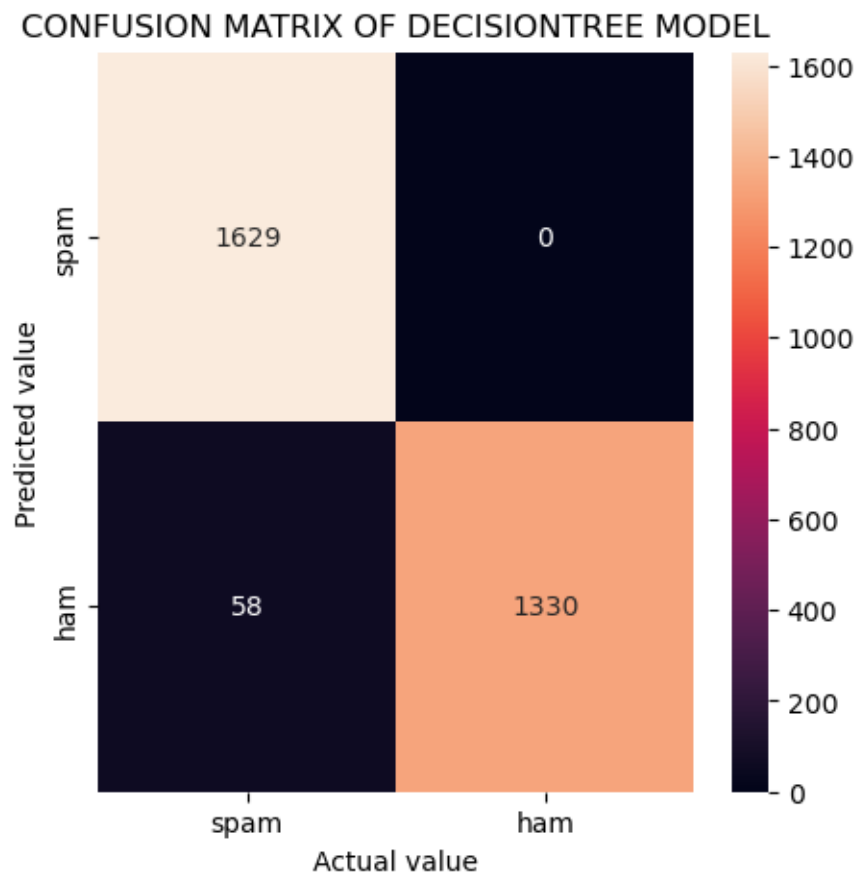
	precision	recall	f1-score	support
0	0.97	1.00	0.98	1629
1	1.00	0.96	0.98	1388

accuracy			0.98	3017
macro avg	0.98	0.98	0.98	3017
weighted avg	0.98	0.98	0.98	3017

```
[46]: cm1 = confusion_matrix(y_test , y_pred1)

plt.figure(figsize=(5,5))
axis_labels = ['spam' , 'ham']
g = sns.heatmap(data=cm1 , annot=True , xticklabels=axis_labels ,
                yticklabels=axis_labels , fmt='g')
plt.title("CONFUSION MATRIX OF DECISIONTREE MODEL")
plt.xlabel("Actual value")
plt.ylabel("Predicted value")
```

```
[46]: Text(33.2222222222222, 0.5, 'Predicted value')
```



```
[ ]:
```

```
[47]: def predict_spam(sms):  
    messege = re.sub(pattern = '^a-zA-Z' , repl=" " , string=sms) #filtering  
    ↪ all the special charactors and numbers  
    messege = messege.lower()  
    messege = messege.split()  
    messege = [word for word in messege if word not in set(stopwords.  
    ↪ words('english'))]  
    messege = [wnl.lemmatize(word) for word in messege]  
    messege = " ".join(messege)  
  
    temp = tfidf.transform([messege]).toarray()  
    return model1.predict(temp)
```

```
[ ]:
```

```
[ ]:
```

```
[ ]:
```