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# VIOLENT PYTHON #1

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- ❖ 2. [suninatas.com](http://suninatas.com) - Forensics

# 1. Violent Python

## - pyPdf

```
1 import pyPdf
2 import optparse
3 from pyPdf import PdfFileReader
4
5 ▼ def printMeta(filename):
6     pdfFile = PdfFileReader(file(filename, 'rb'))
7     docInfo = pdfFile.getDocumentInfo()
8     print "[*] PDF MetaData For : " + str(filename)
9     for metaItem in docInfo:
10         print "[+] " + metaItem + ":" + docInfo[metaItem]
11
12 ▼ def main():
13     parser = optparse.OptionParser('usage %prog -F <PDF file name>')
14     parser.add_option("-F", dest = "filename", type = "string", help = "specify
15 (options, args) = parser.parse_args()
16     fileName = options.filename
17 ▼ if fileName == > python pypdf.py -F Untitled.pdf
18     print pars [*] PDF MetaData For : Untitled.pdf
19     exit(0)    [+] /CreationDate:D:20180704145847Z00'00'
20 else:         [+] /ModDate:D:20180704145847Z00'00'
21     printMeta[+] /Producer:Mac OS X 10.13.5 Quartz PDFContext
22               [+] /Title:Untitled
23 if __name__ == " [+]/Creator:Keynote
24     main()
```

# 1. Violent Python

## - Exiftool

교환 이미지 파일 형식 (Exif, EXchangable Image File format)은 디지털 카메라에서 이용되는 이미지 파일 포맷이다. 이 데이터는 JPEG, TIFF 6.0과 RIFF, WAV 파일 포맷에서 이용되며 사진에 대한 정보를 포함하는 메타데이터를 추가한다. Exif는 JPEG 2000, PNG나 GIF 파일에서는 지원하지 않는다.

```
> exiftool monitor.jpg
ExifTool Version Number      : 11.04
File Name                    : monitor.jpg
Directory                   : .
File Size                    : 1436 kB
File Modification Date/Time  : 2018:07:05 03:27:
01+09:00
File Access Date/Time       : 2018:07:05 03:43:
59+09:00
File Inode Change Date/Time  : 2018:07:05 03:33:
46+09:00
File Permissions             : rw-r--r--
File Type                    : JPEG
File Type Extension          : jpg
MIME Type                    : image/jpeg
Exif Byte Order              : Little-endian (Intel, II)
Image Description            : SAMSUNG
Make                         : SAMSUNG
Camera Model Name            : SHW-M110S
Orientation                  : Horizontal (normal)
X Resolution                  : 72
Y Resolution                  : 72
Resolution Unit               : inches
Software                     : fw 49.01 prm 49.1
04
Modify Date                  : 2012:05:02 03:23:
```

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## 2. suninatas.com

### - #15

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Do you like music?  
Hint : AuthKey is in this file.

[Play the Music](#)

```
Band           : 3 a o ñ
Title          : 'ÙÀÌ¼î,®
Album          : 'ÙÀÌ¼î,®
Year           : 2011
Track          : 1
User Defined URL : http://ihoneydew.
com/
Picture MIME Type : image/jpeg
Picture Type     : Front Cover
Picture Description :
Picture         : (Binary data 1328
9 bytes, use -b option to extract)
Comment (kor)   : kpop.321.cn
Genre           : kpop.321.cn
Conductor      : GoodJobMetaTagSea
rch
```



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**Cipher I : What is it?**

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86 71 57 107 89 88 107 103 97 88  
77 103 89 83 66 110 98 50 57 107  
73 71 82 104 101 83 52 103 86 71  
104 108 73 69 70 49 100 71 104 76  
90 88 107 103 97 88 77 103 86  
109 86 121 101 86 90 108 99 110  
108 85 98 50 53 110 86 71 57 117  
90 48 100 49 99 109 107 104

```
> python base.py  
VG9kYXkgaXMgYSBnb29kIGRheS4gVGhlIEF1dGhLZXkgaXMgVmV  
yeVZlcnlUb25nVG9uZ0d1cmkh
```

```
Today is a good day. The AuthKey is VeryVeryTongTon  
gGuri!
```

VeryVeryTongTonGuri!

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**Cipher II : What is it?**

0100111001010110010000110101010001000110010001000101  
0110001000000100101101000110001000000100101001001100  
0100010101011010010001010101001001001011010100100100  
1010001000000101001001000101010101010010000001001011  
0100011001010101010100100101000000100000010110100100  
1010001000000101001000100000010110000100011001000110  
0101010100100000010101010101001001010000001000000101  
001001000101010101010100100000010100100100110001001011  
0101100101000010010101100101000000100000010110100100  
1010001000000100011101000011010100100101101001010101  
0101010001001011010101110101101001001010010011010101  
0110010010010101000001011001010100100100100101010101

```
> python bin.py
624
78

-----
#1 : NVCTFDV KF JLEZERKRJ REU KFURP ZJ R XFFU URP R
    EU RLKYBVP ZJ GCRZUTKWZJMVIPYRIU
-----

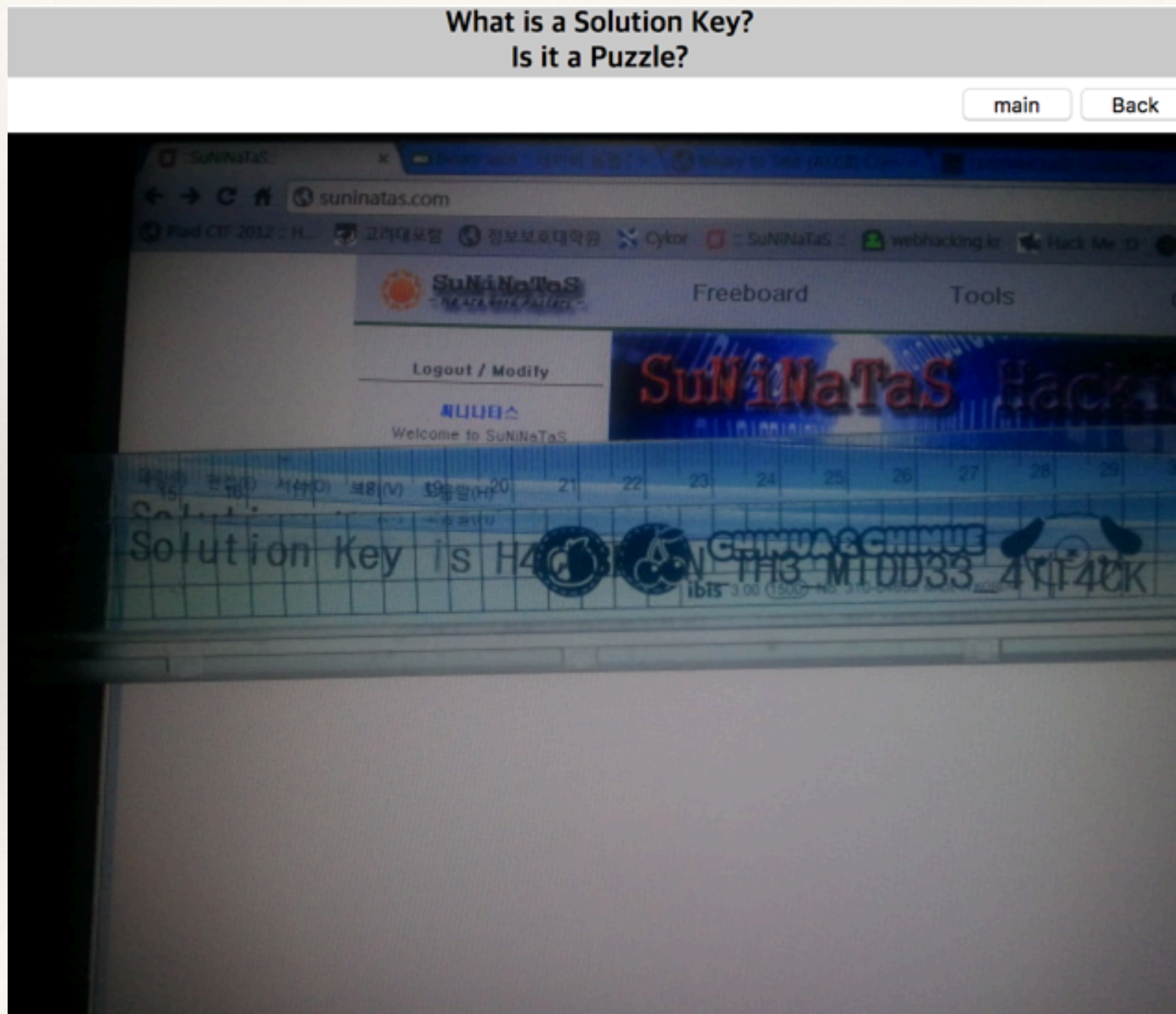
-----
#2 : OWDUGEW LG KMFAFSLSK SFV LGVSQ AK S YGGV VSQ S
    FV SMLZCWQ AK HDSAVULXAKNWJQZSJV
-----

-----
#3 : PXEVHFX MH LNGBGTMTL TGW MHWTR BL T ZHHW WTR T
    GW TNMADXR BL IETBWVMYBLOXKRATKW
-----

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#10 : WELCOME TO SUNINATAS AND TODAY IS A GOOD DAY
      AND AUTHKEY IS PLAIDCTFISVERYHARD
-----
```

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### - #21

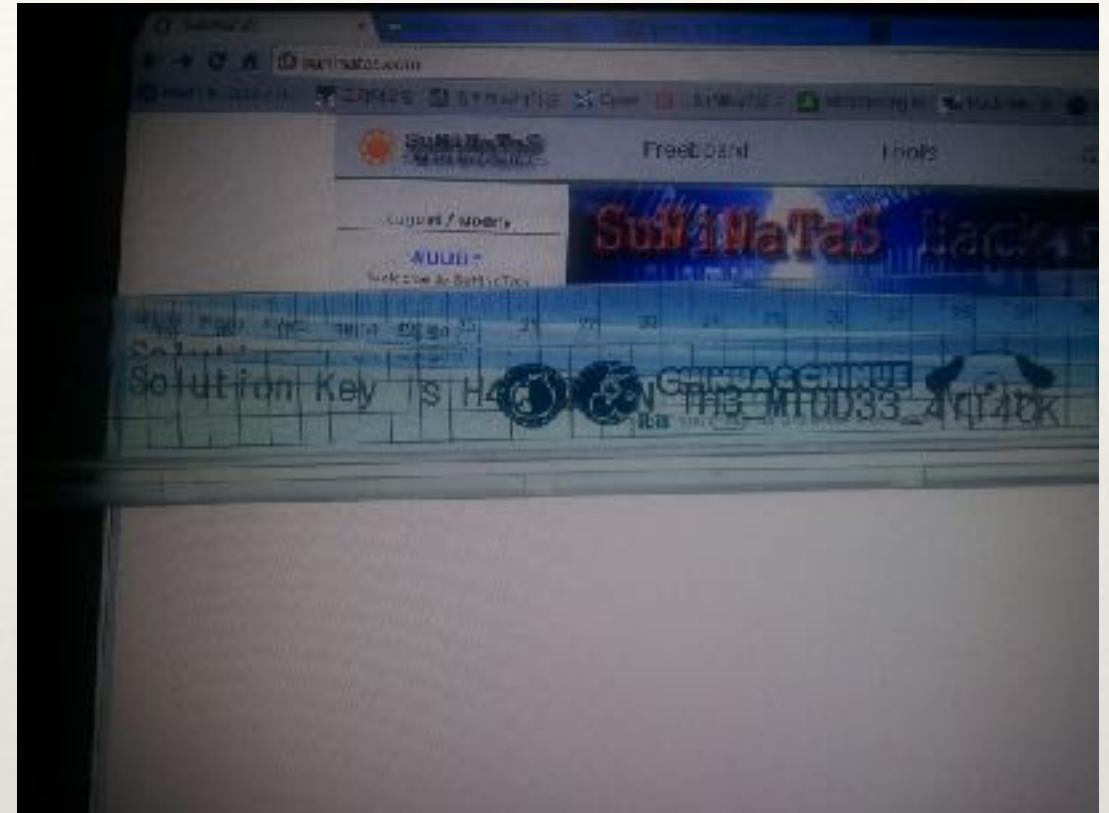




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- #21

y~Exif II*					
f	Ã	(	1	'	2
id	,	E	SAMSUNG		SAMSUNG
SHW-M110S H	H	fw 49.01 prm	49.104	2012:05:02	0
3:23:52 ! öÇ	e	ùÇ	n	"à	'à
0220 e	ú	e	≤	e	i
i	÷	i	n	i	E
i	ó	li	-	†	0100 †
Ä	†	†	†	»	‡
§	§	§	§	§	§
§	§	§	§	§	§
e 2012:05:02 03:23:52 20					
†'ft` 1d[ öC`y~.'æExif II*					
f	Ã	(	1		
'	2	E	id	,	E
SAMSUNG	SHW-M110S H	H	fw 49.01 prm	49.10	
4	2012:05:02	03:25:22 ! öÇ	e	ùÇ	n
÷ iFH	ûµROAôΣEA8ns,zPO(α`y~.)	Exif II*			i
¶	f	Ã	(		
1	'	2	E	id	,
SAMSUNG	SHW-M110S H	H	fw 49.		
01 prm	49.104	2012:05:02	03:25:47 ! öÇ	e	ùÇ
			n	"à	



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### - #21

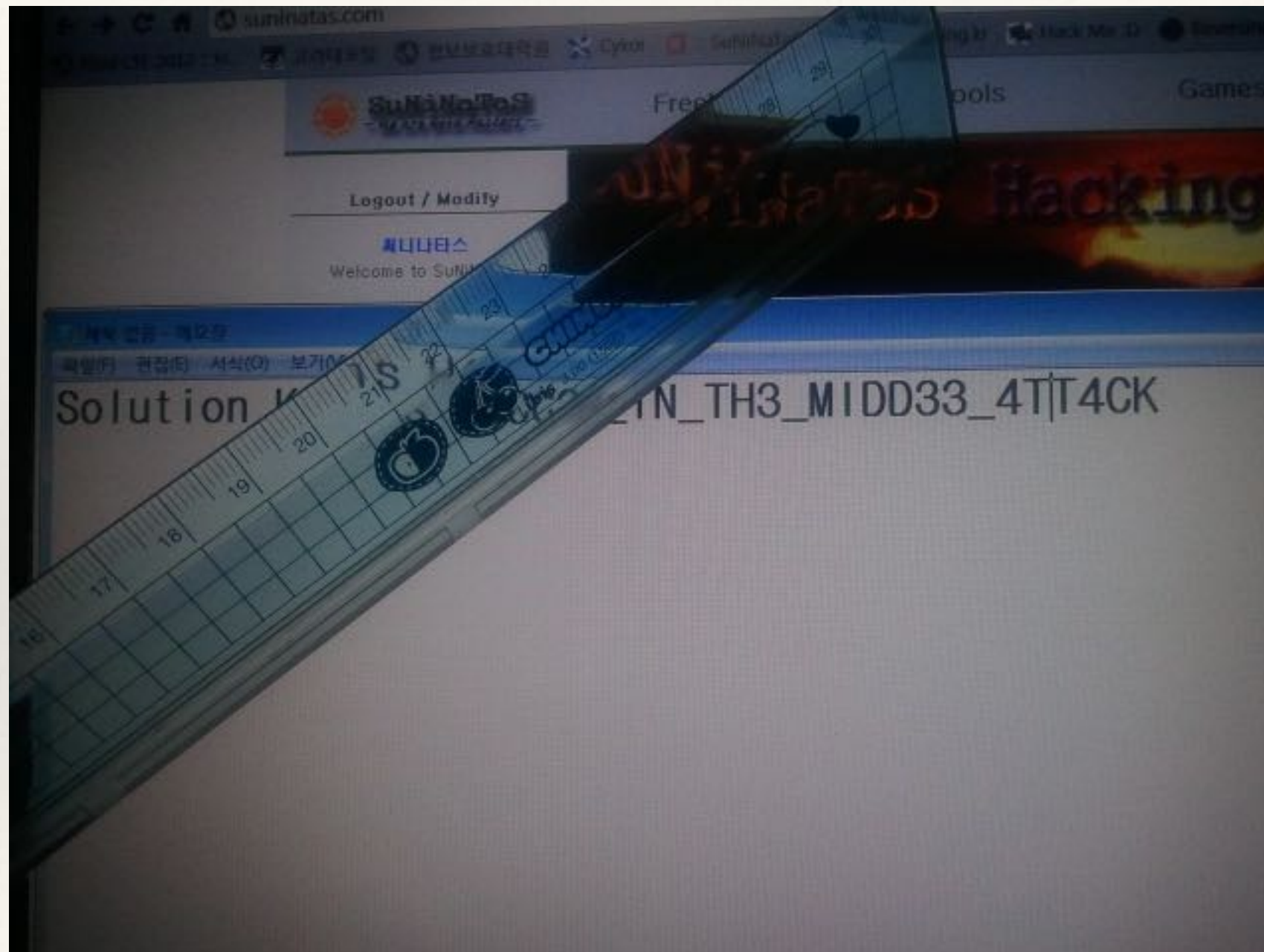
---



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#### Cipher III : Frequency analysis

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This challenge is to recover the plaintext from the following ciphertext using frequency analysis:

szqkagczvcvyabpsyincgozdainvscbnivpnzvpbnfykqhzmmpcqhzygzgfcxznvvzgdfnvbnjiyfxmpcqhzygbpnoyaimygbzgng  
bvmcqhzygcbpinnbzqndicgxhiztozgcfmqchzygbpniyfxeagzyimpcqhzygbpneagzyidicgxhiztozgcfmqchzygcgxcoyaib  
zqnvabpsyincggcbzygcfmqchzygszqzvpnozibvyabpsyincgozdainvscbnibyjjzgcqnxcfcbcgzvaeagzyiyivngzyidicgxhizt  
nungbzvampcqhzygvpzhcgxbpnyfkqhzmhcqnvvpnzvpnozibonqcfnvscbnibyjjzgbpnyfkqhzmhcqnvbnjiyfxmpcqhzygv  
pzhvbnnoyaimygbzgngbvmcqhzygvpzhvcgxbpndicgxhiztozgcfvpnzvygnyobpnqyvbzdpfkinmydgzlnxcbpfnbvncgxqn  
xzcozdainvzgvabpsyinccvyochizfbpzvkncivpnzvicgsnxvnmygxzgbpniyfxrkbpnzgbnigcbzygcfvscbzgdagzygvpnzvpbnm  
aiingbinmyixpyfxnioyifcxznvzgbpnpvyibhiydicqbnoinnvscbzgdcgxbpnmyqrzgnxbybcfagxnibpnzvaeaxdzgdvkvbnqvpnz  
vcfvybpnozibonqcfnvscbnibyvhicvvbpnbjypaxincxhyzgbqcisagxnibpnzvaeaxdzgdvkvbnqvpnpvcvgnunirnnghfcmnxyoo  
bpnhyxzaqzgpningbzinmcinni

Note that we have omitted the blank letters and punctuation marks of the plaintext.




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- #26

Intercept:

NVZGVYABPSYINCCVYOCHIZFBPZVKNCIVPNZVICGSN  
XVNMYGXZGBPNJYIFXRKBPNZGBNIGCBZYGCFVSCBZ  
GDAGZYGVPNZVBPNMAIINGBINMYIXPYFXNIOYIFCXZN  
VZGBPNVPYIBHIYDQCBPNOINNVSGBZGDCGXBPNNYQ  
RZGNXBYBCFAGXNIBPNZVAEAXDZGDVKVBNQVPNZVC

Reset

 Crypto  
Corner

Ciphertext:

diessinglestheworldchampionthefourcontinentschampionathreeti  
megrandprixfinalchampiontheworldjuniorchampionthejuniorgrand  
prixfinalchampionandafourtimesouthkoreannationalchampionkimi  
sthefirstsouthkoreanfigureskatertowinamedalatanisujuniororsenio  
rgrandprixeventisuchampionshipandtheolympicgamessheisthefirs  
tfemaleskatertowintheolympicgamestheworldchampionsthefo  
urcontinentschampionshipsandtheGrandPrixfinalsheisoneofthemo  
sthhighlyrecognizedathletesandmediafiguresinsouthkoreaasofaril  
thisyearsheisrankedsecondintheworldbytheinternationalskatingun  
ionsheisthecurrentrecordholderforladiesintheshortprogramthefre

Find Frequencies

Make Substitutions

Remove spaces

Options:

Count Digraphs

Count Trigraphs

Count Doubles

The frequencies of the English language are:

E	T	A	O	I	N	S	H	R	D	L	C	U	M	W	F	G	Y	P	B	V	K	J	X	Q	Z
12.7	9.1	8.2	7.5	7.0	6.7	6.3	6.1	6.0	4.3	4.0	2.8	2.8	2.4	2.4	2.2	2.0	2.0	1.9	1.5	1.0	0.8	0.15	0.15	0.10	0.07

The frequencies of the intercept are:

N	Z	G	B	C	V	I	Y	P	X	Q	A	H	F	M	O	D	S	K	J	E	T	R	U	L	W
92	78	69	65	65	62	60	59	58	31	30	27	26	25	22	20	19	14	9	7	5	4	3	2	1	0
10.8	9.1	8.1	7.6	7.6	7.3	7.0	6.9	6.8	3.6	3.5	3.2	3.0	2.9	2.6	2.3	2.2	1.6	1.1	0.8	0.6	0.5	0.4	0.2	0.1	0.0
e	i	n	t	a	s	r	o	h	d	m	u	p	l	c	f	g	k	y	w	j	x	b	v	z	

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The most common trigraphs in the english language are:  
THE,AND,THA,ENT,ION,TIO,FOR,NDE,HAS,NCE,TIS,OFT,MEN

The most common trigraphs in the message are:  
BPN,QHZ,ZYG,MPC,PCQ,CQH,HZY,PNZ,VBP,CGX,NZV,VPN,VSC

The most common digraphs in the english language are:  
TH,HE,AN,IN,ER,ON,RE,ED,ND,HA,AT,EN

The most common digraphs in the message are:  
BP,PN,ZG,ZY,YG,YI,IN,GB,CG,NV,VB,CQ,ZV

The most common double letters in the english language are:  
SS,EE,TT,FF,LL,MM,OO

The most common double letters in the message are:  
NN,VV,MM,GG,CC,II,OO

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[illegible]

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Female: females

she: she has

Dames: games or names

system: system

highly: highly

first: first

her: her entire

career: career



QUESTIONS?