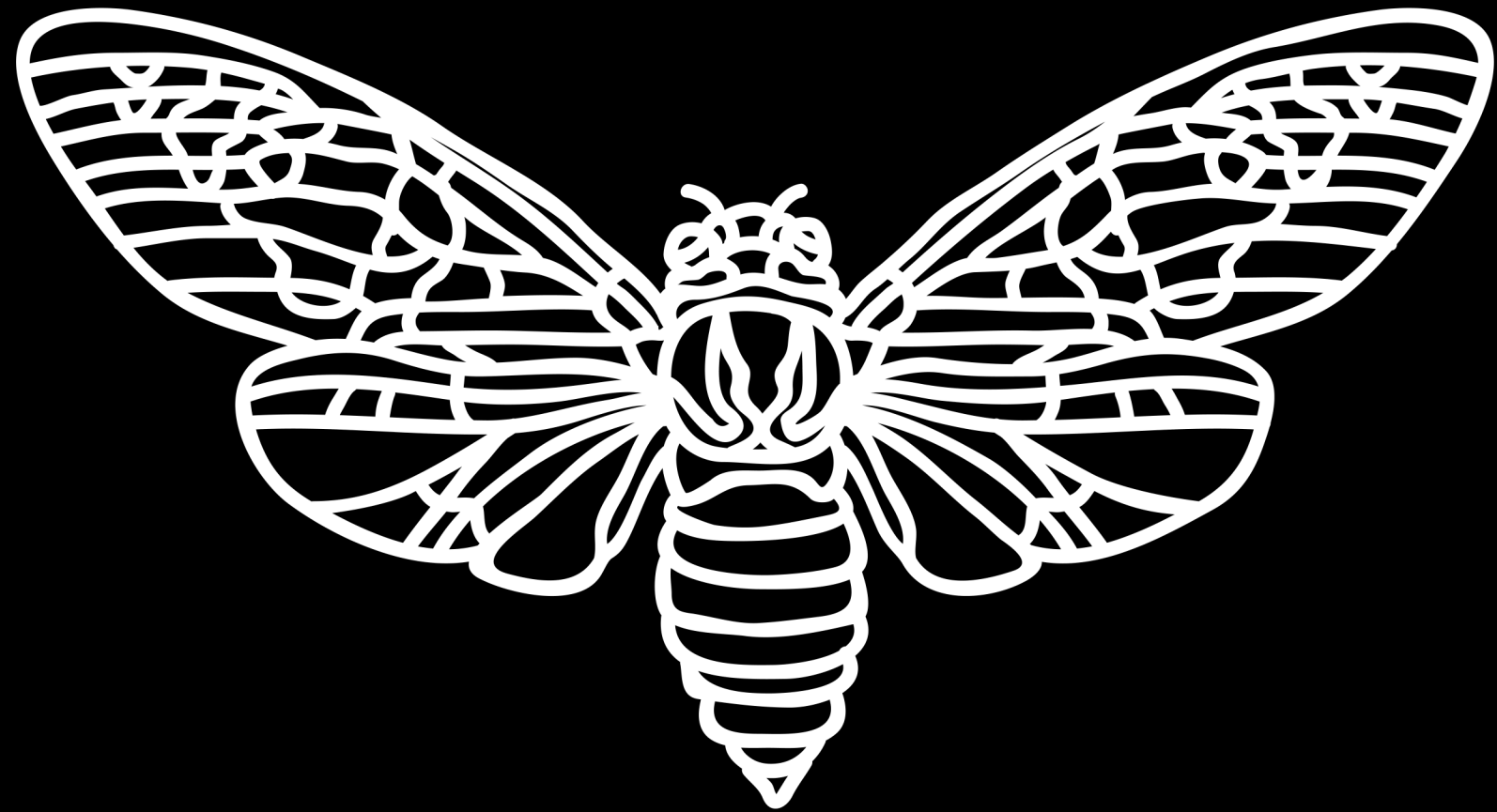


Cicada 3301

The Mystery

@iBotPeaches



Story Time

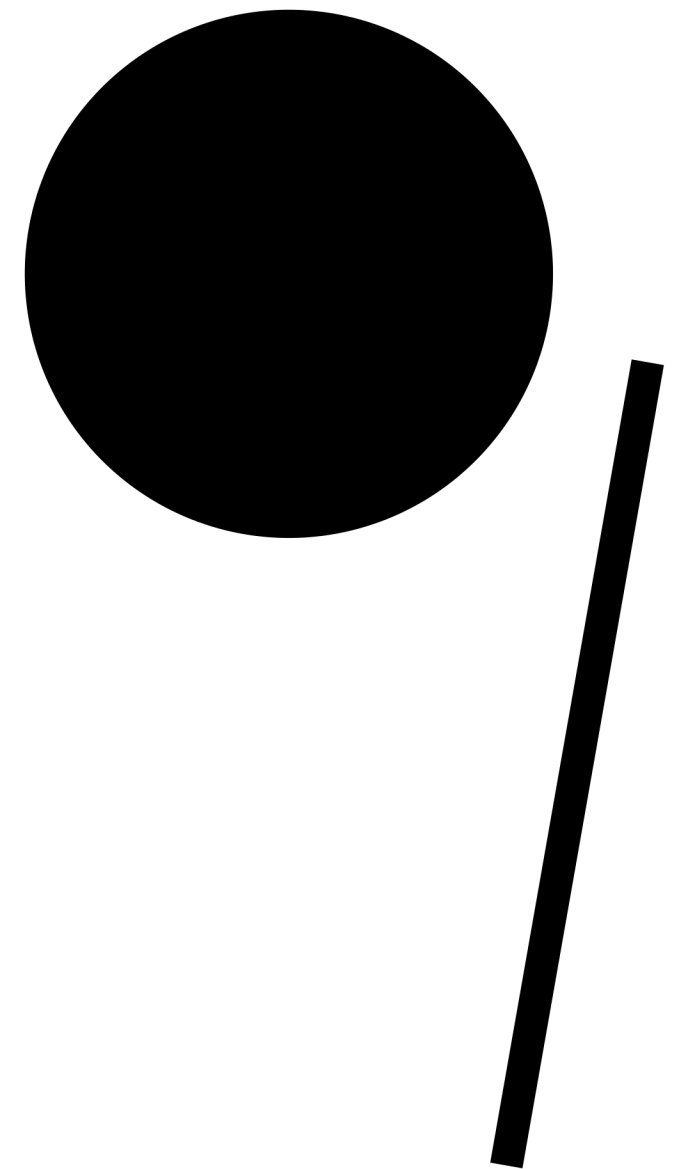
- Cicada 3301
- 3 Puzzles
- Worldwide Hunt
- Largely Unknown
- Scary

Who

- Connor Tumbleson
- @iBotPeaches



**Lets turn
the clocks
back**



Jan 5, 2012

4chan.org

- Weird part of the Internet
- *"hidden in this image"*



Hello. We are looking for highly intelligent individuals. To find them, we have devised a test.

There is a message hidden in this image.

Find it, and it will lead you on the road to finding us. We look forward to meeting the few that will make it all the way through.

Good luck.

3301

Puzzle 1 - Hex Editor

```
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 01  QE..QE..QE..QE..
FF D9 54 49 42 45 52 49 | 56 53 20 43 4C 41 56 44  ↓TIBERIVS CLAVD
49 56 53 20 43 41 45 53 | 41 52 20 73 61 79 73 20  IVS CAESAR says
22 6C 78 78 74 3E 33 33 | 6D 32 6D 71 6B 79 76 32  "l>33m2mqkyv2
67 73 71 33 71 3D 77 5D | 4F 32 6E 74 6B 22 0A + gsq3q=w]02ntk".
```

Puzzle 1 - Hex Editor

```
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 00  QE..QE..QE..QE..
51 45 14 00 51 45 14 00 | 51 45 14 00 51 45 14 00 51 45 14 01  QE..QE..QE..QE..
FF D9 54 49 42 45 52 49 | 56 53 20 43 4C 41 56 44  J TIBERIVS CLAVD
49 56 53 20 43 41 45 53 | 41 52 20 73 61 79 73 20  IVS CAESAR says
22 6C 78 78 74 3E 33 33 | 6D 32 6D 71 6B 79 76 32  "lxxt>33m2mqkyv2
67 73 71 33 71 3D 77 5D | 4F 32 6E 74 6B 22 0A + gsq3q=w]02ntk".
```

Puzzle 1 - Caesar Cipher

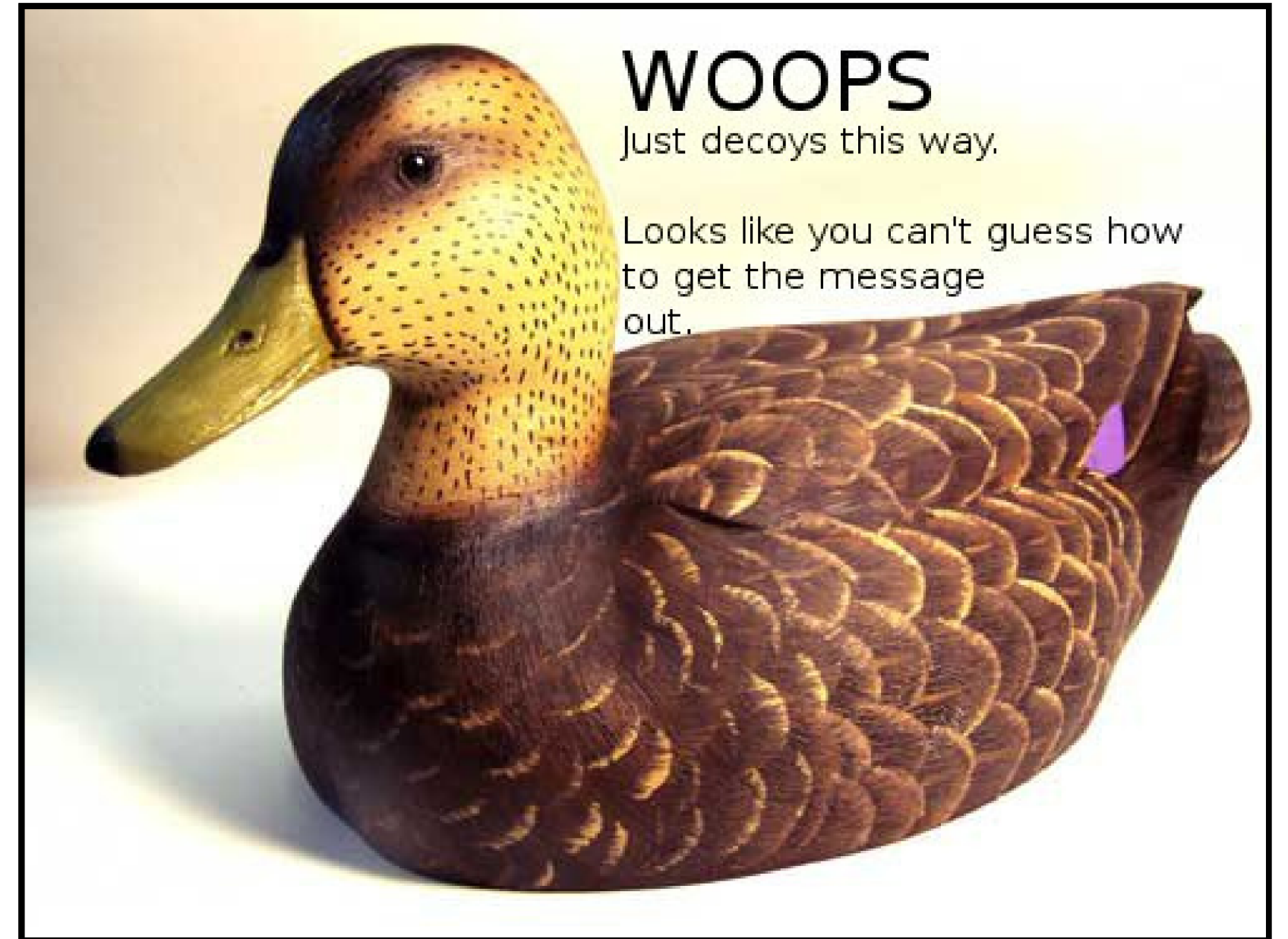
- *lxxt> 33m2mqkyv2gsq3q = w] 02ntk*
- ROT0 - ROT26 - “rotates” text

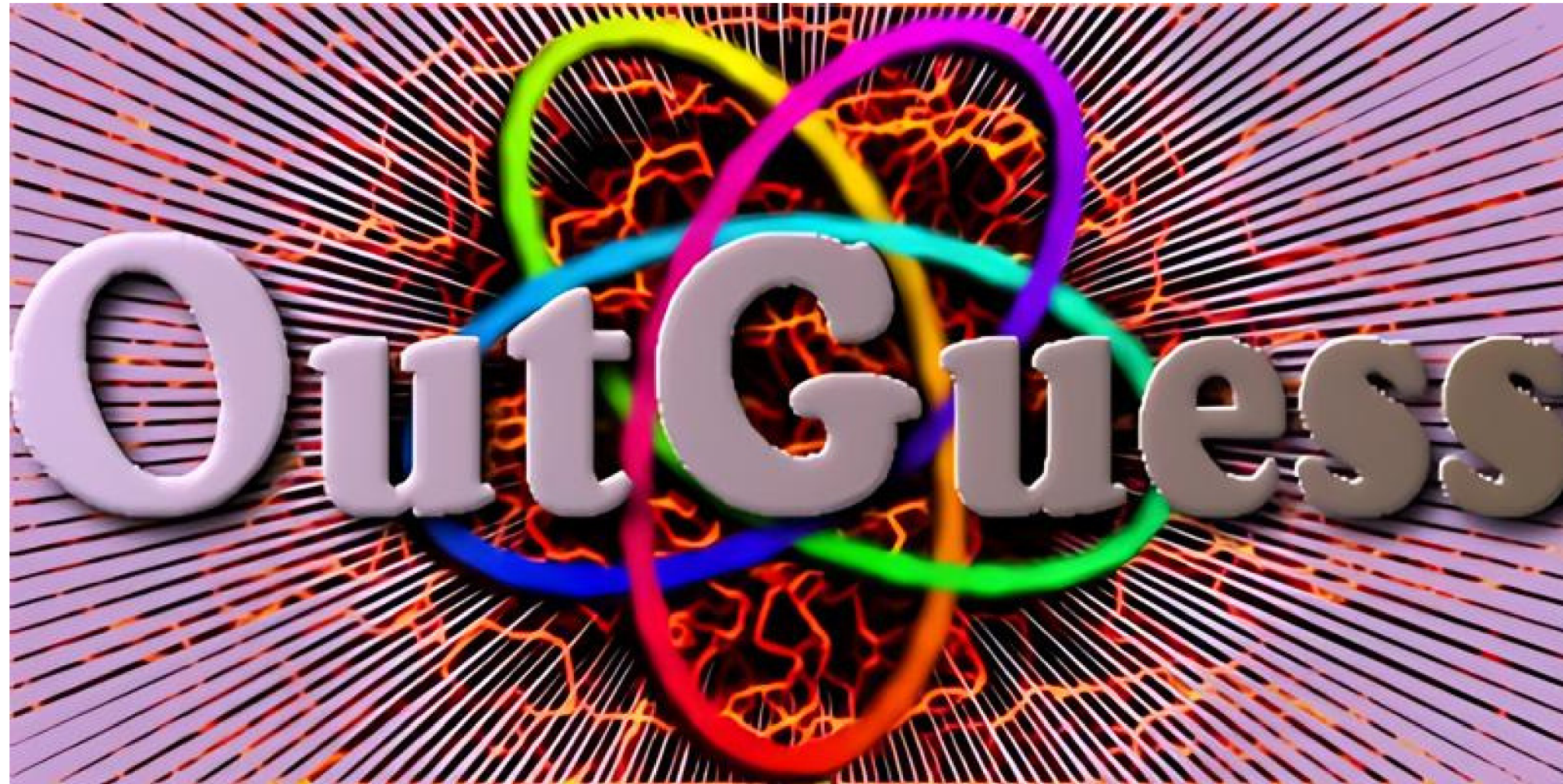
Puzzle 1 - Caesar Cipher

- *lxxt> 33m2mqkyv2gsq3q = w] 02ntk*
- ROT0 - ROT26 - "rotates" text
- **+4 - <http://i.imgur.com/m9sYK.jpg>**

The Decoy

- Decoy Image
- *"can't guess how"*
- *"to get image out"*





Niels Provos

OutGuess is a universal steganographic tool that allows the insertion of hidden information into the redundant bits of data sources.

Outguess

```
→ cicada outguess -r 3301orig2012cesarincluded.jpg out2.txt
```

```
Reading 3301orig2012cesarincluded.jpg....
```

```
Extracting usable bits: 29049 bits
```

```
Steg retrieve: seed: 228, len: 535
```

```
→ cicada cat out2.txt
```

```
Here is a book code. To find the book, and more information, go to http://www.reddit.com/r/a2e7j6ic78h0j/
```

1:20

2:3

3:5

4:20

5:5

6:53

Outguess

```
→ cicada outguess -r 3301orig2012cesarincluded.jpg out2.txt
```

```
Reading 3301orig2012cesarincluded.jpg....
```

```
Extracting usable bits: 29049 bits
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```
Steg retrieve: seed: 228, len: 535
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→ cicada cat out2.txt
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Here is a book code. To find the book, and more information, go to http://www.reddit.com/r/a2e7j6ic78h0j/
```

1:20

2:3

3:5

4:20

5:5

6:53

Welcome to Reddit. Come for the cats, stay for the empathy.

BECOME A REDDITOR and start exploring.



Search bar and login fields: search, username, password, remember me, reset password, login

Submissions restricted Only approved users may post in this community.

reddit premium advertisement: Get an ad-free experience with special benefits, and directly support Reddit. Get Reddit Premium

- 1 10 Valēte! (i.imgur.com) submitted 7 years ago by CageThrottleUs
2 2 djsl aoltlz? Nhta snwe uawg I nqbl mu ltlm, khta hzcn fhpwlnuh hvz (self.a2e7j6ic78h0j)
3 2 djs ctrdqf, igpkvouvbag ng axf ghrofs, 'Vp, Bbnvl, kant ics ltcznl (self.a2e7j6ic78h0j)
4 2 gkho eokflvznz ac lvx oisfs, vq, o tnxegyqeg ovwus pns igabf hokumso (self.a2e7j6ic78h0j)
5 2 osihe zg foik, ebavwf urfpte yt gpgiw. Mul nhxu W ool zotv crcftxj (self.a2e7j6ic78h0j)
6 2 ercu mnw fymv, agk gsbz. Nne vrenm, Rto, A zldvr alojr tay nglyfm (self.a2e7j6ic78h0j)
7 1 djsu mnw erg sevhow qeras, cnn ywaa zzma, jvhhsr lvx oisfs vkuomkv (self.a2e7j6ic78h0j)
8 1 Gjsu B rgarmu og avw hkre ujebg khl tgf h aznzss dsts uqqn sv, ouw (self.a2e7j6ic78h0j)
9 1 erdlk vsda ww im vjwf fl oxp hocr. Hgj ltba Z wbavkhhd uje cjcdxx. (self.a2e7j6ic78h0j)
10 1 bgojakv fom sogl. W likaee oy rrfzx'y xxhvb thdojrl ghf uhyysy, ttv (self.a2e7j6ic78h0j)
11 2 mcb lgjmdl byam zvgkxe aof lsxs. Mhx faa wee hm hzclr hbklcvcuxy (self.a2e7j6ic78h0j)



Community profile for a2e7j6ic78h0j: 1,341 readers, 6 users here now, a2e7j6ic78h0j7eiejd0120, Verify: 7A35090F, created by CageThrottleUs, a community for 7 years, MODERATORS Pixelated_Fudge, message the moderators, about moderation team >>

The Subreddit

- 2 images
- Many lines of gibberish

1  165  [Valēte!](#) (i.imgur.com)
submitted 12 years ago by [CageThrottleUs](#)
 **57 comments** [share](#) [save](#) [hide](#) [report](#)

2  10 
[djsl aoltlz? Nhta snwe uawg I nqbl mu ltlm, khta hzcn fhpwlnuh hvz](#)
(self.a2e7j6ic78h0j)
submitted 12 years ago by [CageThrottleUs](#)
14 comments [share](#) [save](#) [hide](#) [report](#)

3  10 
[djs ctrdqf, igpkvouvbag ng axf ghrofs, 'Vp, Bnbvnl, kant ics ltcbznl](#) (self.a2e7j6ic78h0j)
submitted 12 years ago by [CageThrottleUs](#)
9 comments [share](#) [save](#) [hide](#) [report](#)

Rotation Cipher?

ROT-0: Ukbn Txlbtz nal hh Uoxelmgox wdvq Akw; hvu ogl rsm ar sbv ix jwz

ROT-1: Vlco Uymuca obm ii Vpyfmnhpy xewh Blx; iww phm stn bs tcw jy kxa

ROT-2: Wmdp Vznvdb pcn jj Wqzgnoiqz yfxi Cmy; jxw qin tuo ct udx kz lyb

ROT-3: Xneq Waowec qdo kk Xrahopjra zgyj Dnz; kyx rjo uvp du vey la mzc

ROT-4: Yofr Xbpxfd rep ll Ysbipqksb ahzk Eoa; lzy skp vwq ev wfz mb nad

ROT-5: Zpgs Ycqyge sfq mm Ztcjqrltc bial Fpb; maz tlq wxr fw xga nc obe

ROT-6: Aqht Zdrzhf tgr nn Audkrsmud cjbm Gqc; nba umr xys gx yhb od pcf

ROT-7: Briu Aesaig uhs oo Bvelstnve dkcn Hrd; ocb vns yzt hy zic pe qdg

ROT-8: Csjv Bftbjh vit pp Cwfmtuowf eldo Ise; pdc wot zau iz ajd qf reh

ROT-9: Dtkw Cgucki wju qq Dxgnvpxg fmep Jtf; qed xpu abv ja bke rg sfi

ROT-10: Eulx Dhvdlj xkv rr Eyhovwqyh gnfq Kug; rfe yqv bcw kb clf sh tgj

Rotation Cipher?

ROT-11: Fvmy Eiwemk ylw ss Fzipwxrzi hogr Lvh; sgf zrw cdx lc dmg ti uhk

ROT-12: Gwnz Fjxfnl zmx tt Gajqxysaj iphs Mwi; thg asx dey md enh uj vil

ROT-13: Hxoa Gkygom any uu Hbkryztbk jqit Nxj; uih bty efz ne foi vk wjm

ROT-14: Iypb Hlzhpn boz vv Iclszauc lkrju Oyk; vji cuz fga of gpj wl xkn

ROT-15: Jzqc Imai qo cpa ww Jdmtabvdm lskv Pzl; wkj dva ghb pg hqk xm ylo

ROT-16: Kard Jnbjrp dqb xx Kenubcwen mtlw Qam; xlk ewb hic qh irl yn zmp

ROT-17: Lbse Kocksq erc yy Lfovcdxfo numx Rbn; yml fxc ijd ri jsm zo anq

ROT-18: Mctf Lpdltr fsd zz Mgpwdeygp ovny Sco; znm gyd jke sj ktn ap bor

ROT-19: Ndug Mqemus gte aa Nhqxefzhq pwoz Tdp; aon hze klf tk luo bq cps

ROT-20: Oevh Nrfnvt huf bb Oiryfgair qxp Ueq; bpo iaf lmg ul.mvp cr dqt

Rotation Cipher?

ROT-21: Pfwl Osgowu ivg cc Pjszghbjs ryqb Vfr; cqp jbg mnh vm nwq ds eru

ROT-22: Qgxj Pthpxv jwh dd Qktahickt szrc Wgs; drq kch noi wn oxr et fsv

ROT-23: Rhyk Quiqyw kxi ee Rlubijdlu tasd Xht; esr ldi opj xo pys fu gtw

ROT-24: Sizl Rvjrxz lyj ff Smvcjkemv ubte Yiu; fts mej pqk yp qzt gv hux

ROT-25: Tjam Swksay mzk gg Tnwdklfnw vcuF Zjv; gut nfk qrl zq rau hw ivy

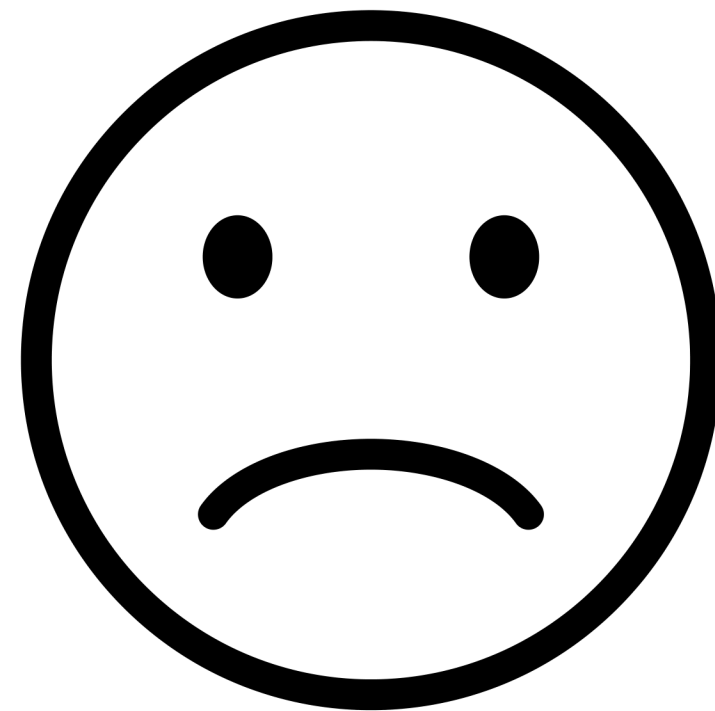


Image 1



Image 2



Outguess

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

- From here on out, we will cryptographically sign all messages with this key.

It is available on the mit keyserver. Key ID 7A35090F, as posted in a2e7j6ic78h0j.

Patience is a virtue.

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

iQIcBAEBAGBQJPBRz7AAoJEBgfAeV6NQkP1UIQALFc08DyZkecTK5pAIcGez7k

Outguess

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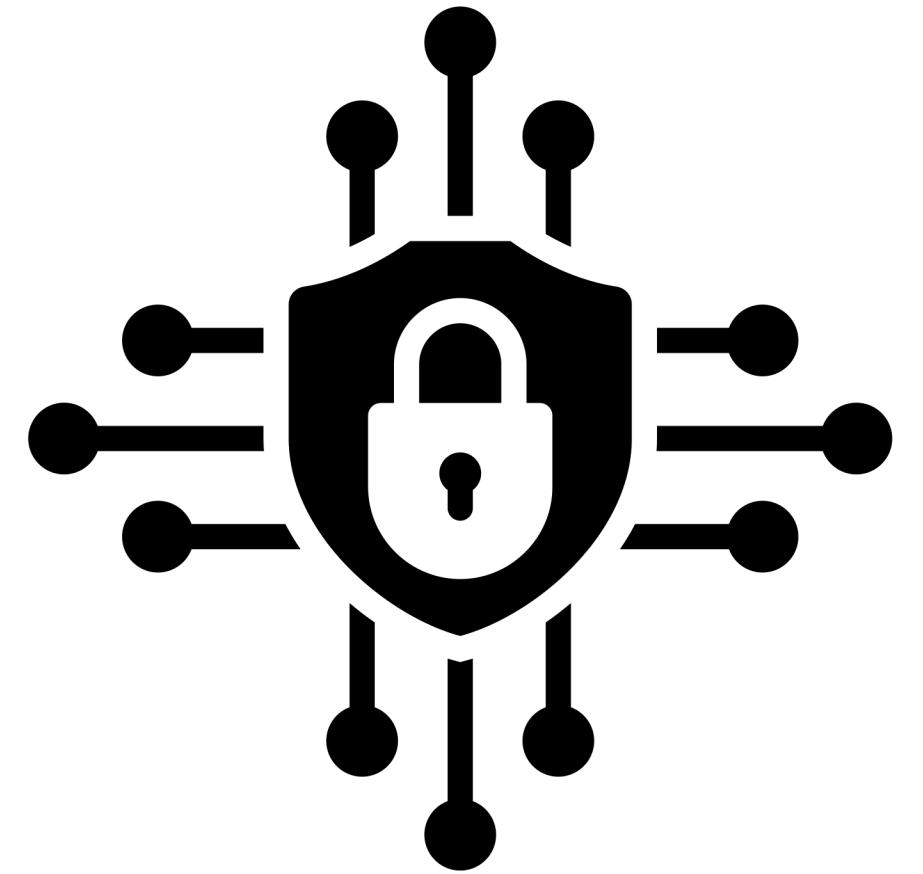
-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

iQIcBAEBAGBQJPBRz7AAoJEBgfAeV6NQkP1UIQALFc08DyZkecTK5pAIcGez7k

GPG / PGP

- Integrity
- Confidentiality
- Signing



```
gpgv: Signature made Thu Jan 5 03:46:03 2012 UTC
gpgv: using RSA key 181F01E57A35090F
gpgv: Good signature from "Cicada 3301 (845145127)"
```

Outguess

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

The key has always been right in front of your eyes.

This isn't the quest for the Holy Grail. Stop making it more difficult than it is.

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

Reddit Header













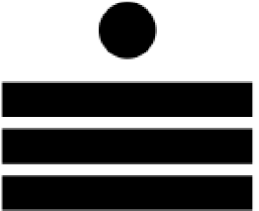
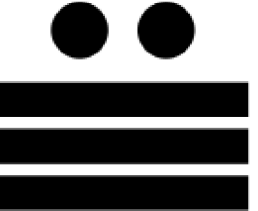
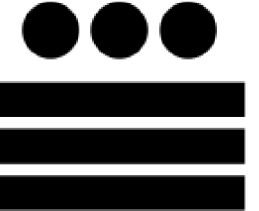
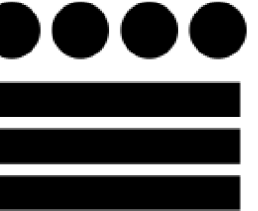


The image shows a horizontal navigation bar with various icons and text labels. The icons include a home icon, a search icon, a notification icon, a profile icon, a community icon, a trending icon, a search icon, a community icon, a trending icon, a search icon, a community icon, a trending icon, a search icon, a community icon, a trending icon, and a search icon. The text labels are: hot, new, rising, controversial, top, gilded, and A2E7J6IC78H0J.

hot new rising controversial top gilded A2E7J6IC78H0J

Mayan Numerals

- Base 20
- Zero (shell)
- One (dot)
- Five (bar)

0	1	2	3	4
	•	••	•••	••••
5	6	7	8	9
				
10	11	12	13	14
				
15	16	17	18	19
				

Reddit Sidebar

a2e7j6ic78h0j

join 1,352 readers

 4 users here now

a2e7j6ic78h0j7eiejd0120

Verify: 7A35090F

created by [CageThrottleUs](#)

a community for 7 years

Reddit Sidebar

a2e7j6ic78h0j

join 1,352 readers

● 4 users here now

a2e7j6ic78h0j7eiejd0120

Verify: 7A35090F

created by [CageThrottleUs](#)

a community for 7 years

Letters to Numbers

a

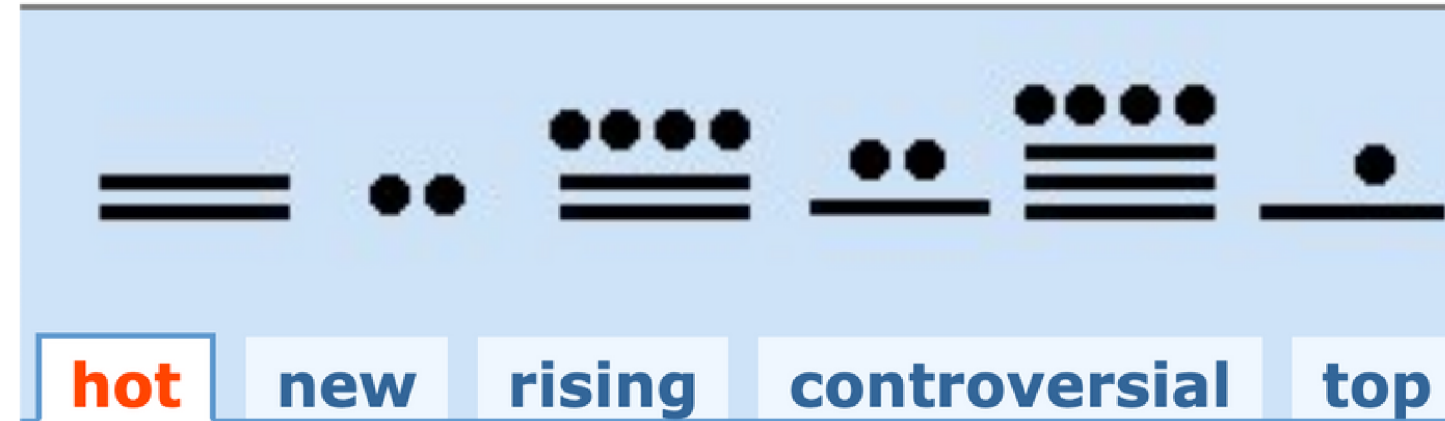
2

e

7

j

6



The image shows a horizontal bar with a light blue background. Above the bar are six Braille icons: two parallel horizontal lines, two dots, four dots in a row above two parallel horizontal lines, two dots above a horizontal line, four dots in a row above three parallel horizontal lines, and one dot above a horizontal line. Below the bar are five text buttons: "hot" (in red), "new", "rising", "controversial", and "top" (all in blue).

Letters to Numbers

a

2

e

7

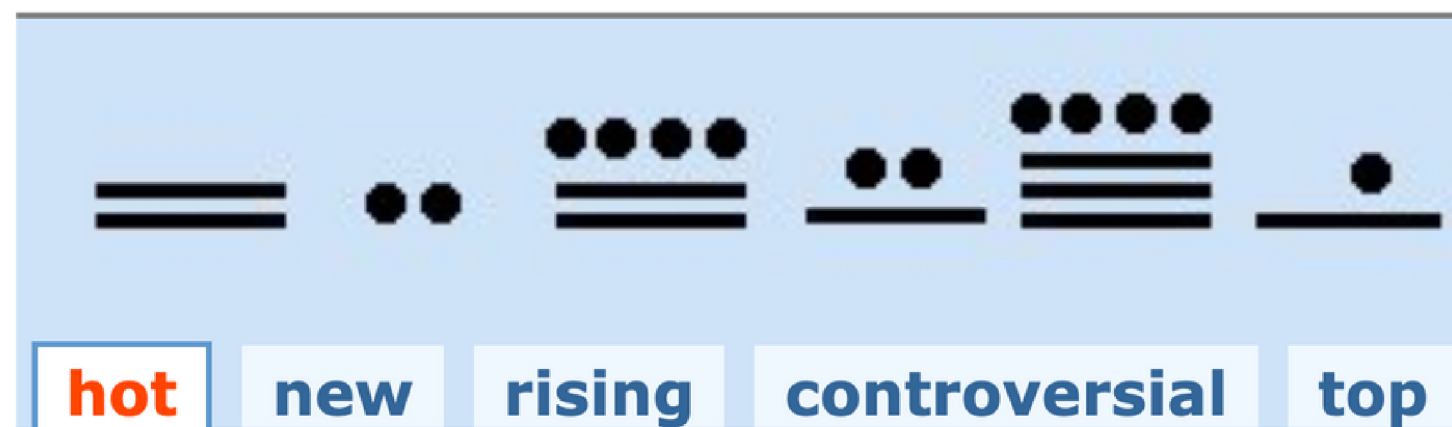
j

6

A horizontal notification bar with a light blue background. It features a yellow ghost icon with two eyes in the center. To the left of the icon are two horizontal lines. To the right of the icon are four sets of icons: four dots above two lines, two dots above one line, four dots above three lines, and one dot above one line. Below the bar are five buttons with the following text: **hot** (in red), **new**, **rising**, **controversial**, and **top**.

Letters to Numbers

a 2 e 7 j 6



10 2 14 7 19 6

The Number

10 2 14 7 19 6 18 12 7 8 17 0 19
7 14 18 14 19 13 0 1 2 0

The book?

*dj sl a o l t l z ? N h t a s n w e u a w g l n q b l m u
l t l m , k h t a h z c n f h p w l n u h h v z*

10 2 14 7 19 6 18 12 7 8 17 0 19
7 14 18 14 19 13 0 1 2 0

The book?

djst aoltz?

10 2 14 7 19 6 18 12 7 8

Vigenere Cipher

- d shift 10
- j shift 2
- s shift 14
- l shift 7
- a shift 19
- o shift 6
- l shift 18
- t shift 12
- l shift 7
- z shift 8

Vigenere Cipher

- d shift 10 t
- j shift 2 h
- s shift 14 e
- l shift 7 e

- a shift 19 h
- o shift 6 i
- l shift 18 t
- t shift 12 h
- l shift 7 e
- z shift 8 r

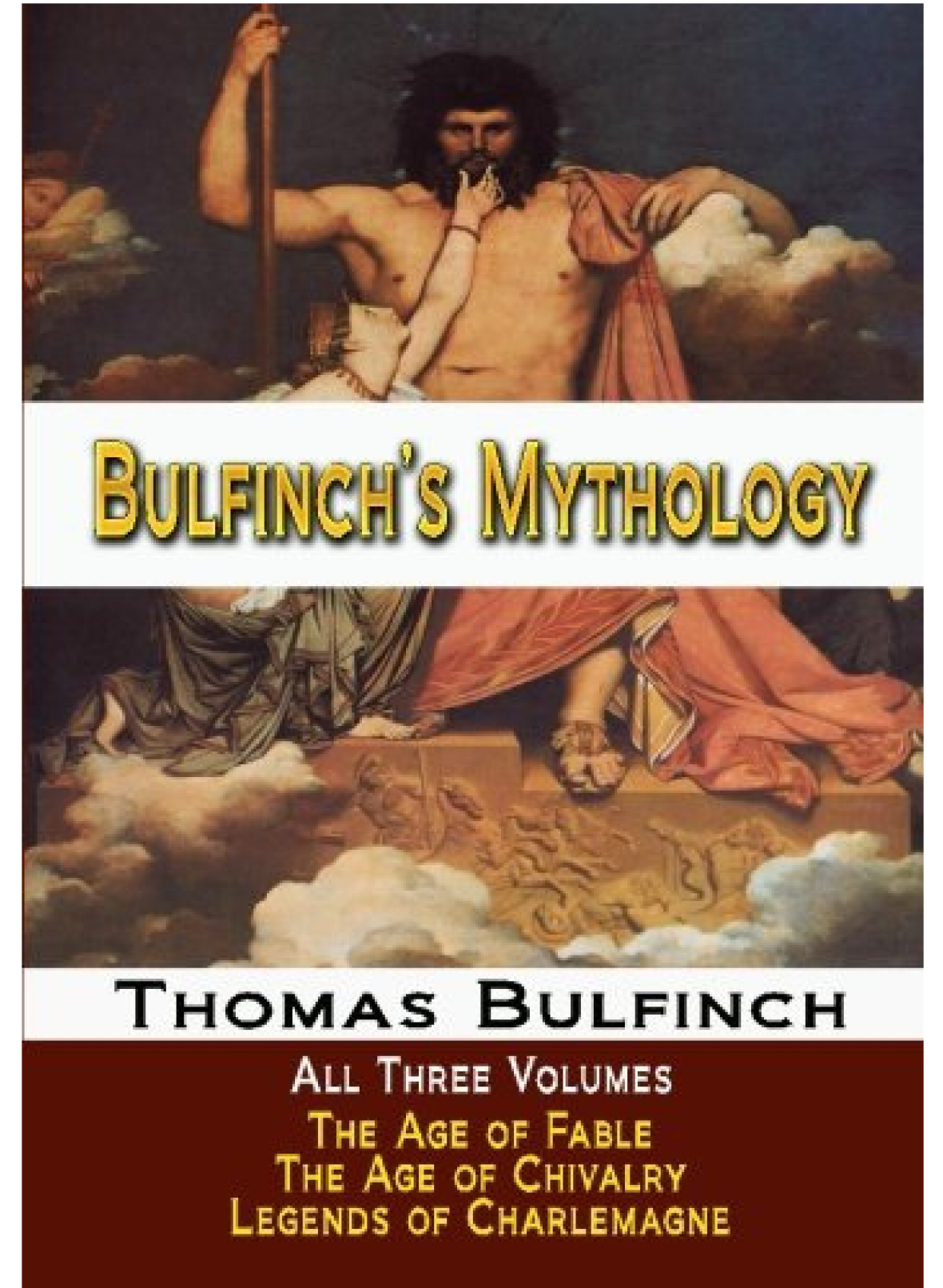
The book

thee hither? What evil have I done
to thee, that thou shouldst act

the valley, approaching me and
saying, 'Oh, Knight, what has
brought

The book

- Story about King Arthur
- Book code!



The message

*Call us at us tele phone numBer
two one four three nine oh nine
six oh eight*

The Call - (214) 390-9608



The Call Transcript

*Very good. You have done well. There are **three** prime numbers associated with the original final.jpg image.*

***3301** is one of them.*

*You will have to **find** the other two. Multiply all three of these numbers together and add a .com to find the next step.*

Good luck. Goodbye.

Find the Primes

- Original image

Hello. We are looking for highly intelligent individuals. To find them, we have devised a test.

There is a message hidden in this image.

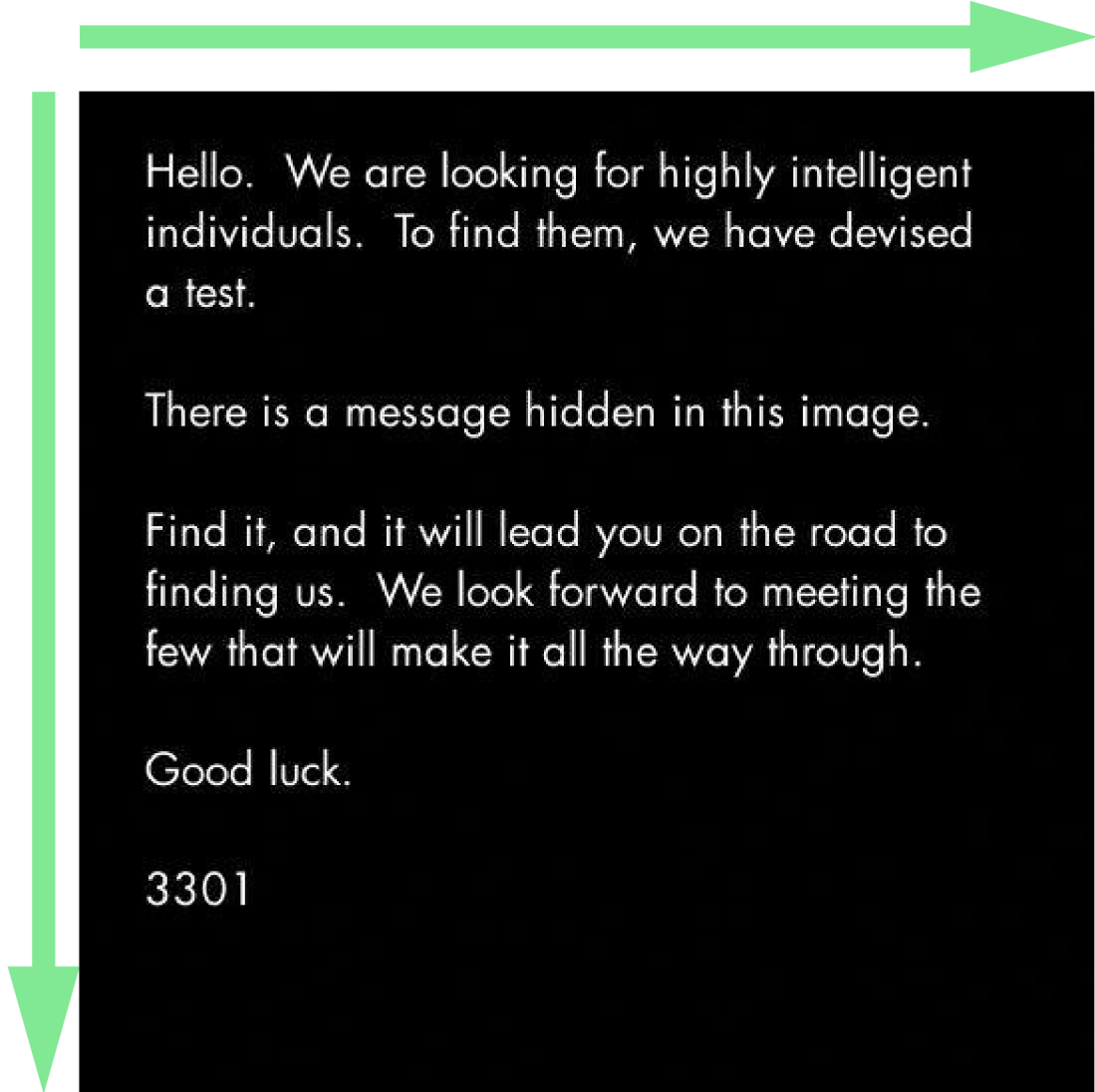
Find it, and it will lead you on the road to finding us. We look forward to meeting the few that will make it all the way through.

Good luck.

3301

Find the Primes

- Original image
- **509px by 503px**
- **3301 x 509 x 503**



Hello. We are looking for highly intelligent individuals. To find them, we have devised a test.

There is a message hidden in this image.

Find it, and it will lead you on the road to finding us. We look forward to meeting the few that will make it all the way through.

Good luck.

3301

845145127.com



Find our symbol at the location nearest you:

52.216802,	21.018334
48.85057059876962,	2.406892329454422
48.85030144151387,	2.407538741827011
47.664196,	-122.313301
47.637520,	-122.346277
47.622993,	-122.312576
37.577070,	126.813122

Locations



Locations

- Australia
- France
- South Korea
- Poland
- California
- Arkansas
- Hawaii
- Florida
- Louisiana
- Washington

Warsaw, Poland

- Cicada Symbol
- QR code



The Posters



Outguess

```
-----BEGIN PGP SIGNED MESSAGE-----
```

```
Hash: SHA1
```

```
A poem of fading death, named for a king  
Meant to be read only once and vanish  
Alas, it could not remain unseen.
```

```
1:5
```

```
152:24
```

```
the product of the first two primes
```

```
14:13
```

```
7:36
```

```
12:10
```

```
7:16
```

```
24:3
```

```
-----BEGIN PGP SIGNED MESSAGE-----
```

```
Hash: SHA1
```

```
In twenty-nine volumes, knowledge was once contained.  
How many lines of the code remained when the Mabinogion paused?  
Go that far in from the beginning and find my first name.
```

```
1:29
```

```
6:46
```

```
the product of the first two primes
```

```
2:37
```

```
14:41
```

```
17:3
```

```
27:40
```

```
the first prime
```

```
2:33
```

```
1:1
```

The books



Photograph (c) Kevin Begos Jr.

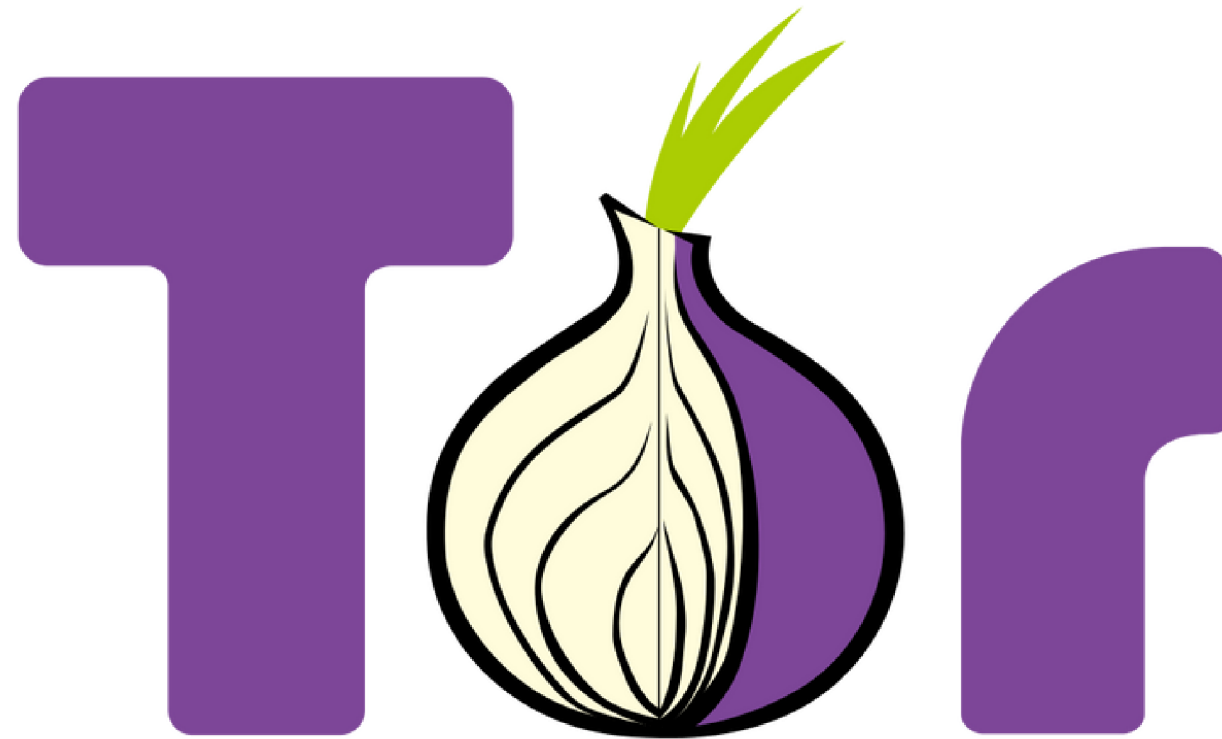
Agrippa



Encyclopaedia Britannica

An Onion

sq6wmgv2zcsrix6t.onion



The Onion

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Congratulations!

Please create a new email address with a public, free, web-based service. Once you've never used before, and enter it below. We recommend you do this while still using Tor, for anonymity.

We will email you a number in the next few days (in the order in which you've arrived to this page). Once you've received it, come back to this site and append a slash and then the number you received to this url. (For example, if you received "3894894230934209", then you would go to "http://sq6wmgv2zcsrix6t.onion/3894894230934209")

3301

-----BEGIN PGP SIGNATURE-----

The Onion

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Congratulations!

Please create a new email address with a public, free, web-based service. Once you've never used before, and enter it below. We recommend you do this while still using Tor, for anonymity.

We will email you a number in the next few days (in the order in which you've arrived to this page). Once you've received it, come back to this site and append a slash and then the number you received to this url. (For example, if you received "3894894230934209", then you would go to "http://sq6wmgv2zcsrix6t.onion/3894894230934209")

3301

-----BEGIN PGP SIGNATURE-----

The Number/Email

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

This message will only be displayed once.

Here is a message that has been encrypted with RSA (the Crypt::RSA Perl module available in CPAN) :

- -----BEGIN COMPRESSED RSA ENCRYPTED MESSAGE-----

Version: 1.99

Scheme: Crypt::RSA::ES::OAEP

```
eJwBzQAY/zEWADE40ABDeXBoZXJ0ZXh0Ca4y//uzl/HvFoP9Klf53nEFH0T4c+ui5de8+vqG0nZc
9DlrsWQe+xxVaPaYgKAD9Wn9VWQ6A5o254r5pa4hkDIY5RRmVfqOm88HJpGdbGGTckyEwJapCLDT
tHzWAZ0FIVj6fH2whErHoVmZ82zQJ640Ltzr1gYk+2kIZuqtLclV9RDhs6j7meTaod2BDrF26tY
d33awv0txxrgXRhd/FDFVtKb0K84cQs2xt0/9A0yLs5GEK2xpG2yM4AeWwft
=I1r6Wtzf/29vTggAK+ELEA==
```

- -----END COMPRESSED RSA ENCRYPTED MESSAGE-----

Here is the public key used to encrypt it. Note that it has a low bit modulus and is therefore breakable:

```
$VAR1 = bless( {
    'e' => 65537,
    'n' => '788089163979115377953025846464969392873341168158157710369029282233319803686473906591634403051269716',
    'Version' => '1.99',
    'Identity' => '<quaetrix0@gmail.com>'
}, 'Crypt::RSA::Key::Public' );
```

The Number/Email

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

This message will only be displayed once.

Here is a message that has been encrypted with RSA (the Crypt::RSA Perl module available in CPAN) :

- -----BEGIN COMPRESSED RSA ENCRYPTED MESSAGE-----

Version: 1.99

Scheme: Crypt::RSA::ES::OAEP


```
eJwBzQAY/zEWADE40ABDeXBoZXJ0ZXh0Ca4y//uzl/HvFoP9Klf53nEFH0T4c+ui5de8+vqG0nZc
9DlrsWQe+xxVaPaYgKAD9Wn9VWQ6A5o254r5pa4hkDIY5RRmVfq0m88HJpGdbGGTckyEwJapCLDT
tHzWAZ0FIVj6fH2whErHoVmZ82zQJ640Ltzr1gYk+2kIZuqtLclV9RDhs6j7meTaod2BDrF26tY
d33awv0txxrgXRhd/FDFVtKb0K84cQs2xt0/9A0yLs5GEK2xpG2yM4AeWwft
=I1r6Wtzf/29vTggAK+ELEA==
```

- -----END COMPRESSED RSA ENCRYPTED MESSAGE-----

Here is the public key used to encrypt it. Note that it has a low bit modulus and is therefore breakable:

```
$VAR1 = bless( {
    'e' => 65537,
    'n' => '788089163979115377953025846464969392873341168158157710369029282233319803686473906591634403051269716',
    'Version' => '1.99',
    'Identity' => '<quaetrix0@gmail.com>'
}, 'Crypt::RSA::Key::Public' );
```

RSA in 20 seconds

- Given e & n
- e = encryption exponent
- $n = p * q$ (secret )
- n length = 112 digits (372 bits)

Big Number

**7880891639791153779530258464649
6939287334116815815771036902928
2233319803686473906591634403051
2697162068582555837**

(112 digits)

Bruteforce

```
ibotpeaches@foundation# time docker run -it b4den/rsacrack
```

```
7880891639791153779530258464649693928733411681581577103690292822333198036864739065916344030512697162068582555837
```

```
[*] pubkey.e: 65537
```

```
[*] pubkey.n:
```

```
7880891639791153779530258464649693928733411681581577103690292822333198036864739065916344030512697162068582555837
```

```
[*] Key looks like 372 bits
```

```
[*] Using cadonfs to compute primes
```

```
[*] results are: [u'98007492061325958997349177934627388613835953553459586261',  
u'80411114232571782218163489375797613948878398942588985417', 65537L]
```

```
[*] Key extraction done.
```

```
-----BEGIN RSA PRIVATE KEY-----
```

```
MIHsAgEAAi8NG6bqKiUXBAidW7CmF+WTr6owpY+MprGwQrOWuRVHb0ko2zdWiiXkZH1Kv31gvQID  
AQABAI8F4v06/GJby7vyr1LNxL2dba6I2lF1YQP3C1P+Jz85VYigO/4Am+s2SkB+4BkDAQIYA/8+  
91K7m8jMN43hdcKwWiVe54kqoyTVAhgDR4f9CRgCSsFj8Vvilwju0LfevXiIYEKCGAPbGvIekjHj  
y6NiHDcBY+HDuGDQG2gI0wIYALzWdGz/0rb/ydL/oNbpR8aRo4MjE4uHAhgDx+oNUAE2Eddy+lDq  
EqRxF5D0juT2Kwg=
```

```
-----END RSA PRIVATE KEY-----
```

```
real    94m12.942s
```

```
user    0m0.214s
```

```
sys     0m0.115s
```

Perl Time

```
use Crypt::RSA;

my $algo = new Crypt::RSA;
my $keychain = new Crypt::RSA::Key;

my ($public, $private) = $keychain->generate(
    'q' => '9800749206132595899734917793462738861383595355345958626
    'p' => '8041111423257178221816348937579761394887839894258898541
    'e' => '65537'
);

$encrypted = "
-----BEGIN COMPRESSED RSA ENCRYPTED MESSAGE-----
Version: 1.99
Scheme: Crypt::RSA::ES::OAEP

eJwBzQAY/zEwADE40ABDeXBoZXJ0ZXh0Ca4y//uz1/HvFoP9K1f53nEFH0T4c+ui
9D1rsWQe+xxVaPaYgKAD9Wn9VWQ6A5o254r5pa4hkDIY5RRmVfq0m88HJpGdbGGT
tHzZwAZ0FIVj6fH2whErHoVmZ82zQJ640Ltzr1gYk+2kIZuqtLc1V9RDhs6j7meT
d33awv0txxrgXRhd/FDFVtKb0K84cQs2xt0/9A0yLs5GEK2xpG2yM4AeWwft
=I1r6Wtzf/29vTggAK+ELEA==
-----END COMPRESSED RSA ENCRYPTED MESSAGE-----
";

print $algo->decrypt(
    Cyphertext => $encrypted,
    Key        => $private,
    Armour     => 1,
);
```

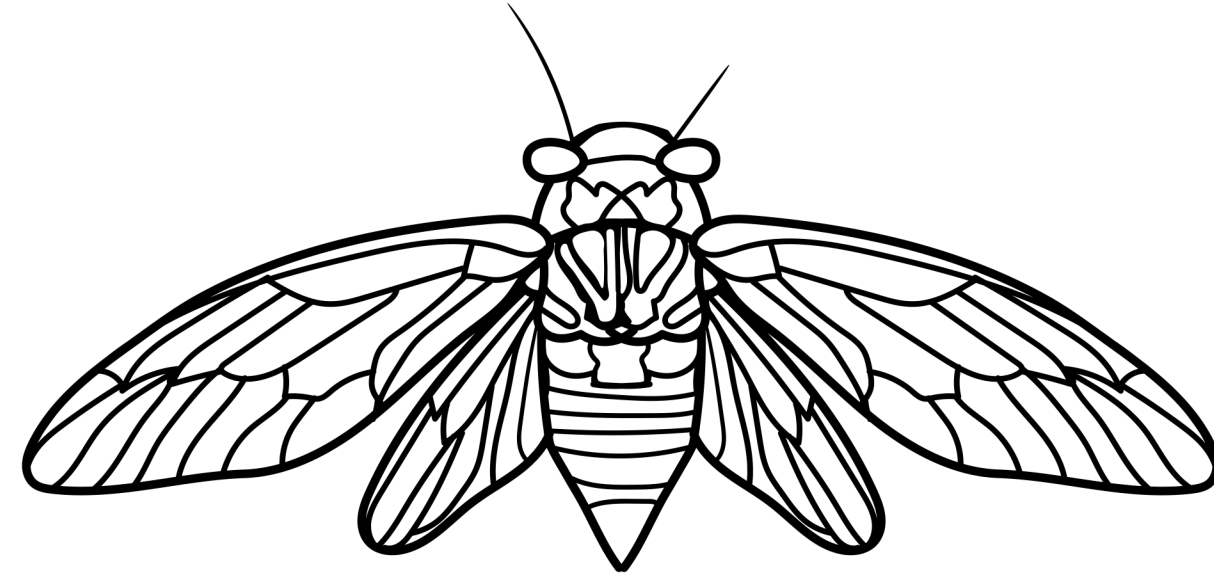
The Solve



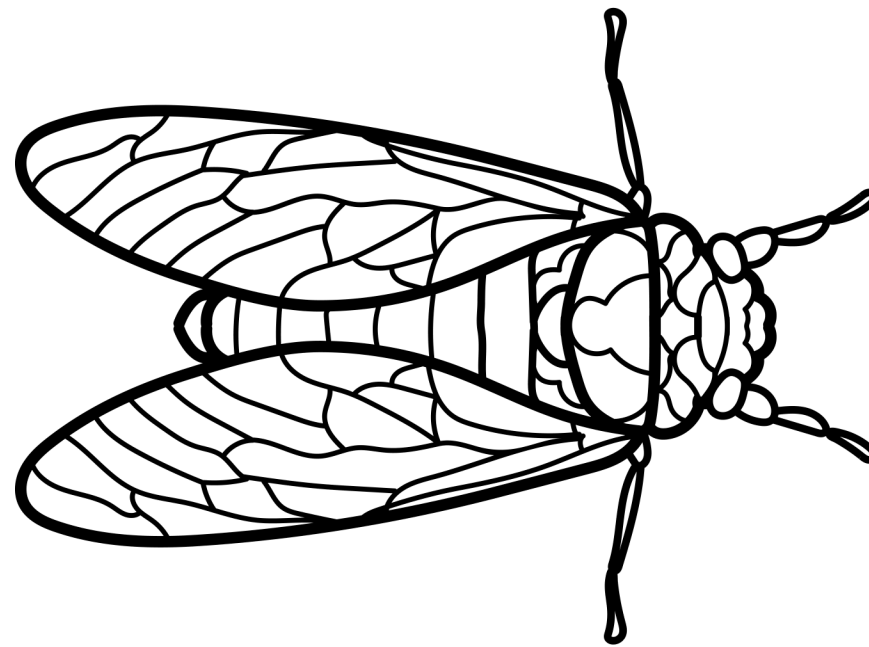
→ perl script.pl

33521494043430258676





Correct. We'll email you



-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

This song is your own path
Another stop on the road toward enlightenment
Follow it, and share not

Let the Chorus be your guide to the depths :

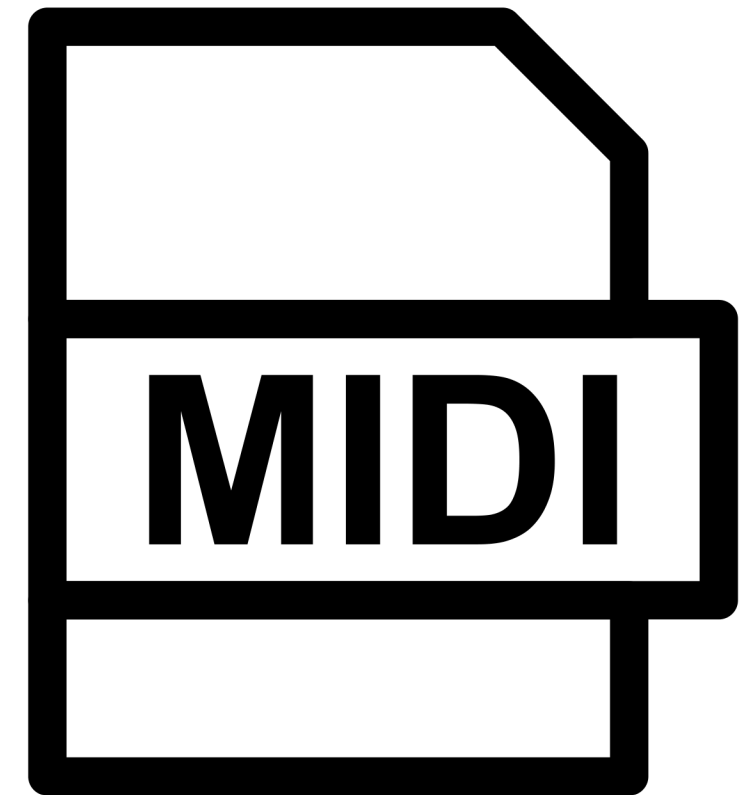
Let the Priests of the Raven of dawn,
no longer in deadly black, with hoarse note
curse the sons of joy. Nor his accepted
brethren, whom, tyrant, he calls free lay the
bound or build the roof. Nor pale religious
letchery call that virginity, that wishes
but acts not.

For every thing that lives is Holy.

Good luck.

3301

The Song



midicsv

0, 0, Header, 1, 3, 96

1, 0, Start_track

1, 0, Text_t, "Cicada at Fri Jan 20 03:57:39 2012"

1, 0, End_track

2, 0, Start_track

2, 0, Text_t, "Cicada at Fri Jan 20 03:57:39 2012"

2, 0, Tempo, 500000

2, 0, Program_c, 1, 6

midicsv

track	time	event	channel	note	velocity
2	0	Note_on_c	1	63	96
2	192	Note_off_c	1	63	0
2	192	Note_on_c	1	61	96
2	216	Note_off_c	1	61	0

midicsv

track	time	event	channel	note	velocity
2	0	Note_on_c	1	63	96
2	192	Note_off_c	1	63	0
2	192	Note_on_c	1	61	96
2	216	Note_off_c	1	61	0

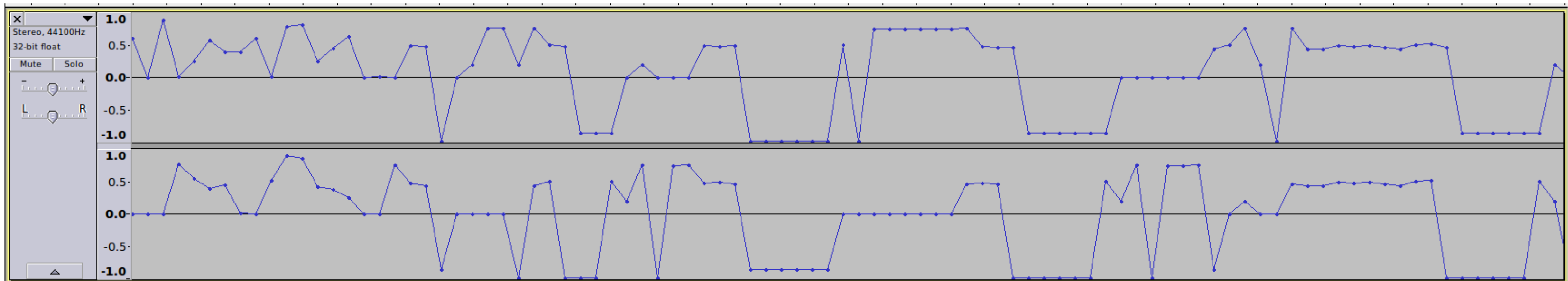
Duration & Note

- Duration = (Off - On)
- Note = Note

time	event	note	duration
96	Note_on_c	63	-
120	Note_off_c	63	24

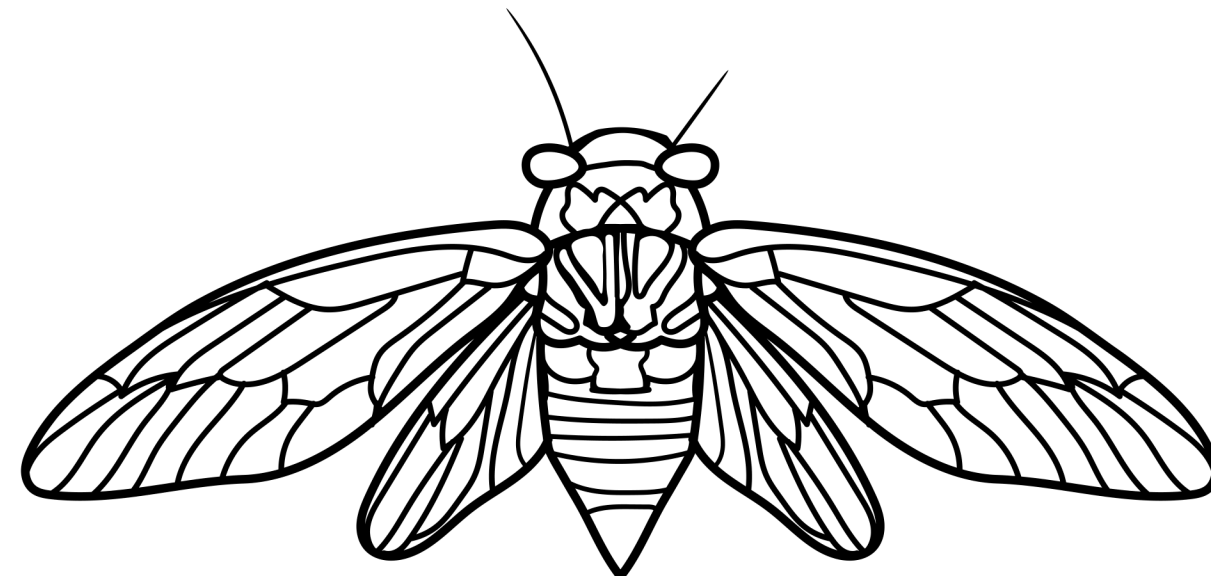
Cipher

- Iterate 2nd track
- Work through chorus
- Skip previously used characters



Solved

Very good you have proven to be most dedicated to come this far to attain enlightenment.



Puzzle 1 - Done

- Released on Reddit
- End of 2012 Puzzle

Hello.

We have now found the individuals we sought.
Thus our month-long journey ends.

For now.

Thank you for your dedication and effort. If you were unable to complete the test, or did not receive an email, do not despair.

There will be more opportunities like this one.

Thank you all.

3301

P.S. 1041279065891998535982789873959431895640\
442510695567564373922695237268242385295908173\
9834390370374475764863415203423499357108713631

Jan 5, 2013
reddit.com

- We go again

Hello again. Our search for intelligent individuals now continues.

The first clue is hidden within this image.

Find it, and it will lead you on the road to finding us. We look forward to meeting the few that will make it all the way through.

Good luck.

3301

Puzzle 2 - ISO

- Riddle, Book Code, Book
- Dropbox URL
- ISO

71	77	83	89	95	101	107	113	119	125
73	79	85	91	97	103	109	115	121	127
127	131	137	143	149	155	161	167	173	179
179	185	191	197	203	209	215	221	227	233
233	239	245	251	257	263	269	275	281	287
283	289	295	301	307	313	319	325	331	337



The OS

@1231507051321

The key is all around you.

Good luck.

3301



Twitter

- Offset: Data
- Gibberish



A screenshot of a Twitter profile page for the user **1231507051321** (@1231507051321). The profile picture is a solid black circle. The bio is empty. The user joined in December 2012, is following 0 users, and has 25.4K followers. The page shows a single tweet from January 7, 2013, containing a long string of hexadecimal characters: 000fa5a:006f4120921ef0ced307817386bfaefa76f41ca73c66ba3e5466ee69b3936f3b6bff6eb2e3fbaabaebffaebaebaa06bbdbd3bdbf971b5c339b59ce4fc9edaebea6. The tweet has 35 replies, 112 retweets, and 123 likes.

1231507051321
@1231507051321
Joined December 2012
0 Following 25.4K Followers

Tweets Tweets & replies Media Likes

1231507051321 @1231507051321 · Jan 7, 2013
000fa5a:
006f4120921ef0ced307817386bfaefa76f41ca73c66ba3e5466ee69b393
6f3b6bff6eb2e3fbaabaebffaebaebaa06bbdbd3bdbf971b5c339b59ce4fc
9edaebea6

35 112 123

Tweet Collection

0000000: b69ccce300104a464802545959580001008d0000ff8b6131616a6a632737293d3e322b3b3e3f263a203c0c4762677c326767713d73716d697b6e3000505b494e47
0000041: 404a727b0843460c44595114476a555f5c5b57604064511292ae7337217a616c682b636d7f2d77454f3c425b4051475f545740575c515741096e5c745b5c561246
0000082: 5a5712565b445b5c5b464b12455b465a5b5c12535c5612575f5740559aee54585c314a02561601220056796423586f8cb0616d20456c607366646f626454504531
00000c3: 0000000501020337363636f7f2ba6fffc400b5100002010303020403050504040000017d01020300041105122131414f7d370e0722711b3281895d081e70afc117
0000104: 57d6fa283c736695101608363b3f320e08171b1c120e0876757d7e700f0b1412101115143237333f3c362929161c1f1be7eaecedf9f8fae4e3efe0e61d2526202e
0000145: 23273a21262c2f2b575a5c5d686f6b7772707175745350525c5d59484a4f3a3839c5c6c7f1858b9f96e7fbefefaad860e1e2e3e4e5e6e7e8dd2ad5f533b9f5f637
0000186: f8c4c8e1e50c2cae0003010101010101010101000000000000102030405060708090a0bffc400b511000201020404030407050404000102770001020311040521
00001c7: 31061241510761711322328108144291a1b1c109233352f0156272d10a162434e125f11718191a262728292a35363738393a434445464748494a53545556575859
0000208: 5a636465666768696a737475767778797a82838485868788898a92939495969798999aa2a3a4a5a6a7a8a9aab2b3b4b5b6b7b8b9bac2c3c4c5c6c7c8c9cad2d3d4
0000249: d5d6d7d8d9dae2e3e4e5e6e7e8e9eaf2f3f4f5f6f7f8f9faffda000c03010002110311003f00f00a28a2800a28a2800a28a2800a28a2800a28a2800a28
000028a: a2800a4a5a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28
00002cb: a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a4a5a2800a28a2800a28a2800a28a28012968a2800a28a2800a28
000030c: a2800a28a2800a28a2800a28a2800a4a5a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a28a2800a275d3b0c68a24058cf2140884e9
000034d: da4c44df8937c35f5a993b56ba1aef5fb76b9414138cf8bea450e2fb63ae550832e069a3d975e5cc784c6479ca379f01b5a8c501300fdc8461304d46bd665e0084
...

To Binary?



```
binwalk 3301_twitter.bin
```

DECIMAL

HEXADECIMAL

DESCRIPTION



OS Files

- AUDIO/761.mp3
- DATA/_560.00
- DATA/560.13
- DATA/560.17



OS Files

- **AUDIO/761.mp3**
- DATA/_560.00
- DATA/560.13
- DATA/560.17



The Instar Emergence



XOR

- XOR Twitter data & 761.mp3
- Obtain an image

Gematria Primus
an order and a value as revealed through 3301

Rune	Letter	Value	Rune	Letter	Value
ƒ	F	2	ȝ	S/Z	53
h	U	3	†	T	59
þ	TH	5	þ	B	61
ƒ	O	7	¶	E	67
k	R	11	¶	M	71
L	C/K	13	†	L	73
χ	G	17	χ	NG/ING	79
ƒ	W	19	λ	OE	83
¶	H	23	¶	D	89
þ	N	29	ƒ	A	97
	I	31	þ	AE	101
†	J	37	h	Y	103
↓	EO	41	χ	IA/IO	107
k	P	43	Υ	EA	109
Υ	X	47			



Gematria Primus

an order and a value as revealed through 3301

Rune	Letter	Value	Rune	Letter	Value
ƒ	F	2	ᚗ	S/Z	53
ᚢ	U	3	ᚦ	T	59
ᚦ	TH	5	ᚱ	B	61
ƿ	O	7	ᚷ	E	67
ᚱ	R	11	ᚹ	M	71
ᚕ	C/K	13	ᚺ	L	73
χ	G	17	ᚸ	NG/ING	79
ᚱ	W	19	ᚻ	OE	83
ᚱ	H	23	ᚾ	D	89
ᚦ	N	29	ᚿ	A	97
ᚨ	I	31	ᚰ	AE	101
ᚦ	J	37	ᚱ	Y	103
ᚨ	EO	41	ᚸ	IA/IO	107
ᚱ	P	43	ᚹ	EA	109
ᚹ	X	47			



Outguess

- Blank (?)
- Tabs/Spaces

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

iQIcBAEBAgAGBQJQ5IDTAAoJEBgfAeV6NQkP7nMQAJVg7DQilA7NpkacR0RA4eBs
NZHJBQNHO2P22h+aFFP/rI1gjGaV3hMWaa2sQ4Vbi/W8eZuH40AsmZUy3EOb+4j0
3cJRJgAJI99ZjDcVXITm5VyUv+WlqCzBr+bHMK7pkMYQ/rEzeWD56tIsrDgFdimh
PA/b7XrDcofd9JfBNFI7D/sF84HL2ig5baNo+MGjYI4Dq2cHX+SAafXmIN9PXFjx
HRBbuoMLlviKywQ8MnePBPYG6V8siMmrJIHS5ZcNEaSJ9nGL4X0XbECqV79ermye
1EeNKcckoeZMU86SabfMeyZozG04Vkbemn8JH5cssbuF8hf4fdN/LSP4NG0r5y9
ifRv7z59pL577ZpGAju5zBtICBUvmxxNYR5lGLg+Fi/ICqcRC98mzesFnQ7wbDLS
HKyV95SBQK82bbqSREBflrrNb+MjVtJwlvOY5OPTBVihPqrluMw8KDGfSvw9ncCt
dase7vUjXxlrn36xDSRN6cMzTmFZ9lkQYkRAYq5ApERud+JfKCwszG/UxRwo1WOU
0ALaWXq5VMp+w5pvQkqg9eHpOriG9Z11VLdb53eTmxKrwyX/2eaiybsnMrRNuxv1
iE8PVRkifCcJccw1bGq8TyCQF3a5ozeiBRngAUT7BwZhLa4bShtki7amR0ZZgbKk
8JRMGvoSA5NNTewvUhwI
=ZeNf

-----END PGP SIGNATURE-----

Binary Time



0100001101101111011011010110010100100000011101000110111100100000011001010110110101101001
0111011101110000001101000110110101110101011101010011001001101011011101000111011101101011
0110111001100110001011100110111101101110011010010110111101101110

0101011101100101001000000111001101101000011000010110110001101100001000000110000101110111
0110000101101001011101000010000001111001011011110111010100100000011101000110100001100101
011100100110010100101110

01000111011011110110111101100100001000000110110001110101011000110110101100101110

00110011001100110011000000110001

"Come to emiwp4muu2ktwknf.onion"

"We shall await you there."

"Good luck."

"3301"

Web browsers are useless here.

,+++77777++=:, += ,,+ +=7++=,,
7~?7 +7I77 :,I777 I 77 7+77 7: ,?777777??~ ,+=~I7? ,=77 I
=7I7I~7 ,77: ++:~+7 77=7777 7 +77=7 =7I7 ,I777= 77, :~7 +?7, ~7 ~ 777?
77+7I 777~, ,=7~ ,::7=7: 7 77 77: 7 7 +77,7 I777~+777I= =:,77,77 77 7,777,
= 7 ?7 , 7~,~ + 77 ?: :?777 +~77 77? I7777I7I7 777+77 =:, ?7 +7 777?
77 ~I == ~77= +777 777~: I,+77? 7 7:?? ?7 7 7 77 ~I 7I,,?7 I77~
I 7=77~+77+?=:I+~77? , I 7? 77 7 777~ +7 I+?7 +7~?777,77I
=77 77= +7 7777 ,7 7?7:,??7 +7 7 77??+ 7777,
=I, I 7+:77? +7I7?7777 : :7 7
7I7I?77 ~ +7:77, ~ +7,::7 7
,7~77?7? ?: 7+:77777, 77 :7777=
?77 +I7+,7 7~ 7,+7 ,? ?7?~?777:
I777=7777 ~ 77 : 77 =7+, I77 777
+ ~? , + 7 ,, ~I, = ? ,
77:I+
,7
:77
:



Welcome.

Telnet?



hello

A message for you:

```
0000000: 2d2d2d2d2d424547494e20504750205349474e4544204d45535341147452d2d2d2d2d0a486173683a20534841310a0a20202020200a5665727920676f6f642e0a20
0000041: 20200a596f75206861766520646f6e652077656c6c20746f20636f6d652074686973206661722e0a20200a7873786e616b73696374366567786b712e6f6e696f6e
0000082: 0a20200a476f6f64206c75636b2e0a2020200a333330310a20202020200a2d2d2d2d2d424547494e20504750205349474e41545552452d2d2d2d2d0a5665727369
00000c3: 6f6e3a20476e7550472076312e342e31312028474e552f4c696e7578290a0a695149634241454241674114742514a513653304841416f4a45426766416556364e51
0000104: 6b502f4a3051414c44716133564a7939784c4c6c6749356a5068524970340a66786562624e6874454c4f4859466b44355a397a745159476c65376c4b504d386c6b
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0000186: 6d456c784f427a57723638646c5159743271664251786b327a522f6654490a544c43454776465a746c6e724e66426b376a7349794a59635858506761625334376f
00001c7: 5039764f45586c42312b506d30433775505042504e3761716b665550476c0a6f3166326873634a66374a65324476625a742b3665787859736d3537467039353358
0000208: 414e41642f557046567a542f3835325867363367745a72492b536d66335a0a4256636a70437a7948337753385230694d2b7270303243774a704a7a7357474c7865
0000249: 51476d584c325358424234337a565a414a716c355564584c5447586b62640a6e504d64332f43624a2b6c37724f305941673570334a66344b617558375a64365a63
000028a: 3277484b4c4f76666a5176455758495931434d68493638426a30725a6f2f0a4d2f666933313346465450416d3678684b52762f74482f387756726172326a593777
00002cb: 6e45385878685273793734415a35477141326f484d6566544171335975570a35505838733638324a34706b44554b48476134793635766a49703136706d45496e4d
000030c: 414c4a4762777a366d7461754251716c53364152735166656b446e336f5a0a796f73532b675743336a6449764835733557555147566c376a797a3974342b335467
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000038e: 2f554633515437354d6978514d75344d2b3577436e4e656b676675794f360a5a7679627a70347334537a526a6b6b39734d4d360a3d5759564f0a2d2d2d2d2d454e
00003cf: 4420504750205349474e41545552452d2d2d2d2d0a
```

Offset: 3301, Skip: 0, Col: 65, Line: 16.

XXD

- To Binary

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Very good.

You have done well to come this far.

xsnaksict6egxkq.onion

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)



Another Hint



-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

You already have everything you need to continue.

Sometimes one must "knock on the sky and listen to the sound."

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

Ping away

1f8b080843f5ee5000036d6573736167652e7478742e617363006d93
49b3aa460085f7fd2b582645dd8b80a2bcaa2c804668440691417620
202d43338bfeadc57c92e39db337cabf3f5f52359d59045399a4379
48b354489d55cf9334f5b7f705f4642c7f519e2eb1008030af6b2a23
6dfe4d5137325365b2e4d49d34395524c337005d55372b97e7a5503c
a7fda7f8262d262d001a211955cff7ea27c3f39bdf535fff454b57ff
f22f35c887f1a7f98bd2dad9d1a885fdde7eb32cf58766f98c89db79
fd1300eca2bb2ca9b2f49034d935dcfd12404922862a3f0a290f04cb
ad1c71dd3a0ccf4a3bd3f9a0b2c2f830cacf3958d1dd6ec1f674746d
7a0e82f1b2e33fa8f1fabaec051c48aa489fc87e41fd1372aff28afc
...

XXD - Part 2

- To Binary

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Well done. You have come far.

`pklmx2eeh6fjt7zf.onion`

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)



Coordinates

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Standby for coordinates.

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)



-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

37.182685, -3.605801

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

38.977845, -76.486451

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

33.092817, -96.08265

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

34.7477910, -92.2690863

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

26.41968, 127.73254

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

32.478944, -84.983674

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

37.182685, -3.605801

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

38.977845, -76.486451

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

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33.092817, -96.08265

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34.7477910, -92.2690863

-----BEGIN PGP SIGNATURE-----

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-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

26.41968, 127.73254

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

32.478944, -84.983674

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

Locations

- Japan
- Russia
- Texas
- Arkansas
- Maryland
- Oregon
- Georgia



Phone Call

- Call Number
- Asks for Code
- Enter “*L (5) & M (6)*”
- **Failed**



Phone Call

- Call Number again
- Asks for Code
- Enter “*L (73) & M (71)*”
- **Accepted**



Gematria Primus

an order and a value as revealed through 3301

Rune	Letter	Value	Rune	Letter	Value
ƒ	F	2	ƚ	S/Z	53
Ń	U	3	†	T	59
þ	TH	5	þ	B	61
ƒ	O	7	Ń	E	67
ƚ	R	11	Ń	M	71
ƚ	C/K	13	†	L	73
ƚ	G	17	ƚ	NG/ING	79
þ	W	19	ƚ	OE	83
Ń	H	23	Ń	D	89
þ	N	29	ƒ	A	97
†	I	31	þ	AE	101
þ	J	37	Ń	Y	103
†	EO	41	ƚ	IA/IO	107
ƚ	P	43	ƚ	EA	109
ƚ	X	47			

Phone Call



dataset 13, offset 12821

data

28C07E1B102D4D5C4C1A376E0644

77E1416FCC94928765

Read Data



- Read DATA/560.13
 - Extract file chunk
- XOR (Phone data & above)

416uipnstbggwjyv.onion

SSSS

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

ssss, Threshold: 5

07-f3adb3aacb0b4336fa28178bc1e5edce940c16ce5caa

Good luck.

3301

-----BEGIN PGP SIGNATURE-----

Version: GnuPG v1.4.11 (GNU/Linux)

Shamir Secret Sharing Scheme

- Break secret into chunks
- Need a few to recreate
- 5 minimum from Cicada



Working Together



```
→ ssss-combine -t 5
```

```
Enter 5 shares separated by newlines:
```

```
Share [1/5]: 05-fcd82965b6632ea25d80edc3e58baafb4b2938895cbd
```

```
Share [2/5]: 07-f3adb3aacb0b4336fa28178bc1e5edce940c16ce5caa
```

```
Share [3/5]: 09-82a98a7fe06014f783b752506cf6cd1fabaa3d8b3750
```

```
Share [4/5]: 03-7678a5f6b72042d839151b34b02ffe161cf997fed484
```

```
Share [5/5]: 02-41cc481a51fe77f91600f593c1db2ce9babd2626ea6e
```

```
Resulting secret: p7amjopgric7dfdi.onion
```

The Test

Question:

Disregarding color blindness, any arbitrary color looks the same to all people.

Answer:

- True
- False
- Indeterminate
- Meaningless
- Self-Referential
- Game Rule
- Strange Loop
- None of the Above

Post Answer

01 min and 56 sec



The Exam

- Build TCP Server
- Respond to this protocol
- Deadline: Feb 3, 2013

```
2013/02/25 14:32:01 server is running under address [::]:3307
2013/03/03 10:57:48 got connection from 127.0.0.1:42483
2013/03/03 10:58:05 executing 'rand 3' for 127.0.0.1:42483
2013/03/03 10:58:09 executing 'rand 3' for 127.0.0.1:42483
2013/03/03 10:58:18 executing 'rand 0' for 127.0.0.1:42483
2013/03/03 10:58:29 executing 'rand 1' for 127.0.0.1:42483
2013/03/03 10:58:56 executing 'quine' for 127.0.0.1:42483
2013/03/03 10:59:10 executing 'base29 1033' for 127.0.0.1:42483
2013/03/03 10:59:14 executing 'koan' for 127.0.0.1:42483
2013/03/03 10:59:16 executing 'koan' for 127.0.0.1:42483
2013/03/03 10:59:18 executing 'koan' for 127.0.0.1:42483
2013/03/03 10:59:21 executing 'koan' for 127.0.0.1:42483
2013/03/03 10:59:28 executing 'dh 3301' for 127.0.0.1:42483
2013/03/03 10:59:56 executing 'dh 3301' for 127.0.0.1:42483
2013/03/03 11:00:29 executing 'dh 3301' for 127.0.0.1:42483
2013/03/03 11:00:58 executing 'next' for 127.0.0.1:42483
2013/03/03 11:01:11 executing 'dh' for 127.0.0.1:42483
2013/03/03 11:01:18 executing 'goodbye' for 127.0.0.1:42483
2013/03/03 11:01:18 closing connection to 127.0.0.1:42483
```

Puzzle 2 - Over

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

DO NOT SHARE THIS INFORMATION!

Congratulations. Your testing has finally come to an end. We hope you have enjoyed the "vacation" over the last few weeks. You will be very busy now should you choose to join us.

There are two final steps, although there won't be any hidden codes, or secret messages, or physical treasure hunts. This first of these is only honesty. We have always been honest with you, and we shall continue to be honest with you. And we expect you to be honest with us in return.



Jan 6, 2014

twitter.com

- 3rd times a charm.



Hello.

Epiphany is upon you. Your pilgrimage has begun. Enlightenment awaits.

Good luck.

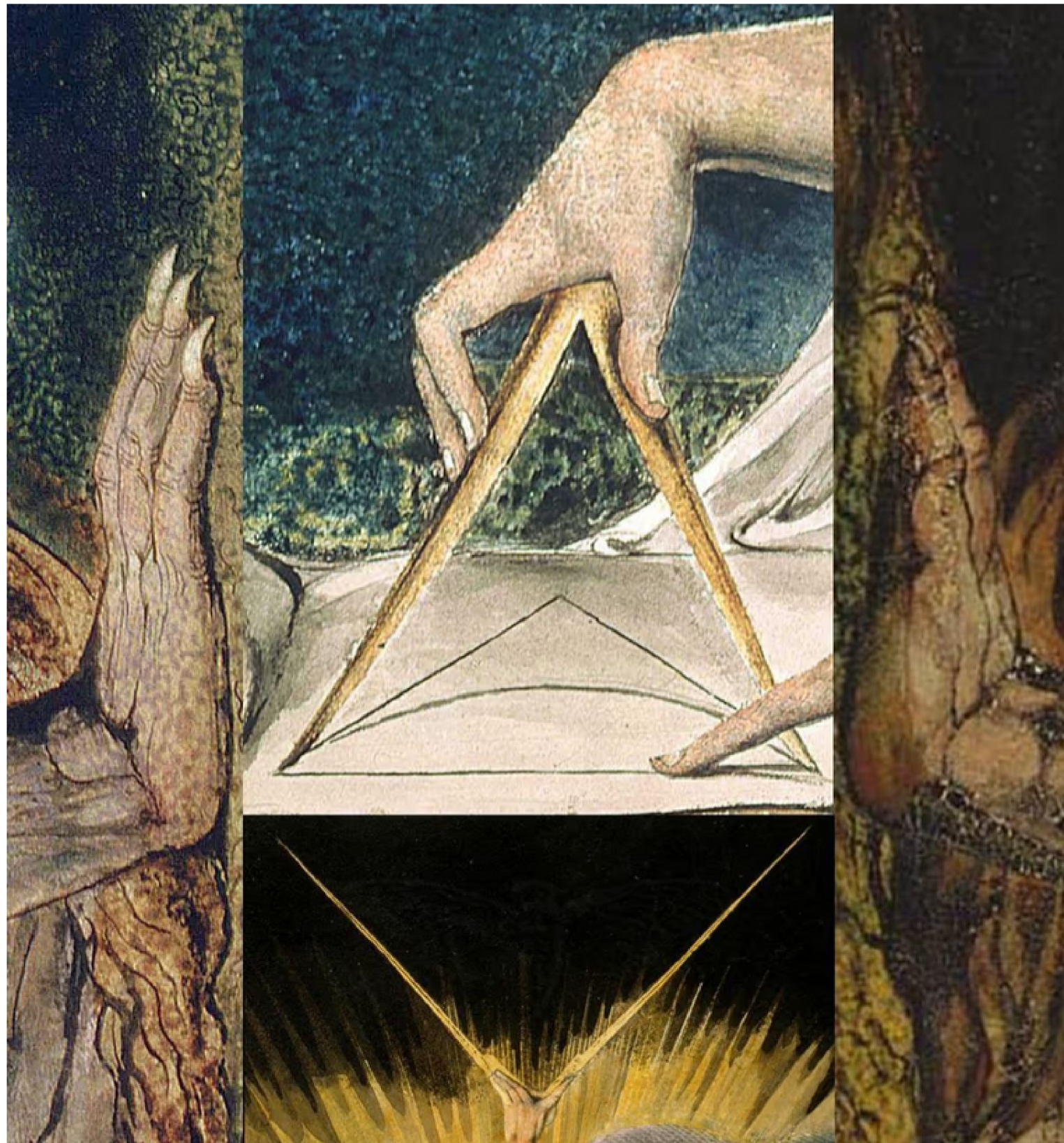
3301

Puzzle 3 - Book Code

- Paragraph
- Sentence
- Word
- Letter



auqgnxjtvdbll3pv.onion



-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA1

Welcome.

Good luck.

3301

e = 65537

n =

755791257460853516442671829205802125564131020718763

309579506944570005921024805075727023467999367384420

3148013173091173786572116639

- -----BEGIN COMPRESSED RSA ENCRYPTED MESSAGE-----

Big Number Redux

75579125746085351644267182920580

21255641310207187633095795069445

70005921024805075727023467999367

38442031480131730911737865721166

39

(130 digits)



Bruteforce

```
ibotpeaches@foundation$ time docker run -it b4den/rsacrack
```

```
755791257460853516442671829205802125564131020718763309579506944570005921024805075727023467999367384420314801317309117378  
657211663
```

```
[ ] pubkey.e: 6553
```

```
[ ] pubkey.n:
```

```
755791257460853516442671829205802125564131020718763309579506944570005921024805075727023467999367384420314801317309117378  
657211663
```

```
[ ] Key looks like 432 bit
```

```
[ ] Using cadonfs to compute prime
```

```
[ ] results are: [u'97513779050322159297664671238670850085661086043266591739338007321',  
u'77506098606928780021829964781695212837195959082370473820509360759', 65537L
```

```
[ ] Key extraction done
```

```
-----BEGIN RSA PRIVATE KEY-----
```

```
MIIBDAIBAAI3AK50gkj06lhiMbT/iIsA+l1l517rgOiDK25eRHiXDIgp00NuKFH03U/5YHNaIjM  
YqZZ4ilSnwIDAQABAjZtP5cLOxy6RpvcPh3y9qTS8mrnHVH3yZTcI/lwoIubRaCJaifErsBrjIv  
e7LQ1fgyRo+c8hECHADtCvldTZS6NNntQIAKTebM9nwGSpu4imfXoxkCHAC8aCngGxUhK0bNdTn  
h4An2V1NmuWt2dhy0ncCGwcXfSAieOKBt851ZR3Jj1gA/Yd59zPLwxw4uAIbNsOR69rhfdX5eVH  
4QFynOdXzrhchHsl3IjkAhsmGCSA2T0fTd6T+mJ7XHMpxqj9oFdz93zmJLk=
```

```
-----END RSA PRIVATE KEY-----
```

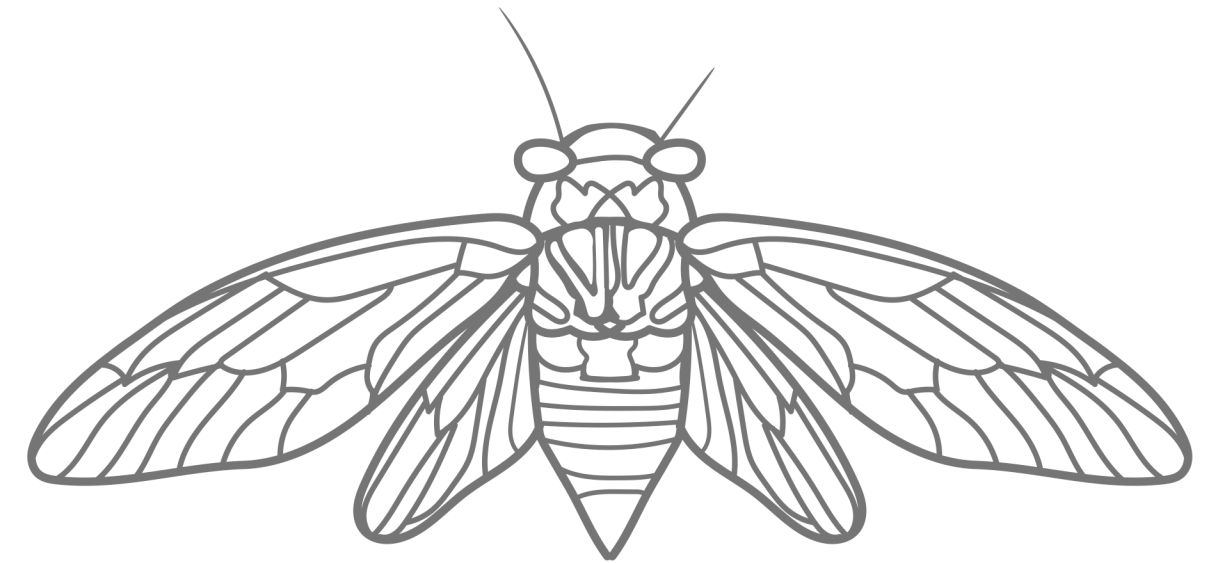
```
real    717m2.977
```

```
user    0m1.752
```

```
sys     0m0.245
```


Linear Fracture

- Many pages
- Tough puzzles
- Not in order
- Progress slowed



Jan 5, 2016

twitter.com

- No new puzzle



Hello.

The path lies empty; epiphany seeks the devoted.

Liber Primus is the way. Its words are the map, their meaning is the road, and their numbers are the direction.

Seek and you will be found.

Good luck.

3301

Beware false paths. Verify OpenPGP 7A35090F.

April 2017

-----BEGIN PGP SIGNED MESSAGE-----

Hash: SHA512

Beware false paths. Always verify PGP signature from 7A35090F.

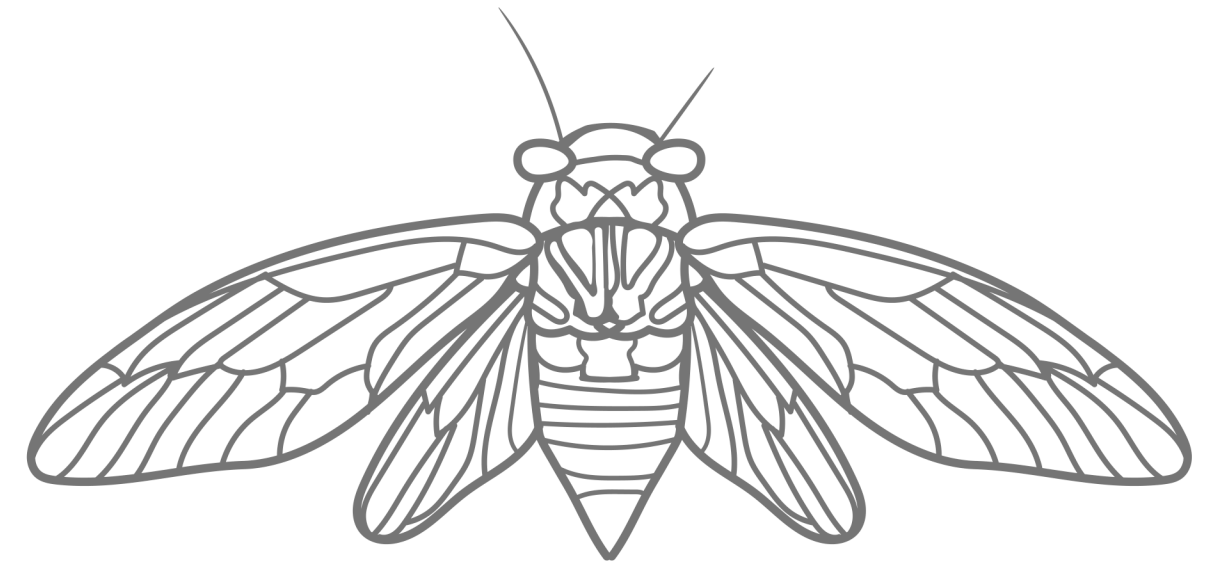
3301

-----BEGIN PGP SIGNATURE-----

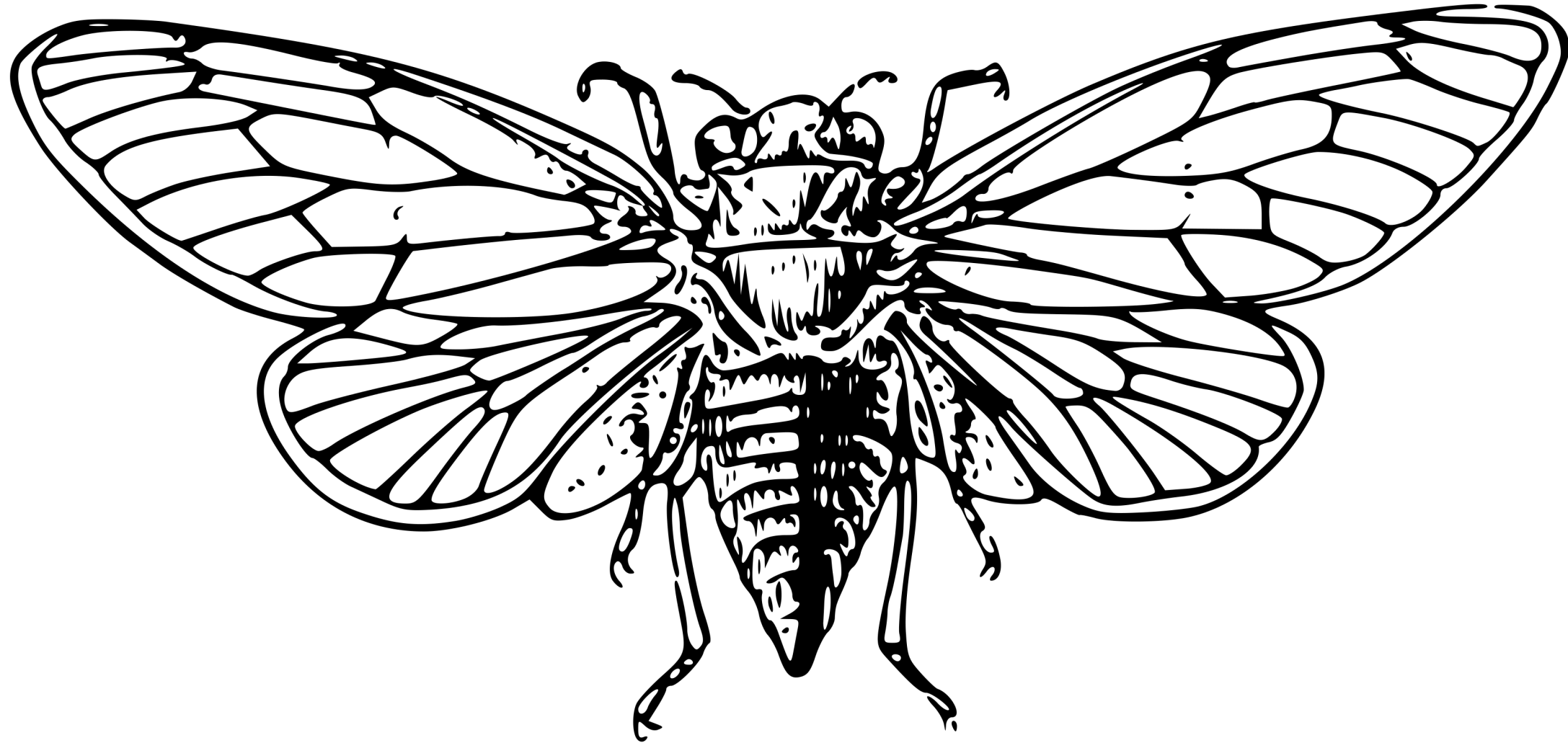
Version: CicadaPG v.3301

Cicada 3301

- An organization?
- A 3 letter agency?
- A person?
- A government?

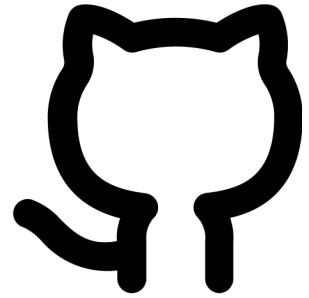


“Question all things.”



Cicada 3301

Thanks!



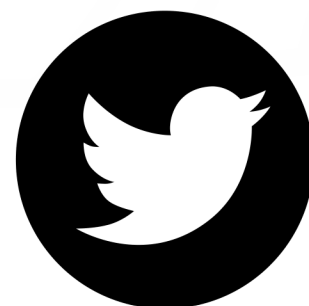
[iBotPeaches/cicada_3301](https://github.com/iBotPeaches/cicada_3301)



infosec.exchange/@iBotPeaches



connortumbleson.com



[iBotPeaches](https://twitter.com/iBotPeaches)