

## Tim : KUKU BIMA SUSU

1. Hammam Awis Zukimi - hammamawis@gmail.com
2. Leandro Pratama Putra - leandro.pratama.putrapoltek231@gmail.com \*
3. Bumi Arya Dirangga - aryadirangga89@gmail.com
4. Ridho Ilhamrullah - ilhamrullahridho@gmail.com

## Write Up

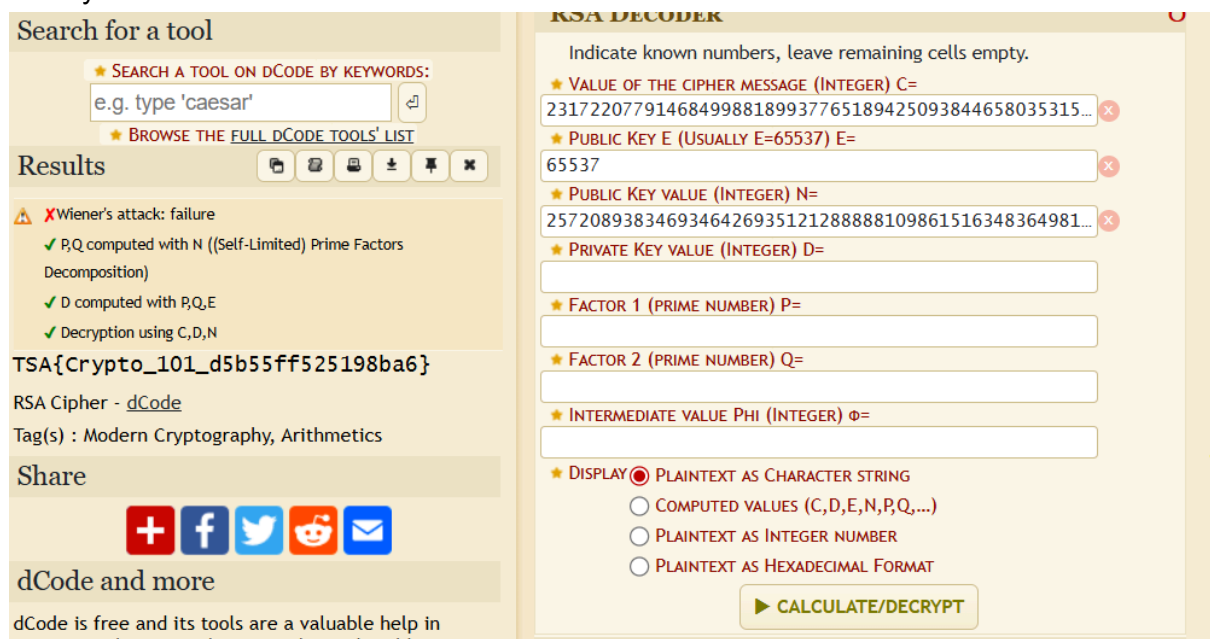
Tuliskan write-up secara terstruktur.

### 101 - Cryptography

Jadi disini kita diberikan file .txt yang berisikan algoritma RSA

```
c =
231722077914684998818993776518942509384465803531548983146869754932667754136315007943497593396644630089073196170276638447665
765624960333289097324447779290700092664403080584161276778064977902852018557301618273474139777712464709585187730351308079009
718870031364399745764326436147001877583703027251271265576350621173
e = 65537
n =
2572089383469346426935121288888109861516348364981535285076387907707645049467191957369876133025261164258732477500329224521
429342437621496424825810959518932424007107126934957421561529561264636001476988808843995824395131838577901446930016348590793
828420808295335603083382120208905347497068915850813369038886980997
```

Kemudian kami menggunakan online tools untuk mendecrypt supaya bisa mendapatkan hasilnya



Flag = TSA{Crypto\_101\_d5b55ff525198ba6}

# 101 - Forensic

## 50

Diberikan sebuah file .pcap. Saat di buka, terlihat ada unsur dari header png pada beberapa traffic pertama

```
0000 08 00 00 00 00 00 00 03 00 01 00 06 0a 00 27 00 .....'.
0010 00 03 00 00 45 00 00 54 85 ae 40 00 3f 01 c4 40 ....E..T...@..?..@
0020 c0 a8 38 01 c0 a8 38 68 08 00 83 f9 06 36 00 01 ..8...8h....6..
0030 28 72 2e 67 00 00 00 00 f3 a2 0c 00 00 00 00 00 (r.g.....
0040 89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52 .PNG.....IHDR
0050 89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52 .PNG.....IHDR
0060 89 50 4e 47 0d 0a 1a 0a .PNG.....
```

Langsung saja di export sebagai plaintext, berikut hasil exportnya:

The Edit Format View Help

```
0000 08 00 00 00 00 00 00 03 00 01 04 06 08 00 27 e9 .....'.
0010 f8 ee 00 00 45 00 00 54 00 86 00 00 40 01 88 69 ....E..T....@..i
0020 c0 a8 38 68 c0 a8 38 01 00 00 1a 6f 06 35 00 01 ..8h..8....o.5..
0030 28 72 2e 67 00 00 00 00 7c 81 0c 00 00 00 00 00 (r.g....|.....
0040 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
0050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
0060 00 00 00 00 00 00 00 00 .....

0000 08 00 00 00 00 00 00 03 00 01 04 06 08 00 27 e9 .....'.
0010 f8 ee 00 00 45 00 00 54 00 8b 00 00 40 01 88 64 ....E..T....@..d
0020 c0 a8 38 68 c0 a8 38 01 00 00 8b f9 06 36 00 01 ..8h..8.....6..
0030 28 72 2e 67 00 00 00 00 f3 a2 0c 00 00 00 00 00 (r.g.....
0040 89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52 .PNG.....IHDR
0050 89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52 .PNG.....IHDR
0060 89 50 4e 47 0d 0a 1a 0a .PNG.....

0000 08 00 00 00 00 00 00 03 00 01 04 06 08 00 27 e9 .....'.
0010 f8 ee 00 00 45 00 00 54 00 8f 00 00 40 01 88 60 ....E..T....@..`
0020 c0 a8 38 68 c0 a8 38 01 00 00 10 ac 06 37 00 01 ..8h..8.....7..
0030 28 72 2e 67 00 00 00 00 b9 b1 0c 00 00 00 00 00 (r.g.....
0040 00 00 00 32 00 00 00 32 08 02 00 00 00 91 5d 1f ...2...2.....].
0050 00 00 00 32 00 00 00 32 08 02 00 00 00 91 5d 1f ...2...2.....].
0060 00 00 00 32 00 00 00 32 ...2...2
```

Dikarenakan banyak line yang tidak diperlukan, maka kami membuat skrip untuk mengambil line yang ada "0040" saja, lalu mengambil yang penting - penting saja (nilai hex)

Berikut skripnya:

```
with open("yoh4.txt", "r") as inyoh, open("hasilyohh.txt", "w") as outyoh:
    for line in inyoh:
        if "0040" in line:
            outyoh.write(line[6:53])
            outyoh.write("\n")
```

Bisa disesuaikan sesuai selera.

Berikut contoh hasilnya:

```
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52
00 00 00 32 00 00 00 32 08 02 00 00 00 91 5d 1f
e6 00 00 00 7e 49 44 41 54 78 9c ed d7 b1 09 c0
20 10 40 51 0d 0e e0 48 37 b0 e0 6a 6e 60 8a b4
69 3e 31 44 c2 7f d5 55 f2 f1 40 30 cf 39 d3 7e
8e af 03 ee 99 45 98 45 98 45 98 45 98 45 98 45
98 45 98 45 98 45 98 45 3c cd ea bd 47 44 44 94
52 ae a1 b5 f6 3c 2b af fa 90 d5 5a c7 18 4b 8e
4a bf 5d e2 4b cc 22 cc 22 96 3d 10 6b 6d 7a 5b
66 11 66 11 66 11 66 11 66 11 66 11 66 11 66 11
66 11 27 0d 1e 13 76 3e 86 9f b4 00 00 00 00 49
45 4e 44 ae 42 60 82 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
89 50 4e 47 0d 0a 1a 0a 00 00 00 0d 49 48 44 52
00 00 00 32 00 00 00 32 08 02 00 00 00 91 5d 1f
e6 00 00 00 f1 49 44 41 54 78 9c ed d8 21 8e 85
30 14 85 e1 76 18 83 27 80 62 09 b0 06 04 48 1c
5d 00 1b 61 1f 88 b2 01 d6 80 c3 b2 89 ba 26 a0
71 f7 89 49 46 3d f1 4e da 64 46 9c 4f a1 4e fe
26 d4 54 8b 88 fa 7f be fe 3a e0 3d 66 21 98 85
60 16 82 59 08 66 21 98 85 60 16 82 59 08 66 21
98 85 88 93 75 9e 67 df f7 6d db 76 5d e7 9c 8b
```

Karena ada line yang “null”, maka itu kami anggap sebagai pembatas dari tiap gambar. Jadi kami buat skrip lagi biar tiap kali program ngeliat ada line “null”, dia akan buat file baru lalu nyalin isinya.

Berikut skripnya:














```
with open("hasil_yohh.txt", "r") as inyoh:
    counter = 1
    outyoh = None

    for line in inyoh:
        if "00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00" in line:
            if outyoh:
                outyoh.close()
            outyoh = open(f"yoh{counter}.txt", "w")
            counter += 1
            continue

        if outyoh:
            outyoh.write(line)

    if outyoh:
        outyoh.close()
```

Berikut contoh hasilnya:

 yoh1.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh2.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh3.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh4.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh5.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh6.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh7.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh8.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh9.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh10.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh11.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh12.txt	11/10/2024 12:35 ...	Text Document	1 KB
 yoh13.txt	11/10/2024 12:35 ...	Text Document	1 KB

Lalu tinggal di ubah ke .png aja. Dan tentunya menggunakan skrip juga











Berikut skrip nya:

```
counter = 1
while counter <= 34:
    with open(f"yoh{counter}.txt", "r") as inyoh:
        hex_data = inyoh.read().replace(" ", "").replace("\n", "")

        binary_data = bytes.fromhex(hex_data)

    with open(f"yoh{counter}.png", "wb") as outyoh:
        outyoh.write(binary_data)
    counter += 1
```

Berikut contoh hasilnya:

 yoh1.png	11/10/2024 12:38 ...	PNG
 yoh2.png	11/10/2024 12:38 ...	PNG
 yoh3.png	11/10/2024 12:38 ...	PNG
 yoh4.png	11/10/2024 12:38 ...	PNG
 yoh5.png	11/10/2024 12:38 ...	PNG
 yoh6.png	11/10/2024 12:38 ...	PNG
 yoh7.png	11/10/2024 12:38 ...	PNG
 yoh8.png	11/10/2024 12:38 ...	PNG
 yoh9.png	11/10/2024 12:38 ...	PNG
 yoh10.png	11/10/2024 12:38 ...	PNG

Dan flag nya dapat

Flag = TSA{Forensic\_101\_0d1b25a70976d70f}