PICOCTF 2023

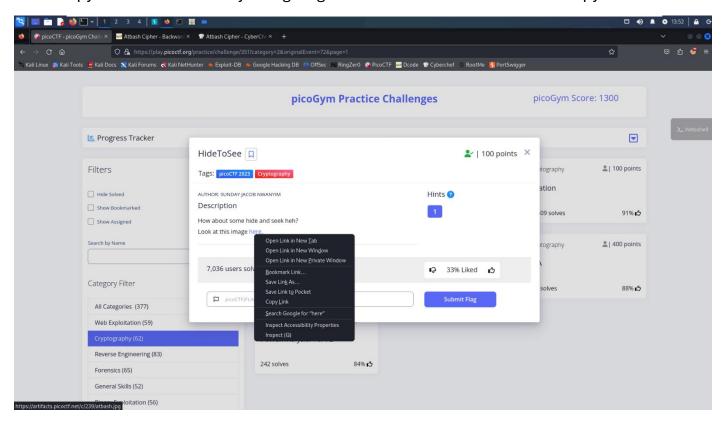
CATEGORY: Cryptography

Challenge: HideToSee

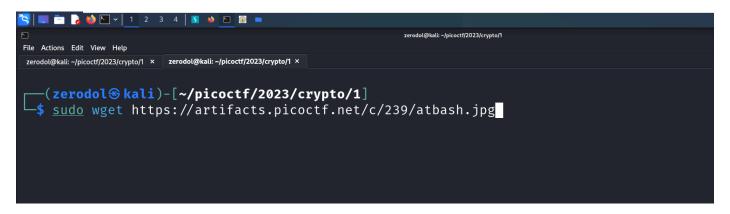
Points: 100

WRITEUP

First I copy the link of the file by doing a right click on "here" and I click on "copy link"



I download the file with the "wget https://artifacts.picoctf.net/c/239/atbash.jpg" command

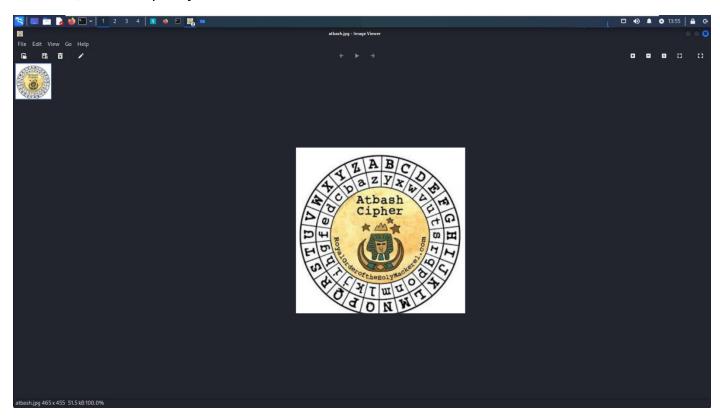


A file name « atbash.jpg » is downloaded with suggested that the file is a jpg image

```
zerodol@kali:~/picoctf/2023/crypto/1

| Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/picoctf/2023/crypto/1 | Zerodol@kali:~/pi
```

We open it and we see that it's an image representing the "Atbash Cipher". Keep that in mind fore now, it can be pretty useful



We can try to extract something from this image with the "stegseek -crack atbash.jpg" command. And we see that something has been extracted and put in "atbash.jpg.out"

```
The Actions Edit View Help
reprodui@kali)-[-/picoctf/2023/crypto/1]
$ stegSeek --crack atbash.jpg
StegSeek 0.6 - https://github.com/RickdeJager/StegSeek

[i] Found passphrase: ""
[i] Original filename: "encrypted.txt".
[i] Extracting to "atbash.jpg.out".

(zerodol@kali)-[-/picoctf/2023/crypto/1]
$ ls
atbash.jpg atbash.jpg.out

(zerodol@kali)-[-/picoctf/2023/crypto/1]
$ ls
atbash.jpg atbash.jpg.out
```

We can see what's inside that file with "cat atbash.jpg.out". We have something that seems encrypted. Now if you remember the Atbash Cipher you can see where this takes us

We can go to "cyberchef" and choose the atbash cipher and paste our encrypted sentence and Whaou, we have our flag: picoCTF{atbash_crack_1f84d779}

