

Cryptography

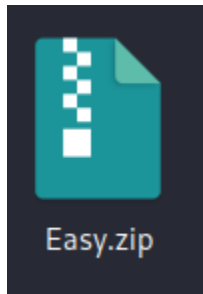
Challenge – 345Y

Difficulty - Easy

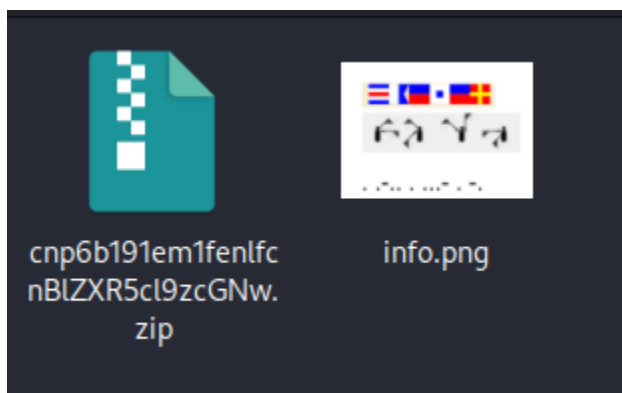
The description of the challenge was “Just your usual ciphers:)”

As it refers, we must use numerous ciphers to solve the challenge.

After downloading the attachment, it is a zip file.



After extracting the zip file there are two more files, one image file and the other is a zip file.



I tried to extract the zip file, but it is password protected. After some time, I realized that the name of the zip file is weird.

I identified the zip file name was something suspicious so as usual I have tried base64 decoding

```
... (arul@kali)-[~] hg...
$ echo "cnp6b191em1fenlfcnBlZXR5cl9zcGNw" | 64
rzzo_uzm_zy_rpeetyr_spcp
```

“cnp6b191em1fenlfcnBlZXR5cl9zcGNw” ==> “rzzo_uzm_zy_rpeetyr_spcp”

The output “rzzo_uzm_zy_rpeetyr_spcp” seems like a flag but encrypted.

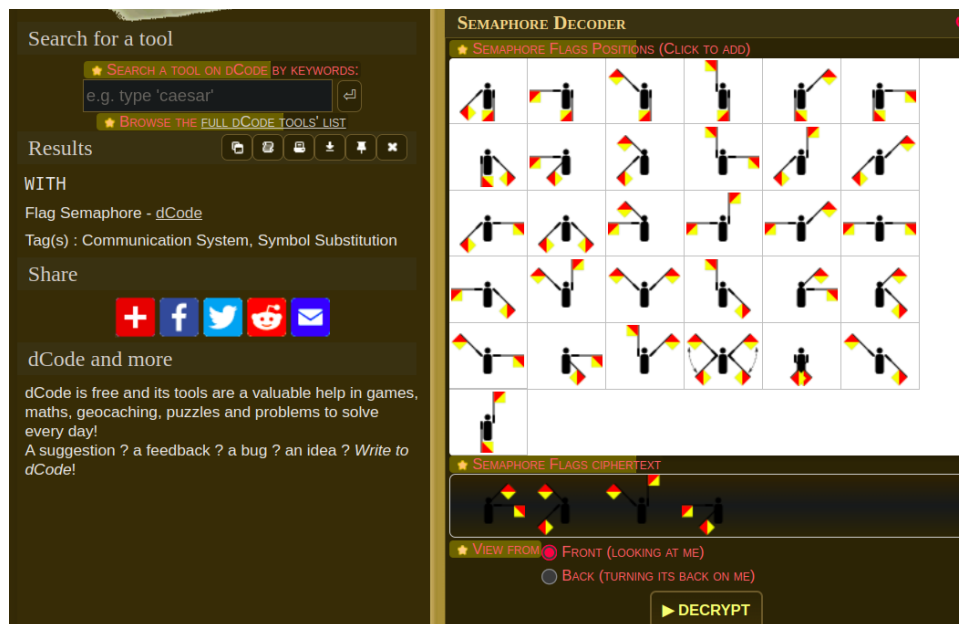
And then I examined the second file in the Easy folder which has some flags, Men holding flags and some morse.



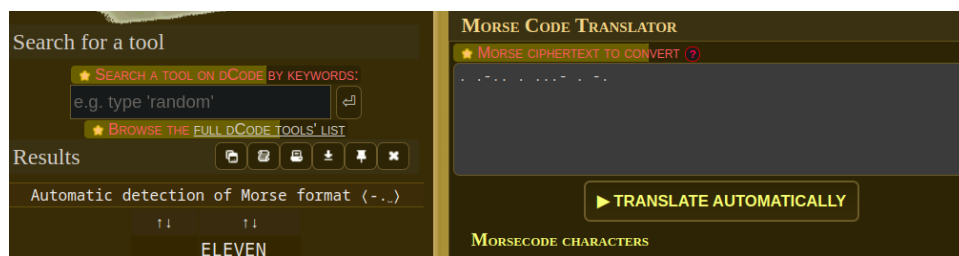
I searched the image in google and I found that these symbols of “Navy Signal”, “Semaphore”, and “Morse Code” are “International code of signals” and each signal is symbolized to a letter.



The output of the first part of the image is “CEASER”

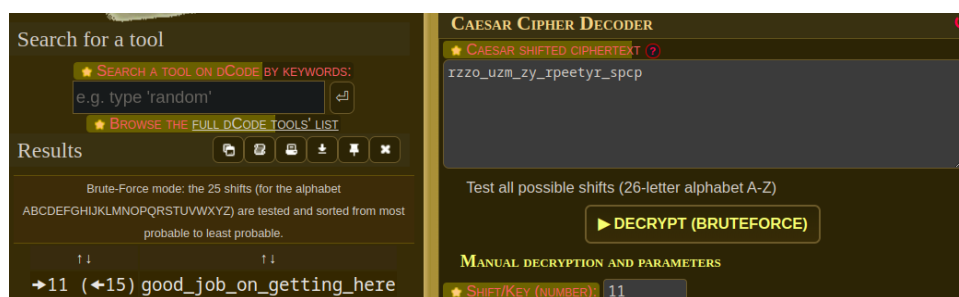


The output of the second part of the image is “WITH”



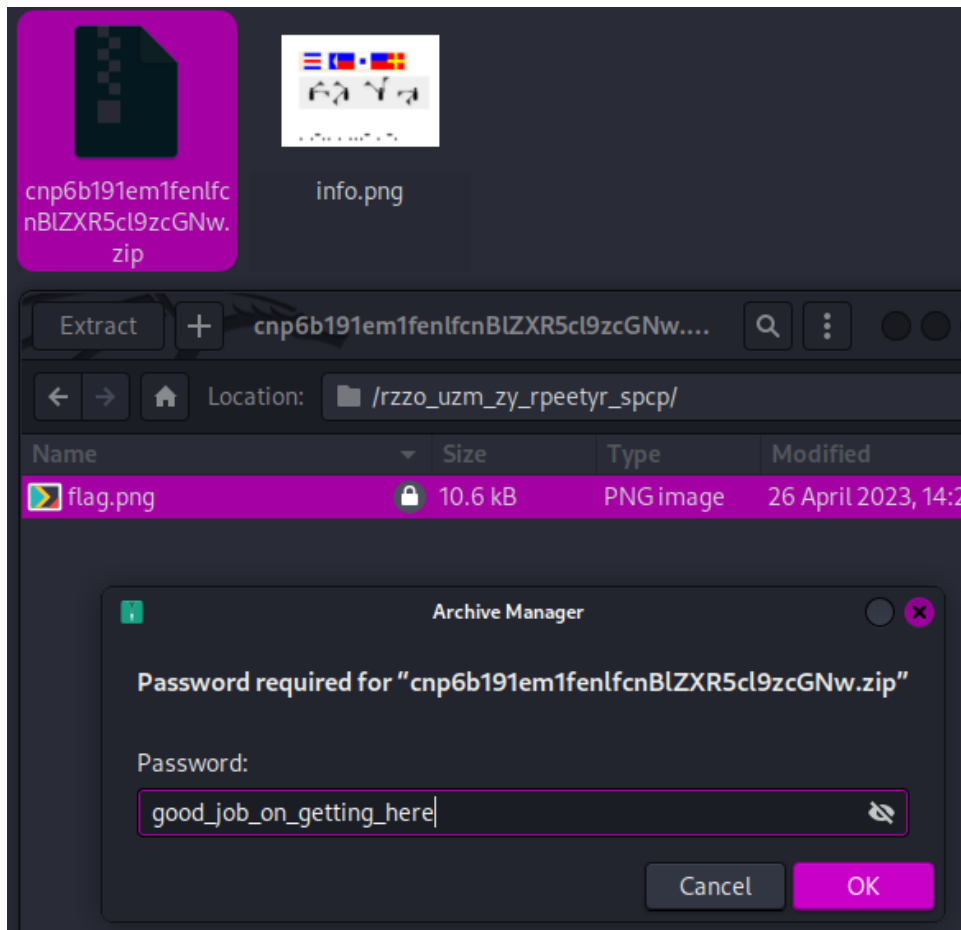
The output of the third part of the image is “ELEVEN”

The output of this image is “CAESER WITH ELEVEN” which refers that “rzzo_uzm_zy_rpeetyr_spcp” encrypted with Caesar cipher with key 11.



Decrypted output is “good_job_on_getting_here”. Hey, I got the flag!!

After that I thought that why can't "good_job_on_getting_here" be the password of the zip file and tried. It's correct!

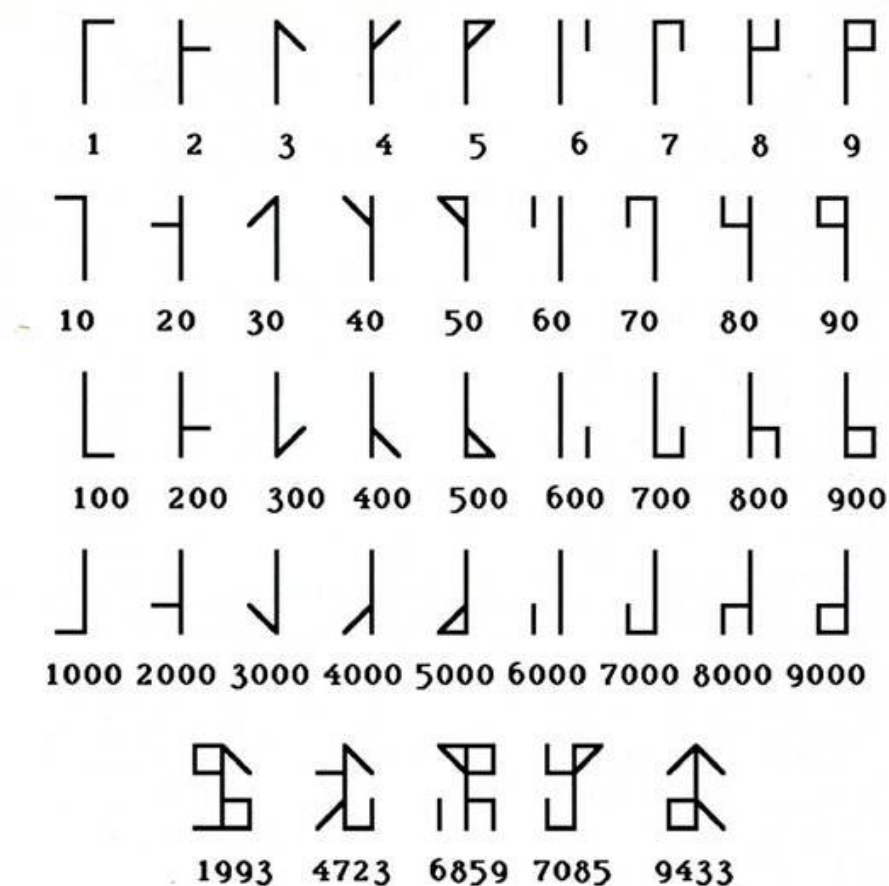


There is a file inside the extracted zip file which has some weird symbols.



I searched this image in google and got to know that this is monk numeral cipher where each symbol has a number assigned to it.

I decrypted according to the symbols given and got some numbers.



106 117 53 116 95 115 48 109 51 95 99 49 112 104 51 114 53 95 102 48 114 95
102 117 110

This must be ASCII. I entered these values in decimal to ASCII and I got

decimal	ascii
106 117 53 116 95 115 48 109 51 95 99 49 112 104 51 114 53 95 102 48 114 95 102 117 110	ju5t_s0m3_c1ph3r5_f0r_fun

"ju5t_s0m3_c1ph3r5_f0r_fun"

Flag: Xiomara{ju5t_s0m3_c1ph3r5_f0r_fun}