

A large green triangle pointing downwards, with a thin white diagonal line running through it from the top-left to the bottom-right.

Hackim 2019 WRITE-UP

Misc –cat

CHALLENGE DESCRIPTION

Decrypt the file to unlock the door.

Encrypted file is given.


SOLUTION

The file is containing uncat code then by using uncat interpreter to run the file we got the following result.

```
root@kali:~# python cat.py final
[('inputst',1),('diepgrm',),('asgnlit', 1, 1),('asgnlit', 4, 1),('
10, 7),('echoval', 2),('pointer',4,4),('echoval',4),('applop+', 10
oval',10),('asgnlit', 2, 72),('applop*', 2, 10),('echoval',2),('as
108), ('echovar', 0),('asgnlit', 0, 108), ('echovar', 0),('asgnli
, ('echovar', 0),('asgnlit', 0, 119), ('echovar', 0),('asgnlit', 0
chovar', 0),('asgnlit', 0, 115), ('echovar', 0),('asgnlit', 0, 48)
r', 0),('asgnlit', 0, 109), ('echovar', 0),('asgnlit', 0, 69), ('e
),('asgnlit', 0, 95), ('echovar', 0),('asgnlit', 0, 67), ('echovar
gnlit', 0, 64), ('echovar', 0),('asgnlit', 0, 84), ('echovar', 0)]
```

The python interpreter file uses the “diepgrm” to terminate and exit from the application and usually present at the end of the list, so we should remove “inputst” and “diepgrm” then just add “diepgrm” at the end of the list.

We modified cat.py interpreter and add our list to “ins” variable which will used by the interpreter to convert the list into readable string.



```
*cat.py
~/
Save

def return_val(c):
    c=c[1:]
    return ("asgnlit",-1,-1)

while len(c) > 0:
    ins.append(parseStmnt())

#print ins

ins=[('asgnlit', 1, 1),('asgnlit', 4, 1),('asgnlit', 10, 7),('echoval', 2),('pointer',4,4),('echoval',4),('applop+', 10, 1),('echoval',10),
('asgnlit', 2, 72),('applop*', 2, 10),('echoval',2),('asgnlit', 0, 108), ('echovar', 0),('asgnlit', 0, 108), ('echovar', 0),('asgnlit', 0, 65),
('echovar', 0),('asgnlit', 0, 119), ('echovar', 0),('asgnlit', 0, 69), ('echovar', 0),('asgnlit', 0, 115), ('echovar', 0),('asgnlit', 0, 48),
('echovar', 0),('asgnlit', 0, 109), ('echovar', 0),('asgnlit', 0, 69), ('echovar', 0),('asgnlit', 0, 95), ('echovar', 0),('asgnlit', 0, 67),
('echovar', 0),('asgnlit', 0, 64), ('echovar', 0),('asgnlit', 0, 84), ('echovar', 0),('diepgrm',)]

while True:
    mem[-1]=mem.get(-1,-1)+1
    try: it = ins[mem[-1]]
    except IndexError: it = ("asgnlit",-1,-1)
    if it[0] == "diepgrm":
```

By running the interpreter, we got the flag.

```
root@kali:~# python cat.py final
018576llAwEs0mE_C@Troot@kali:~#
```

Reference

Unicat interpreter <https://github.com/gemdude46/unicat>