

checker


CSAW 2021 CTF

GoProSlowYo

checker

141

What's up with all the zeros and ones? Where are my letters and numbers? (This is a reversing challenge.)

 checker.py

2021-09-10

Contents

checker	3
Initial Research	3
Decode then encode	3
Victory	4

checker

Writeup by: GoProSlowYo solved by Perryman

Team: OnlyFeet

Writeup URL: GitHub

```
1 What's up with all the zeros and ones? Where are my letters and numbers
  ? (This is a reversing challenge.)
```

Initial Research

This one is extremely straightforward and they literally tell us: `(This is a reversing challenge.)`.

For this challenge you can work backwards through the provided python code and function calls to end up with the flag ultimately.

Decode then encode

The main function calls an `encode` function on the `flag`:

```
encoded = encode(flag).
```

If we look at the `encode` function we see it's setting `d = 24` then it's calling `x = up(input)`, `x = right(x,d)`, `x = down(x)`, `x = left(x,d)` and then returns `x`.

```
1 def encode(plain):
2     d = 24
3     x = up(plain)
4     x = right(x,d)
5     x = down(x)
6     x = left(x,d)
7     return x
```

We need to take the encoded string and run backwards through main and each function.

Victory

Submit the flag and claim the points:

flag{r3vers!nG_w@rm_Up}