

After messing around a bit on the server, I discovered this:

```
(kali㉿kali)-[~]
$ nc 35.246.152.131 32753
Welcome, enter text here and we will secure it: x
x
1b15071a540359525905035500535052035004530251515003040756505853565053025405530357
580057580704505057045203570351570300540700575454540500511c

(kali㉿kali)-[~]
$ nc 35.246.152.131 32753
Welcome, enter text here and we will secure it: c
c
0017051856015b505b07015702515250015206510053535201060554525a51545251005607510155
5a02555a0506525255065001550153550102560502555656560702531e

(kali㉿kali)-[~]
$ nc 35.246.152.131 32753
Welcome, enter text here and we will secure it: ctf{
ctf{
0000000057005a515a06005603505351005307500152525300070455535b50555350015706500054
5b03545b0407535354075100540052540003570403545757570603521f
```

The server performs some sort of alien xor (pun intended) that works like this: If the character from input is correct, the server returns 00 for that character. A quick solve script looks like this:

```
from pwn import *

valid_chars = "abcdef0123456789"
context.log_level='error'
host = '35.246.152.131'
port = 32753

def send_input(input_data):
    r = remote(host, port)
    r.recvuntil(": ")
    r.sendline(input_data)
    r.recvline()
    response = r.recvline().decode().strip()
    r.close()
    return response

def find_flag():
    flag = "ctf{"
    while True:
        for char in valid_chars:
            response = send_input(flag + char)
```

```
        n = len(flag) + 1
        if response[:2*n] == "0" * (2*n):
            flag += char
            break
    else:
        print(f"Flag found: {flag}" + "}")
        break

if __name__ == "__main__":
    find_flag()
```

Made with love by: AndreiCat