PPC : Mind Palace II

Description :   It's time to strain your brains.

nc 212.47.229.1 33002

Solution :

This challenge is like a game.

We need to program a script that decrypts what seems to be rot13 encoded words. Rot13 is a cypher where all the characters are swapped by 13 following their position in the alphabet.

This program receives the instructions, parse the string, translate it and send the answer to the server. There is a loop that throws an error when the flag will be sent, because the parse will fail.

```
1   import socket
2   import string
3
4   server = "212.47.229.1"
5   port = 33002
6
7   rot13 = str.maketrans(
8       "ABCDEFGHIJKLMabcdefghijklmNOPQRSTUVWXYZnopqrstuvwxyz",
9       "NOPQRSTUVWXYZnopqrstuvwxyzABCDEFGHIJKLMabcdefghijklm")
10
11
12  def challenge(socket):
13      while True:
14          buf = socket.recv(1024).decode('utf-8')
15          print(buf)
16          message = buf.split()
17          res = str.translate(message[1], rot13) + "\n"
18
19          socket.send(res.encode('utf-8'))
20          print("[+] Sending " + res.rstrip())
21
22
23  socket = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
24  socket.connect((server, port))
25
26  buf = socket.recv(1024).decode('utf-8')
27  print(buf)
28  message = buf.split()
29  res = str.translate(message[13], rot13) + "\n"
30
31  socket.send(res.encode('utf-8'))
32  print("[+] Sending " + res.rstrip())
33
34  challenge(socket)
```

```
Message:   ERFHOFGNAGVNGVBA
Answer:
[+] Sending RESUBSTANTIATION
Message:   CHAPGHNGR
Answer:
[+] Sending PUNCTUATE
Message:   OVFZRECHAQ
```

We finally get the flag.

```
Message:   VARSSNOYL
Answer:
[+] Sending INEFFABLY
FLAG{Y0U_V3RY_F45T3R_CRYPT0GR4PH}
Message:   FCNEYVATF
```

FLAG{Y0U_V3RY_F45T3R_CRYPT0GR4PH}