Congratulations!! You have been accepted into the legendary Unit 8200. This is a rare opportunity to contribute to the war effort against the Iranian nuclear program. Your mission is to hack into the servers of the Iranian reactor and obtain the flag. One of the Pakistanis in the nuclear facility works for the Mossad and has agreed to sniff the communications at the site. The problem is that some cyber kids have decided to attack the server. Luckily, the cyber kids don't know how to read instructions.

The Iranians have implemented their checksum algorithm in the UDP protocol differently from the norm. (Explanation on the next page).

The server is essentially a secure website that you need to hack into.

**Website link:**

<https://yosef147yosef.pythonanywhere.com/>

Capture File:



The flag will be marked with

**Flag{}**

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**Explanation of the Checksum Algorithm:**

First, we will sum the values of the bytes as follows:

For each byte, the sum will be equal to the sum plus the byte value with a left shift of the byte index modulo four.

Finally, we perform a NOT operation on the accumulated sum and take the two leftmost bytes.

For example, given the bytes

0x11, 0xea, 0x33, 0x77, 0xfc

the sum would be calculated as:

0x0011 + 0x01d4 + 0x00cc + 0x03b8 + 0x00fc = 0x0765

NOT 0x0765 = 0xF89A