## Over The Wire -- Natas

## Level 11 - Level 12

1. Get cookie from website(Use the default color #ffffff)

CIVLIh4ASCsCBE8IAxMacFMZV2hdVVotEhhUJQNVAmhSEV4sFxFeaAw=

2. Decode cookie from base64 to hex(We can skip this step)

0A554B221E00482B02044F2503131A70531957685D555A2D12185425035502685211 5E2C17115E680C

3. Json encode the default data from page source

{"showpassword":"no","bgcolor":"#ffffff"}

4. Calculate xor of decoded cookie and encoded data to hex(You can get the key)

7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a7177384a71

The key is 7177384a in hex and qw8J in ascii

5. Edit a new data which show password is true

{"showpassword":"yes","bgcolor":"#ffffff"}

6. Transfer data to hex

7b2273686f7770617373776f7264223a22796573222c226267636f6c6f72223a22236666 66666666227d

7. Modify key so that it get same length with transferred data

8. Xor modified data and key, then encode by base64

CIVLIh4ASCsCBE8IAxMacFMOXTITWxooFhRXJh4FGnBTVF4sFxFeLFMK

9. Set cookie in http://natas11.natas.labs.overthewire.org/ and refresh

EDXp0pS26wLKHZy1rDBPUZk0RKfLGIR3

Level 12 - Level 13