RSA NOOB

These numbers were scratched out on a prison wall. Can you help me decode them? [https://mega.nz/#!al8iDSYB!s5olEDK5zZmYdx1LZU8s4CmYqnynvU\_aOUvdQojJPJQ](https://mega.nz/" \l "!al8iDSYB!s5olEDK5zZmYdx1LZU8s4CmYqnynvU_aOUvdQojJPJQ)

I recommend you to first gather some basic knowledge about RSA algorithm

and then proceed further. There are many online tools for RSA decryption which can easily solve this problem but you should know its working.

After downloading text file from this url its content were :



From this text it was clear that c = ciphertext, n = product of two prime numbers, and e = range(1,phi(n))

For decryption the formula is:

decrypt\_value = c^d (mod n)

where d = e^-1 (mod phi(n)).

In this case phi(n) is just n. Hence d = 1 mod(phi(n)) which is always 1.

Hence our decrypt\_value becomes c.

Converting this decimal value into hex and then to ascii will give the flag as:

abctf{b3tter\_up\_y0ur\_e}