MATH 253: CRACK RSA

Be a Bad Guy

I have encrypted one of the questions on Test 2 using public key

$$N = 8539734222673567068156567202312013153434 9$$
$$e = 17$$

I tried to email this to Agent X, who proofreads my tests, but the message was intercepted.

$$C = 4804036093541681782301272610411262161249 7$$

It is your turn to be the Bad Guy. You are not the intended receiver, here is a chance to try out your number theory/python kung-fu. As a Bad Guy, you must decrypt the message. Once you succeed, you will get an integer forming the decrypted message. Understanding the message at this point is easy. Just chop the number into consecutive blocks of size 2, and each block corresponds to a character in ASCII. Python allows you to convert from ASCII to text and back using `chr` and `ord`.

You can get the public key (N, e) and encrypted message C on Blackboard. Good luck, and don't get arrested. (Don't worry. This is not a violation of the UNCG Academic Integrity Policy.)

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