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I wrote python code to decrypt the ciphertext.

In the python algorithm I manually define the values of e and n and create a list containing the blocks of ciphertext as strings.

The python algorithm calls a text file containing each character to be encoded, and creates a mapping between the characters and their encodings.

The code then runs a loop that increments a value X and checks if n modulo X is equal to 0, which would mean that X divides n and X is either p or q.

It then defines p as X and q as n/X, getting both primes that compose n.

The code then runs the euclidean algorithm, keeping track of c_n , d_n , c_{n-1} , and d_{n-1} at time step n.

It ends the algorithm when the remainder r is equal to 1, and calculates d for the RSA encryption using the values of c_n and d_n .

Once it has d it goes through the list of ciphertext blocks and calculates $(c_i)^d$ for each cipherblock c_i in the list.

The result is the corresponding m_i to each c_i , which is added to a list of messages. Finally the algorithm uses the mapping of encodings to characters from earlier to get the message from m_i .

The decrypted ciphertext blocks are 'My s', 'tude', 'nts ', 'are ', 'grea', 't. ', where quotation marks enclose the block and are not part of the block. The full message is "My students are great".

The code is included in the folder, and can be run as any other python file.