**Explanation**

1. **Compute ed\_minus\_1**: Calculate epub⋅dpub−1*epub*​⋅*dpub*​−1, which is a multiple of ϕ(N)*ϕ*(*N*).
2. **Iterate k Values**: Loop through possible values of k*k* to find divisors of edminus1*edm*​*inus*1​.
3. **Check Validity of phi\_candidate**: For each k*k*, compute ϕ(N)*ϕ*(*N*) candidate and check if it leads to valid primes p*p* and q*q*.
4. **Recover p and q**: Use the quadratic equation derived from N*N* and ϕ(N)*ϕ*(*N*) to find p*p* and q*q*.
5. **Decrypt the Ciphertext**: Once p*p* and q*q* are found, compute the private key for epriv*epriv*​ and decrypt the ciphertext to get the flag.

