CS/MATH111 EXTRA CREDIT ASSIGNMENT

For this assignment, you need to implement the RSA public-key cryptosystem. (You can use C++, Java or Python).

Input:

a) Valid public key;

b) Choice of encryption or decryption;

Input for encryption:

c1) English text (in a text file). You can use well known quotes.

Input for decryption:

c2) Cipher text (in a text file).

Output:

For encryption: cipher text (written into a text file).

For decryption: decoded message (written into a text file).

You can reuse the character - integer encoding schema from your Homework 2 (A is 2, B is 3, ..., Z is 27, and blank is 28) and append it with other characters if needed.

Submission/Demo Instructions.   To submit the homework, you need to upload the pdf file into Gradescope (by Tuesday, Oct. 29, 11:50pm) and demo your program to the instructor or a TA (by Tuesday, Nov. 5, 5:00pm).

Reminders.   Remember that only LaTeX papers are accepted.