

Homework Assignment Due October 21, 2021:

1. Imagine that Fred sees your RSA signature on m_1 and m_2 , (i.e., he sees $(m_1^d \bmod n)$ and $(m_2^d \bmod n)$).

How does he compute the signature on each of $m_1^j \bmod n$ (for positive integer j), $m_1^{-1} \bmod n$, $m_1 \times m_2 \bmod n$, and in general $m_1^j m_2^k \bmod n$ (for arbitrary j and k)?

2. Choose one of your favorite operating systems (e.g. Windows 98/2000/XP or UNIX) and compare its security policy with the Clark-Wilson model. Does its security mechanism satisfy Clark-Wilson axioms? You may take a look at http://www.giac.org/practical/gsec/Sonya_Blake_GSEC.pdf, though I am sure you will have your own opinion.

How to Submit Your Assignment:

Please send your completed assignment to talía.q@ufv.ca :

The Subject Field must read: CIS221 Assignment 1. Please copy and paste this into the Subject Field of your submission. Failure to do this exactly will result in a grade of zero for the assignment with no exceptions.