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Exercise for the lecture

Distributed Storage and Computer Forensic

Winter 2011/12

Sheet 3

EXERCISE 3:

Consider the $GF(2^2)$ with the irreducible polynome $x^2 + x + 1$

1. Create an exponential and logarithm table for this field.

2. Create a 3x3 Vandermonde Matrix.

3. Invert the Vandermonde Matrix.

4. What is the largest invertible Vandermonde Matrix over this field?