1056-Z1-1458 Yajun Yang* (yangy@farmingdale.edu), Department of Mathematics, Farmingdale State College, 2350 Broadhollow Road, Farmingdale, NY 11735, and Katherine Zhu (kzhu25@gmail.com), Massachusetts Institute of Technology, Cambridge, MA 02139. A Classroom Project on Protecting Social Security Numbers from Identity Theft.

According to security experts, identity theft is one of the fastest growing crimes in America. Social Security Numbers (SSNs) can be used to help assume the identity of other individuals and commit fraud. With an estimated 10 million individuals being victimized by identity theft each year, preventing SSNs from being stolen has become increasingly essential to help protect individuals.

This presentation can work well in the classroom (including a project for a Discrete Mathematics course) to illustrate an interesting method to protect personal information and prevent identity theft. Students can encrypt SSNs in order to generate other unique numbers that can be used for non-social security purposes, such as student identification cards, health insurance accounts, and medical records. The method can be computer implemented and will: encrypt an SSN into an Identification number (ID), and then recover the SSN from the ID number. Therefore, there would be no need to store the SSN in the computer system. (Received September 21, 2009)