

MAT 331 Fall 2018
Solving a random shift code

This project is to decode a text that was encoded by using a different random shift of each letter, but where you are told how the random shifts were chosen, except for the choice of the seed, which is less than a million.

- (1) The file `gm.txt.rs` contains the encryption of a book using the MATLAB code `rs_code.m` found in the `Crypt` directory. This program takes in a file name and an integer that is used to seed the random number generator in MATLAB. This program removes punctuation and white spaces, so the encoded file consists of just a long string of letters. Find the seed that was used to encrypt this file (it is less than a million). Carefully explain how you found the correct seed.
- (2) What is the title and author of the book?
- (3) Include a copy of the first 100 decoded letters. Insert the spaces that were removed in the encoding process.