Morthlach Jul 13, 2018 at 12:58am [a2e7j6ic78h0j](https://cicada3301.boards.net/user/135) likes this

Red Runes Key Search  
  
It is often asked what methods have been tried to decrypt the runes. There isn't much information on actual failed attempts out there, [and there are many good reasons why this is the case](http://cicada3301.boards.net/thread/34/solving-hard-little-information-failures). Here is some attempt to rectify this by sharing some code that will generate keys for many different cribs of the red runes.  
  
github: [Key Search](https://github.com/mortlach/Key_search)Its written in fairly basic python,  so hopefully should be reasonably understandable.  Encryption and decryption methods for [simple arithmetic functions](http://cicada3301.boards.net/thread/31/combining-runes-1-visual-representation)  and [a recursive method](http://cicada3301.boards.net/thread/30/general-approach-solving-liber-primus) (and [here](https://pastebin.com/dZzEjm4j)) have been coded. The cipher text of the LP has been used with [cribs from the n-gram data-base](http://cicada3301.boards.net/thread/48/words-liber-primus-ii-grams) to generate the keys required for each method to give the cipher-text. To help with identifying patterns the keys are also shifted so their first element is zero.  All the data: crib, cipher-text, shift, encryption method, keys and 'keys shifted to zero' are output to files for further inspection.  
  
The scripts generate many thousands of keys. Maybe amongst all these keys is one with a simple pattern that can be extended.  
  
Key Patterns  
  
A next stage could be to set up a pattern matching object that can sort through the key-data and find interesting looking keys.  
For example:  
Prime Sequence Keys: [here are the keys that are consistent with a 'shifted' prime sequence.](https://github.com/mortlach/Key_search/blob/master/prime_keys.txt) There are 491 of them. Most, but not all, are keys that contain wild-card characters.  
[Fibonacci Sequence Keys](https://github.com/mortlach/Key_search/blob/master/fib_keys_cut.txt): (285 of them)