

Zhikai's Password Generator*

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Abstract: A password generator using Zhikai's Index Permutation.

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1. Introduction

We give a password generator using Zhikai's Index Permutation.

2. The Algorithm

Algorithm 1 Zhikai's Password Generator

input: a positive integer n .
output: a sequence of regular Englis (U.S.) keyboard characters with length n including one alphabet, one number, one non-alpha-numeric, the remaining $n - 3$ are random .
Get system time as a long integer l .
Use $l \bmod p$ a large prime p as the random seed.
Get a random byte from set "1234567890".
Get a random byte from set "`abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ".

Get one none-alpha-numeric from set 0 " `~!@#%&*()_-+=[]—:;<,>.?".
Get remaining bytes from the joined set of the previous three steps.
Randomly arrange the bytes using Zhikai's Index Permutation, i.e., generate a random number in $[1, n!]$. Zhikai's Index Permutation will map the the former sequence of bytes to a new sequence using the generated random number.

3. Discussion

This article is not peer reviewed. We attach a program to show its functionality. Discretion advised for serious readers.

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References