

D

С

0

Encrypted string (Z)

C

## Key

n: 8≤ n ≤16

C: 426609638937

$$K = P(X_1) + P(X_2) + P(X_3) + .... + P(X_n)$$

Where P(J) is the number of partitions of the number J

$$Z = K + C$$

(\*\* The largest number whose partitions have been calculated till 28 April 2016 is 10<sup>20</sup> which has 11,140,086,260 digits in its result)

## Example 1

Password: \_)0AvaN!

Character	Representation	Partition
_ (underscore)	1431	138032968084085429989744342641002104875
)	1420	95726696686332376146505918443171660625
0	1410	68550304756601011890673498202891728627
Α	403	8091200276484465581
V	123	2552338241
а	76	9289091
N	424	28938037257084798150
!	27	3010

Sum (K)= 302309969527018818063952996823196388200 {39 Digits}

C = 426609638937 {12 Digits}

Z = K + C = 302309969527018818063952997249806027137 {39 Digits}

## **Example 2**

Password: P{u!S\h"K.A[r3:)

Character	Representation	Partition
Р	430	41415739207102358378
{	37	21637
u	122	2291320912
!	27	3010
S	433	49501890409405150715
\	1430	133523474368721196662101633251149823925
h	105	342325709
"	1411	70881739631740035679525259959146526016
K	421	24167053021441363961
•	24	1575
Α	403	8091200276484465581
[	40	37338
r	117	1327710076
3	1343	7096974610593182332652154711768629954
:	1423	105789511261048976512902596439531532566
)	1420	95726696686332376146505918443171660625

Sum (K)= 413018396558435767456863445723162931978 {39 Digits}

C = 426609638937 {12 Digits}

Z = K + C = 413018396558435767456863446149772570915 {39 Digits}

There exists **only one possible combination** of numbers through which we get the above result for 'Z'. It has 39 digits in total so for a computer to decrypt the password, it would have to calculate partitions of 'Z' i.e. in the **order of 10**<sup>39</sup> which has not been done and will **take a lot of resources and time** to **decrypt to the second level** of our encryption. And in worst case scenario (<u>maybe in future when enough computational resources for the purpose are available</u>) if an intruder reaches layer 1, i.e. the representation layer it will rather turn out to be a **next to impossible** sort of task as **the kernel is arranged in a unique pattern**.