**Given Cipher – 2000 characters**

JFLLXIPASIYRMOYRHCBFQCAQXSENLHSLFVHGRGHLNLHPCZFQXBAZXJLHWZLFBWZNHRVACAHXNOZBDBKHWZLFBWZNHRVLXIBAMSYFCOUQMCFBDIUQNFZGJBKLNGKBWHOHAHTRRAORASABQSSCHCBENSZRBSYTNOUGCSJULCTNBGPTWSKGXDYBCSJGHCBLXICRKSLACOYTNHARMTVECSYZRBHGRCUVMCUGTBVJRHSBXYZYRYLVCAPTQHZCASHQCCAURGMHABPGDFLJJFLUXIZRJQYBBGAUNOSYNMAUNDHVWHVACVLJJZSFBHHECWUTCCIYRGARAIWONHARAULGJBVGQSYGAIJXACBAMHVGQWZFRRLGQWZVBOTVBHHXNWONESUGMCURJBFGQWUTWCIHCMVHFWSYRHZINFFVVDVECOUGCVHGHCBYRJLVLOUGKSSVNJLGQWZVBVHCYSUVWUOBFQVHURAUJBTNWULGDDHSCSYLXIUBCOTNWOARAAPAJHVELMIRARFAJAPPBAVQNZZHBDLPCJLURQSRBWNUCSKBWAVGXFHGYWJBBCBGQPVHWRBARHZGFCGRACZVGOUQOWCRBSCRWOAGNAWGRBARAQLCCIUVCCUROCBECVYRNQVZNWUGQWZVBCUROCBECVYRNKLFCPVHWRVAXZFZYWJN**Y**DYBJQOVWUVINFSNWRHVAIUVCHDBFSYRXBOVVKLFCPVHWRZNWHHZXBPPJOASXIYMNFVSRJLNVOJURBLLXITRJBSVTSHEXPVGWCANACIBCQFOXFNPHPLEWSAVLCYTJBPFVPBGQSDNBPSRNRPAPXBFCOZRLCUQTSLCHCBEQSHQMCDAUCZGQWTTXCKPXJLEJZYVPVAYRGARWHORCSYZRBHGXFZNWWUSRZAEJHPBWIUVCDHECAHAYOYGVOJURBLHWRLEWSHGQWAFJVFCNFHYUCFPXAINCQONBGPFVWYPXDYBLSZFXFJBWHYBUZLQOISYHOYZXFLQESYLCCBTQPBGXIAFRRLVCGSVEWUTQITNWHPFBILSUSZUBYPAQOPEKZVBMUYBFBMBAHORLMIBAUZYXCRENSZRRYUBFMVHFOUGCCORUDIHCDHLJHARWHPBWHORBSYVNGONMFBOKSYFTWUJNGWBCHLQCVLZNOZLKIAGQSZRJFLANKAUNMSBXYOHVOUFFSHGKOKOASHGQSCRAMAURBNINFFUJFKGXGWBCWONMHVJJWAGRZORVCCRMCULXIIROCYRRQVHURGRACOVVVLLRAUBCGAHYWKLTBVJCVLLLOUGKIPYMOULCVPAPZPXNHONCMLGWCUBCMLGWCASXFHOXIASXFALHSHEBGVV**C**GMEXAAUNTBGDFLVBHONCFPTQHVANDVFBWIYNTBGDFLSXIYLXIYCXWUGXTCVNKPQXBAXWCDGQSARLVZGDTMNWRFBDFLSACTGQSMHCIYRCCVERUOGAWNUCQFOXFNFMCUGOSLYYOPARRVQXBAQXHONCONNRBQHBHSRCALTXZPFCSUHWRLEBHHAMHONCHLEVWUNCCYVBCBGCVLENWAPJBAONFLNBCURMKPGQWAPJBAONPHEPOPANRDVCVPGMCLFWHMRNZWVCMVSASTBAGLBATLNAOUQRHHOBCSHCSSLFWSYWCAFCCWRESYHWHPYHCBNASKRJRJNWMVHBHVCRHTNHPLJRHOGQSZRFSHCXBZVMCUGTBVJBIZCNQAINVPPUSSBLOARMOACJFRVWUSBCQLQJFHAMUSRWVHINBYRNGLJQMTRFVFQXSZVCKHACALGQSYRBGVZDQOGNZSZNXBFCGANAHHGCVLONUPAWWUTCVLENKHFJKHEJTLJHSHEBTYBVBVJWIJYNOYJJFAUNKOBUSAURBNNUZAURGLINFFGQWUTRGNBWSQHBHNBWSAUNFLJNFLFDFCVECYFQSYRCVLENBVOXRFXWSDJQCZGJFARMWAVCKHFCVLZJQOVWSZVMCUGDBKRAGANWRKROSUFNBLGFCYXLCTCDHLEWSDCXKLEOISUXCRRMWUGXSCRAMAURBNGAIZGNRABAIUVCOSYCVLLBOFVCUVGBAHECOURFCYQNFVSRBARUZPTNBJRCVLARHZNFOSYYSVCUSHFJHOENOAAXHQHBHAUNCURBCUGQSVGQSYFRRLQNQPQNRVHCTHGNWUNVWJEXGLPXBKRGHLEVWUNCWVAMWKACGLRCVLJJFPJJGIBABHSCSYVWHORAIPABUYRFIWGQSYRBHHEEWUTQWKVWUMEXAAUNVRFCVLJQOAUDBARAYPYUSYFYOAEXZTNLVPANGIHRZKVWOBGXAHGNRMNLHVERSZZXGABOIZJNFLEXIUQNRBCYIAVWQHZYGMBACYQNFSLMWZCXGHYKIYANRPAKMSNBSYFLOUFXALBOIZJNFLXNDANUWCRCCDBAYSBJRPAPPVQRSZGQSKVBDVFJZBARHZEJBUVPVANWRKNHKLJNFLGQOAPUCZRCCNBRBNBDHMBASCRAPBGCVLENKHFXBLZJBDUXHHHPVAHBHVSRUOGCCZGXFTGQSDVASVSCVLPJAWFCCZZJGOGQCZRVSANUAVGQSYSDQRRAGPACCQHWYORCIYANRPGJFVHWRORKFVHPVAHBPHPTTYBVHORKFPATDHHBSOVBBHZNWZPXBUBAXVUWQVAWCYLXIYFXBZNAOOLXIYHWPVEWGVA

**-------------------------------------------------Cipher 0 -------------------------------------------------**

JFLLXIPASIYRMOYRHCBFQCAQXSENLHSLFVHGRGHLNLHPCZFQXBAZXJLHWZLFBWZNHRVACAHXNOZBDBKHWZLFBWZNHRVLXIBAMSYFCOUQMCFBDIUQNFZGJBKLNGKBWHOHAHTRRAORASABQSSCHCBENSZRBSYTNOUGCSJULCTNBGPTWSKGXDYBCSJGHCBLXICRKSLACOYTNHARMTVECSYZRBHGRCUVMCUGTBVJRHSBXYZYRYLVCAPTQHZCASHQCCAURGMHABPGDFLJJFLUXIZRJQYBBGAUNOSYNMAUNDHVWHVACVLJJZSFBHHECWUTCCIYRGARAIWONHARAULGJBVGQSYGAIJXACBAMHVGQWZFRRLGQWZVBOTVBHHXNWONESUGMCURJBFGQWUTWCIHCMVHFWSYRHZINFFVVDVECOUGCVHGHCBYRJLVLOUGKSSVNJLGQWZVBVHCYSUVWUOBFQVHURAUJBTNWULGDDHSCSYLXIUBCOTNWOARAAPAJHVELMIRARFAJAPPBAVQNZZHBDLPCJLURQSRBWNUCSKBWAVGXFHGYWJBBCBGQPVHWRBARHZGFCGRACZVGOUQOWCRBSCRWOAGNAWGRBARAQLCCIUVCCUROCBECVYRNQVZNWUGQWZVBCUROCBECVYRNKLFCPVHWRVAXZFZYWJN

(Most frequent ciphertext characters)

C = 52

B = 47

A = 43

C – E = 2 – 4 = 2 (shift left 2)

Character key: ‘c’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b |

B – E = 1 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

A – E = 0 – 4 = 4 (shift left 4)

Character key: ‘e’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d |

C – T = 2 – 19 = 17 (shift left 17)

Character key: ‘r’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q |

C – A = 2 – 0 = 2 (shift left 2)

Character key: ‘c’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b |

C – O = 2 – 14 = 12 (shift left 12)

Character key: ‘m’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l |

C – I = 2 – 8 = 6 (shift left 6)

Character key: ‘g’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f |

C – N = 2 – 13 = 11 (shift left 11)

Character key: ‘l’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k |

C – S = 2 – 18 = 16 (shift left 16)

Character key: ‘q’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p |

C – H = 2 – 7 = 5 (shift left 5)

Character key: ‘f’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e |

C – R = 2 – 17 = 15 (shift left 15)

Character key: ‘p’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o |

C – L = 2 – 11 = 9 (shift left 9)

Character key: ‘j’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i |

**-------------------------------------------------Cipher 1 -------------------------------------------------**



(Most frequent ciphertext characters)

C = 42

B = 40

H = 38

C – E = 2 – 4 = 2 (shift left 2)

Character key: ‘c’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b |

B – E = 1 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

H – E = 7 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

V – E = 21 – 4 = 17 (shift left 17)

Character key: ‘r’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q |

R – E = 17 – 4 = 13 (shift left 13)

Character key: ‘n’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m |

L – E = 11 – 4 = 7 (shift left 7)

Character key: ‘h’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g |

A – E = 0 – 4 = 4 (shift left 4)

Character key: ‘e’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d |

O – E = 14 – 4 = 10 (shift left 10)

Character key: ‘k’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j |

F – E = 7 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

S – E = 18 – 4 = 14 (shift left 14)

Character key: ‘o’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n |

**-------------------------------------------------Cipher 2 -------------------------------------------------**

CGMEXAAUNTBGDFLVBHONCFPTQHVANDVFBWIYNTBGDFLSXIYLXIYCXWUGXTCVNKPQXBAXWCDGQSARLVZGDTMNWRFBDFLSACTGQSMHCIYRCCVERUOGAWNUCQFOXFNFMCUGOSLYYOPARRVQXBAQXHONCONNRBQHBHSRCALTXZPFCSUHWRLEBHHAMHONCHLEVWUNCCYVBCBGCVLENWAPJBAONFLNBCURMKPGQWAPJBAONPHEPOPANRDVCVPGMCLFWHMRNZWVCMVSASTBAGLBATLNAOUQRHHOBCSHCSSLFWSYWCAFCCWRESYHWHPYHCBNASKRJRJNWMVHBHVCRHTNHPLJRHOGQSZRFSHCXBZVMCUGTBVJBIZCNQAINVPPUSSBLOARMOACJFRVWUSBCQLQJFHAMUSRWVHINBYRNGLJQMTRFVFQXSZVCKHACALGQSYRBGVZDQOGNZSZNXBFCGANAHHGCVLONUPAWWUTCVLENKHFJKHEJTLJHSHEBTYBVBVJWIJYNOYJJFAUNKOBUSAURBNNUZAURGLINFFGQWUTRGNBWSQHBHNBWSAUNFLJNFLFDFCVECYFQSYRCVLENBVOXRFXWSDJQCZGJFARMWAVCKHFCVLZJQOVWSZVMCUGDBKRAGANWRKROSUFNBLGFCYXLCTCDHLEWSDCXKLE

(Most frequent ciphertext characters)

C = 51

N = 44

A = 39

C – E = 2 – 4 = 2 (shift left 2)

Character key: ‘c’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b |

N – E = 13 – 4 = 9 (shift left 9)

Character key: ‘j’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i |

A – E = 0 – 4 = 4 (shift left 4)

Character key: ‘e’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d |

B – E = 1 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

H – E = 7 – 4 = 3 (shift left 3)

Character key: ‘d’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c |

V – E = 21 – 4 = 17 (shift left 17)

Character key: ‘r’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q |

F – E = 5 – 4 = 1 (shift left 1)

Character key: ‘b’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| b | c | d | e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a |

R – E = 17 – 4 = 15 (shift left 13)

Character key: ‘n’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m |

S – E = 18 – 4 = 14 (shift left 14)

Character key: ‘o’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m | n |

L – E = 11 – 4 = 7 (shift left 7)

Character key: ‘h’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g |

**-------------------------------------------------Cipher 3 -------------------------------------------------**

OISUXCRRMWUGXSCRAMAURBNGAIZGNRABAIUVCOSYCVLLBOFVCUVGBAHECOURFCYQNFVSRBARUZPTNBJRCVLARHZNFOSYYSVCUSHFJHOENOAAXHQHBHAUNCURBCUGQSVGQSYFRRLQNQPQNRVHCTHGNWUNVWJEXGLPXBKRGHLEVWUNCWVAMWKACGLRCVLJJFPJJGIBABHSCSYVWHORAIPABUYRFIWGQSYRBHHEEWUTQWKVWUMEXAAUNVRFCVLJQOAUDBARAYPYUSYFYOAEXZTNLVPANGIHRZKVWOBGXAHGNRMNLHVERSZZXGABOIZJNFLEXIUQNRBCYIAVWQHZYGMBACYQNFSLMWZCXGHYKIYANRPAKMSNBSYFLOUFXALBOIZJNFLXNDANUWCRCCDBAYSBJRPAPPVQRSZGQSKVBDVFJZBARHZEJBUVPVANWRKNHKLJNFLGQOAPUCZRCCNBRBNBDHMBASCRAPBGCVLENKHFXBLZJBDUXHHHPVAHBHVSRUOGCCZGXFTGQSDVASVSCVLPJAWFCCZZJGOGQCZRVSANUAVGQSYSDQRRAGPACCQHWYORCIYANRPGJFVHWRORKFVHPVAHBPHPTTYBVHORKFPATDHHBSOVBBHZNWZPXBUBAXVUWQVAWCYLXIYFXBZNAOOLXIYHWPVEWGVA

(Most frequent ciphertext characters)

A = 52

R = 43

V = 43

A – E = 0 – 4 = 4 (Shift left 4)

Character key: ‘e’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| e | f | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d |

R – E = 17 – 4 = 13 (shift left by 13)

Character key: ‘n”

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| n | o | p | q | r | s | t | u | v | w | x | y | z | a | b | c | d | e | f | g | h | i | j | k | l | m |

**---------------------------------------------------TRIAL 1 -----------------------------------------------------**

First key: “ccce”



**---------------------------------------------------TRIAL 2 -----------------------------------------------------**

Second key: “ddjn”

GCCYUFGNPFPEJLPEEZSSNZRDUPVAIEJYCSYTODYYKIYCZWWDUYRMUGCUTWCSYTQAEOMNZXYKKLQOAYBUTWCSYTQAEOMYUFSNJPPSZLLDJZWOAFLDKCQTGYBYKDBOTEFUXEKEOXFEXPRONPJPEZSRKPQEYPPGKLLTZPAHIZKAYDGGTPBTUAPOZPATEZSYUFTEHPCNZLPGKEREJQMRZPPMOYYTOZLIJZLTQYMWOEJOUVQLOVCIZXGGNEQPXPYDZZRHODDUXYGTACCWGCCHUFQEGNPOYDRHKLJLKJRHKAYITEMNZSCWGWJSYEYRZTLGZZZLODREXFNBKEREXRCTGYMTNPPTXFAKXZSNJEMTNTQSOOCTNTQIYLKIYEYKKTFABPLTJZLEGYWTNTLGTZZUZJMUCTJLOEQVKCWISAMRZLLTZSYTEZSLOGCIILLTHPJIKGCTNTQIYSYPVPLITRFOCNMURORHGYKATRCTAAYFZPPYUFLOZLKATLREXXGNGEMRIJZEXOWNGXGCYXMDKWQUYACCZGCHONJEYTEHZPBOTXMTUCYTVTAOYZSTNMMUTOSNOEQTCZXEXZQIDLLDLTTEYPTETLRTKXNTOYREXNCPZFLIZZLELZSRZSPEKNMMKTLTNTQIYZLELZSRZSPEKHCSZMMUTOMNUWWMVTAAVAPOGNFITRMVKCJATOYIXFLIZEUOCPPEUYFISHCSZMMUTOQATEYMUYGCGLRFUFPZKCMFOGCASLAHOYCYUFKEGYJIQPYRUMMTTZRAXZZOZNWBUCECEMCRTPRIIZPGGYGSSMSTNPUAYMJEKOGNMUSSZLQEIZLDQPCPEZSRNPYDJZUNRZQTNTKGUZBCUGCRGWPIMSRLODRETEFEZPPMOYYTUCQATTLFOWRRGEGOTFLIZAYRZXYNVLPTSLAHOYCUTOCRTPYTNTRSGSWPKCYLRZWCUXZAZNFAYDGSSTPCUAPOIPQSUCAOTEPORWCDLFJLELPMUCCDBPPYZZSGNMSTUFRSOOCIZDJIBTLGNFKATEGSYFCFRPQHYVGNNLGRHWMOJRPOCYDOXEFEIJZOXRQLUZIRKPQEOVLOCJMUCLLTZZFERAZUZAYYGERETEGOTEFEYPPIKDFAJCSBHPPSQTLWKDNOZECDZSCMKLQYHFRTNPQEGCCNKHRHKJJOUVFUSLLSCPYTHLBBXPYTNPTEXJRHOYEVKCWHGCBTUDNOZTFAJEMWGTRTOWFESZTEJZLYUFZELZPEONMUROXEXZFISSCYOXLOZDRUVTBYQYMWZSCYILLTHFGLJLLYZSGNMWGKKEFAZJCTTZLOZJCTTZRFUCYBUFRFUCRYEPYRYDMIZDDRUXRHKQSTACCIYEFAZCGGNEMNKAMSYTZLKQSTACCFUFPYUFPPUTLTUQTIKHGDUYRKTZUTNPREISQTAQDATOWOACCFXZKTNPDUZFPEZZMRORFTXTEHZNWBUCESJZLTLPCLVLGNOOMDUYRDUEFAZLEAOYHUYEJEZXCGUWGSZPLUTOCRYEYNJEFAZECRSTLAZZPIYZSTZSCRKTRCGYRBKCCAYZLEJHGTNTRCGYRBKMYRMLGNKOUIZSGTJZCSTEDEKWNIZJMFXPKOXDCOXQCAXLLDOEYBYZJUZPJYCTJLTZRSZZNEBPPUTEGLEZSAXPBEGOAATJMUYEMPOEKAEMCWOEFTNPQECPYPUYQIJZLTQYMWYFQPKNRVKSGCRPJOILREJLRPGCIITRJOZNCDGCYNJRJETSYVKYPEKDCWNJKECSWDUPQIZHYNZXCTNPPEYDMMANFTKWJMKUSSZDRAXEYTZSCBKRGNTTLGZSCRKHYSGHYRGQCWEPYRYQPOSYMWTFALKLPWGCRHKHFORPRHOYEARWRHODCVKCWTNTLGODEOTPHUYEEOTPRHKCCWKCCSACTIBZPSNPPEZSCRKYMBUOWKTPUWNZQTGCREJTRIZHYSZSCMGNFITPQIJZLTAYBEXDRATOBELPLSKYCTCZPKIZKPAECRTPUPUHCRLFJHUZIEJTLTUPTEXJRHOYETXFQTKOROXFLIZLJLZSCYYLWIZRMTYXYRZLLECZPDKCMFOYRERWGGKYAEZSCNOEQACLJLVPMPRPYSGEFRKLRNUEHUYERHKZLEYZLTNPMTNPPSOOCDKNGDKOMUZQYTKTLASTARUDCCUYBEDECRSTLAZTMNJTBNZDCEZSCWGCGWGDZOXYYFZPPITEFEXFGNYRPECFNTNPPEYEYRBTLGNTBITRDRUXRHKSISZSCWNLRHAYREXVGLRPPSVLRRUWKAISGNKDZUOWBITLSTUXYTKODAIEMROPQMUDROLFQWKCCRUFLDKOSPVFRITNYMVDDOXZPDKCJYJTQPUDYLHFPNKOGNHJJAYPPSILLSUXCOLFQWKCCKKARARTTEZZUOXVJOGOGNMMMDOPQTNPBIYAMSGWSNOEQRGYLIMSRATOBAEHCWKCCTNLRCRZQEZZEOOYEOAEDOXPTEXMSTZSCRKHYSUYCMGYUHUEYUMSRUYEMFORFTZZQTUCKTNPUIXPMFZSCCGXNSZZQMGDFTNZQESPRARXMTNPPFANIEXDGNZZHUTVFEZFPNKOGTGCMUTOFEHCMUMSRUYMYCQQPOSEFEHCGNQAYUYPFIYYYMKTQCUYLOXUMHTNMNTZPYUFPSUYQAXLFYUFPUTMMRTDMN

**---------------------------------------------------TRIAL 3 -----------------------------------------------------**

Third key: “edjn”

FCCYTFGNOFPEILPEDZSSMZRDTPVAHEJYBSYTNDYYJIYCYWWDTYRMTGCUSWCSXTQADOMNYXYKJLQOZYBUSWCSXTQADOMYTFSNIPPSYLLDIZWOZFLDJCQTFYBYJDBOSEFUWEKENXFEWPROMPJPDZSRJPQEXPPGJLLTYPAHHZKAXDGGSPBTTAPOYPATDZSYTFTEGPCNYLPGJEREIQMRYPPMNYYTNZLIIZLTPYMWNEJOTVQLNVCIYXGGMEQPWPYDYZRHNDDUWYGTZCCWFCCHTFQEFNPOXDRHJLJLJJRHJAYISEMNYSCWFWJSXEYRYTLGYZZLNDREWFNBJEREWRCTFYMTMPPTWFAKWZSNIEMTMTQSNOCTMTQIXLKIXEYKJTFAAPLTIZLEFYWTMTLGSZZUYJMUBTJLNEQVJCWIRAMRYLLTYSYTDZSLNGCIHLLTGPJIJGCTMTQIXSYPUPLISRFOBNMUQORHFYKASRCTZAYFYPPYTFLOYLKASLREWXGNFEMRHJZEWOWNFXGCXXMDJWQUXACCYGCHNNJEXTEHYPBOSXMTTCYTUTAOXZSTMMMUSOSNNEQTBZXEWZQICLLDKTTEXPTESLRTJXNTNYREWNCPYFLIYZLEKZSRYSPEJNMMJTLTMTQIXZLEKZSRYSPEJHCSYMMUSOMNTWWMUTAAUAPOFNFISRMVJCJASOYIWFLIYEUOBPPETYFIRHCSYMMUSOQASEYMTYGCFLRFTFPZJCMFNGCARLAHNYCYTFKEFYJIPPYRTMMTSZRAWZZOYNWBTCECDMCRSPRIHZPGFYGSRMSTMPUAXMJEJOGNLUSSYLQEHZLDPPCPDZSRMPYDIZUNQZQTMTKGTZBCTGCRFWPILSRLNDRESEFEYPPMNYYTTCQASTLFNWRRFEGOSFLIYAYRYXYNULPTRLAHNYCUSOCRSPYTMTRSFSWPJCYLQZWCTXZAYNFAXDGSRTPCTAPOHPQSTCAOSEPOQWCDKFJLDLPMTCCDAPPYYZSGMMSTTFRSNOCIYDJIATLGMFKASEGSXFCFQPQHXVGNMLGRGWMOIRPOBYDOWEFEHJZOWRQLTZIRJPQENVLOBJMUBLLTYZFEQAZUYAYYFERESEGOSEFEXPPIJDFAICSBGPPSPTLWJDNOYECDYSCMJLQYGFRTMPQEFCCNJHRHJJJOTVFURLLSBPYTGLBBWPYTMPTEWJRHNYEVJCWHFCBTTDNOYTFAIEMWFTRTNWFERZTEIZLYTFZEKZPENNMUQOXEWZFIRSCYNXLOYDRUUTBYPYMWYSCYHLLTGFGLILLYYSGNLWGKJEFAYJCTSZLOYJCTSZRFTCYBTFRFTCRYDPYRXDMIYDDRTXRHJQSTZCCIXEFAYCGGMEMNJAMSXTZLJQSTZCCFTFPYTFPPTTLTTQTIJHGDTYRKSZUTMPREHSQTZQDASOWOZCCFWZKTMPDUYFPEYZMRNRFTWTEHYNWBTCESIZLTKPCLULGNNOMDTYRDTEFAYLEANYHUXEJEYXCGTWGSYPLUSOCRXEYNIEFAYECRRTLAYZPIXZSTYSCRJTRCFYRBJCCAXZLEIHGTMTRCFYRBJMYRLLGNJOUIYSGTIZCSSEDEJWNIYJMFWPKOWDCOWQCAWLLDNEYBXZJUYPJYBTJLSZRSYZNEAPPUSEGLDZSAWPBEFOAASJMUXEMPNEKADMCWNEFTMPQEBPYPTYQIIZLTPYMWXFQPJNRVJSGCQPJOHLREILRPFCIISRJOYNCDFCYNIRJESSYVJYPEJDCWMJKEBSWDTPQIYHYNYXCTMPPEXDMMZNFTJWJMJUSSYDRAWEYTYSCBJRGNSTLGYSCRJHYSFHYRFQCWDPYRXQPORYMWSFALJLPWFCRHJHFOQPRHNYEAQWRHNDCVJCWTMTLGNDEOSPHUXEEOSPRHJCCWJCCSZCTIAZPSMPPEYSCRJYMBTOWKSPUWMZQTFCREITRIYHYSYSCMFNFISPQIIZLTZYBEWDRASOBEKPLSJYCTBZPKHZKPZECRSPUPTHCRKFJHTZIEITLTTPTEWJRHNYETWFQTJOROWFLIYLJLYSCYXLWIYRMTXXYRYLLEBZPDJCMFNYREQWGGJYAEYSCNNEQABLJLUPMPQPYSFEFRJLRNTEHUXERHJZLEXZLTMPMTMPPSNOCDJNGDJOMUYQYTJTLARTARTDCCTYBECECRRTLAYTMNITBNYDCEYSCWFCGWFDZOWYYFYPPISEFEWFGNXRPEBFNTMPPEXEYRATLGMTBISRDRTXRHJSISYSCWMLRHZYREWVGLQPPSULRRTWKAHSGNJDZUNWBISLSTTXYTJODAHEMRNPQMTDROKFQWJCCRTFLDJOSPUFRISNYMUDDOWZPDJCJYITQPTDYLGFPNJOGNGJJAXPPSHLLSTXCOKFQWJCCKJARAQTTEYZUOWVJOFOGNLMMDNPQTMPBIXAMSFWSNNEQRFYLILSRASOBADHCWJCCTMLRCQZQEYZEONYEOZEDOWPTEWMSTYSCRJHYSTYCMFYUHTEYULSRUXEMFNRFTYZQTTCKTMPUIWPMFYSCCFXNSYZQMFDFTMZQERPRAQXMTMPPFZNIEWDGNYZHUSVFEYFPNJOGTFCMUSOFEGCMULSRUXMYCPQPOREFEGCGNPAYUXPFIXYYMJTQCTYLOWUMHSNMNSZPYTFPSTYQAWLFYTFPUSMMRSDMN

**---------------------------------------------------TRIAL 4 -----------------------------------------------------**

Fourth key: “eden”

FCHYTFLNOFUEILUEDZXSMZWDTPAAHEOYBSDTNDDYJIDCYWBDTYWMTGHUSWHSXTVADORNYXDKJLVOZYGUSWHSXTVADORYTFXNIPUSYLQDIZBOZFQDJCVTFYGYJDGOSEKUWEPENXKEWPWOMPOPDZXRJPVEXPUGJLQTYPFHHZPAXDLGSPGTTAUOYPFTDZXYTFYEGPHNYLUGJEWEIQRRYPUMNYDTNZQIIZQTPYRWNEOOTVVLNVHIYXLGMEVPWPDDYZWHNDIUWYLTZCHWFCHHTFVEFNUOXDWHJLOLJJWHJADISERNYSHWFWOSXEDRYTQGYZELNDWEWFSBJEWEWRHTFYRTMPUTWFFKWZXNIERTMTVSNOHTMTVIXLPIXEDKJTKAAPQTIZQEFYBTMTQGSZEUYJRUBTOLNEVVJCBIRARRYLQTYSDTDZXLNGHIHLQTGPOIJGHTMTVIXSDPUPQISRKOBNRUQOWHFYPASRHTZADFYPUYTFQOYLPASLWEWXLNFERRHJEEWOBNFXLCXXRDJWVUXAHCYGHHNNOEXTJHYPGOSXRTTCDTUTFOXZXTMMRUSOXNNEVTBZCEWZVICLQDKTYEXPYESLWTJXSTNYWEWNHPYFQIYZQEKZXRYSUEJNRMJTQTMTVIXZQEKZXRYSUEJHHSYMRUSORNTWBMUTFAUAUOFNKISRRVJCOASODIWFQIYEZOBPUETYKIRHHSYMRUSOVASEDMTYLCFLWFTFUZJCRFNGHARLFHNYHYTFPEFYOIPPDRTMRTSZWAWZEOYNBBTCJCDMHRSPWIHZUGFYLSRMXTMPZAXMOEJOLNLUXSYLVEHZQDPPHPDZXRMPDDIZZNQZVTMTPGTZGCTGHRFWUILSWLNDWESEKEYPUMNYDTTCVASTQFNWWRFELOSFQIYADRYXDNULUTRLFHNYHUSOHRSPDTMTWSFSBPJCDLQZBCTXEAYNKAXDLSRTUCTAUOHPVSTCFOSEUOQWHDKFOLDLUMTCHDAPUYYZXGMMXTTFWSNOHIYDOIATQGMFPASELSXFHFQPVHXVLNMLLRGWROIRUOBYIOWEKEHJEOWRVLTZNRJPVENVQOBJRUBLQTYZKEQAEUYADYFEWESELOSEKEXPUIJDKAICXBGPUSPTQWJDSOYEHDYSHMJLVYGFWTMPVEFCHNJHWHJJOOTVKURLQSBPDTGLGBWPDTMPYEWJWHNYJVJCBHFCGTTDSOYTKAIERWFTWTNWKERZYEIZQYTFEEKZUENNRUQOCEWZKIRSHYNXQOYDWUUTGYPYRWYSHYHLQTGFLLILQYYSLNLWLKJEKAYJHTSZQOYJHTSZWFTCDBTFWFTCWYDPDRXDRIYDIRTXWHJQXTZCHIXEKAYCLGMERNJARSXTELJQXTZCHFTFUYTFUPTTQTTQYIJHLDTYWKSZZTMPWEHSVTZQIASOBOZCHFWZPTMPIUYFUEYZRRNRKTWTJHYNBBTCJSIZQTKPHLULLNNORDTYWDTEKAYLJANYMUXEOEYXHGTWLSYPQUSOHRXEDNIEKAYEHRRTQAYZUIXZXTYSHRJTWCFYWBJCHAXZQEIHLTMTWCFYWBJMDRLLLNJOZIYSLTIZHSSEIEJWSIYJRFWPPOWDHOWQHAWLQDNEDBXZOUYPOYBTOLSZWSYZSEAPUUSELLDZXAWPGEFOFASJRUXERPNEPADMHWNEKTMPVEBPDPTYVIIZQTPYRWXFVPJNWVJSLCQPOOHLWEILWPFCNISROOYNHDFCDNIROESSDVJYUEJDHWMJPEBSBDTPVIYHDNYXHTMPUEXDRMZNKTJWOMJUXSYDWAWEDTYSHBJRLNSTQGYSHRJHDSFHDRFQHWDPDRXQUORYRWSFFLJLUWFCWHJHKOQPWHNYJAQWWHNDHVJCBTMTQGNDJOSPMUXEJOSPWHJCHWJCHSZCYIAZUSMPUEYSHRJYRBTOBKSPZWMZVTFCWEITWIYHDSYSHMFNKISPVIIZQTZYGEWDWASOGEKPQSJYHTBZUKHZPPZEHRSPZPTHHRKFOHTZNEITQTTPYEWJWHNYJTWFVTJOWOWFQIYLOLYSHYXLBIYRRTXXDRYLQEBZUDJCRFNYWEQWLGJYFEYSHNNEVABLOLUPRPQPDSFEKRJLWNTEMUXEWHJZQEXZQTMPRTMPUSNOHDJNLDJORUYQDTJTQARTFRTDHCTYGECEHRRTQAYTRNITGNYDHEYSHWFCLWFDEOWYDFYPUISEKEWFLNXRUEBFSTMPUEXEDRATQGMTGISRIRTXWHJSNSYSHWMLWHZYWEWVLLQPUSULWRTWPAHSLNJDEUNWGISLXTTXDTJOIAHERRNPVMTDWOKFVWJCHRTFQDJOXPUFWISNDMUDIOWZUDJCOYITVPTDDLGFUNJOLNGJOAXPUSHLQSTXHOKFVWJCHKJAWAQTYEYZZOWVOOFOLNLMRDNPVTMPGIXARSFWXNNEVRFYQILSWASOGADHHWJCHTMLWCQZVEYZJONYJOZEIOWPYEWMXTYSHRJHDSTYHMFYZHTEDULSWUXERFNRKTYZVTTCPTMPZIWPRFYSHCFXSSYZVMFDKTMZVERPWAQXRTMPUFZNNEWDLNYZMUSVKEYFUNJOLTFCRUSOKEGCRULSWUXMDCPQUOREKEGCLNPADUXPKIXYDMJTVCTYQOWURHSNRNSZUYTFUSTYVAWLKYTFUUSMRRSDRN

**---------------------------------------------------TRIAL 5 -----------------------------------------------------**

Fourth key: “”