

Detyrë

Përdorni shifrën shtesë me çelësin  $k=4$  për të koduar mesazhin “eljesa”

Emri: eljesa; key = 4

$V_{lera\_enk} = ((shkronja - a) + zhvendosja) \bmod 26 + a$

$V_e = e$

$V_e = ((101 - 97) + 4) \bmod 26 + 97$

$V_e = (4+4) \bmod 26 + 97$

$V_e = 8 \bmod 26 + 97$

$V_e = 8 + 97 = 105$

105 = i

$V_e = l$

$V_e = ((108 - 97) + 4) \bmod 26 + 97$

$V_e = (11 + 4) \bmod 26 + 97$

$V_e = 15 \bmod 26 + 97$

$V_e = 15 + 97 = 112$

112 = p

$V_e = j$

$V_e = (106-97) + 4) \bmod 26 + 97$

$V_e = (9+4) \bmod 26 + 97$

$V_e = 13 \bmod 26 + 97$

$V_e = 13+97 = 110$

110 = n

$$V_e = e$$

$$V_e = ((101 - 97) + 4) \bmod 26 + 97$$

$$V_e = (4+4) \bmod 26 + 97$$

$$V_e = 8 \bmod 26 + 97$$

$$V_e = 8 + 97 = 105$$

$$105 = i$$

$$V_e = s$$

$$V_e = (11597) + 4) \bmod 26 + 97$$

$$V_e = (18+4) \bmod 26 + 97$$

$$V_e = 22 \bmod 26 + 97$$

$$V_e = 22 + 97 = 119$$

$$119 = W$$

$$V_e = a$$

$$V_e = (97 - 97) + 4) \bmod 26 + 97$$

$$V_e = (0+4) \bmod 26 + 97$$

$$V_e = 4 \bmod 26 + 97$$

$$V_e = 4 + 97 = 101$$

$$101 = e$$

$$e=i, l=p, j=n, e=i, s=w, a=e$$

Dekriptimi:  $V_{e\_enk} = ((shkronja - a) - zhvendosja) \bmod 26 + a$

$$V_e = i$$

$$V_e = ((10597) - 4) \bmod 26 + 97$$

$$V_e = (8-4) \bmod 26 + 97$$

$$V_e = 4 \bmod 26 + 97$$

$$V_e = 4 + 97 = 101$$

$$101 = e$$

$$V_e = p$$

$$V_e = ((112 - 97) - 4) \bmod 26 + 97$$

$$V_e = (15 - 4) \bmod 26 + 97$$

$$V_e = 11 \bmod 26 + 97$$

$$V_e = 11 + 97 = 108$$

$$108 = l$$

$$V_e = n$$

$$V_e = ((110 - 97) - 4) \bmod 26 + 97$$

$$V_e = (13-4) \bmod 26 + 97$$

$$V_e = 9 \bmod 26 + 97$$

$$V_e = 9+97= 106$$

$$106 = j$$

$$V_e = i$$

$$V_e = ((105-97) - 4) \bmod 26 + 97$$

$$V_e = (8-4) \bmod 26 + 97$$

$$V_e = 4 \bmod 26 + 97$$

$$V_e = 4 + 97 = 101$$

$$101 = e$$

$$V_e = w$$

$$V_e = ((119-97) - 4) \bmod 26 + 97$$

$$V_e = (22-4) \bmod 26 + 97$$

$$V_e = 18 \bmod 26 + 97$$

$$V_e = 18 + 97 = 115$$

$$115 = s$$

$$V_e = e$$

$$V_e = ((101 - 97) - 4) \bmod 26 + 97$$

$$V_e = (4-4) \bmod 26 + 97$$

$$V_e = 0 \bmod 26 + 97$$

$$V_e = 0 + 97 = 97$$

$$97 = a$$

$$i=e, p=l, n=j, i=e, w=s, e=a$$

Enkriptimi dhe dekriptimi i emrit "Leonora" sipas kodit ASCII  $k=4$ ,  $a=97$

$$l) V_e = (108-97) + 4 \bmod 26 + 97 = (11+4) \bmod 26 + 97 = 15 \bmod 26 + 97 = 15+97 = 112 \Rightarrow p$$

$$e) V_e = (101-97) + 4 \bmod 26 + 97 = (4+4) \bmod 26 + 97 - 8 \bmod 26 + 97 = 8 + 97 = 105 \Rightarrow i$$

$$o) V_e = (111-97) + 4 \bmod 26 + 97 = (14+4) \bmod 26 + 97 = 18 \bmod 26 + 97 = 18+97 = 115 \Rightarrow s$$

$$n) V_e = (110-97) + 4 \bmod 26 + 97 = (13+4) \bmod 26 + 97 = 17 \bmod 26 + 97 = 17+97 = 114 \Rightarrow r$$

$$o) V_e = (111-97) + 4 \bmod 26 + 97 = (14+4) \bmod 26 + 97 = 18 \bmod 26 + 97 = 18+97 = 115 \Rightarrow s$$

$$r) V_e = (114-97) + 4 \bmod 26 + 97 = (17+4) \bmod 26 + 97 = 21 \bmod 26 + 97 = 21+97 = 118 \Rightarrow v$$

$$a) V_e = (97-97) + 4 \bmod 26 + 97 - 4 \bmod 26 + 97 = 101 \Rightarrow e$$

$$l \rightarrow p; e \rightarrow i; o \rightarrow s; n \rightarrow r; o \rightarrow s; r \rightarrow v; a \rightarrow e$$

Formula enkriptimit:  $v_e = ((\text{shkronja} - a) + \text{zhvendosja}) \bmod 26 + a$

pisrsve=Leonora

formula dekriptimit :  $v_d = ((\text{shkronja} - a) - \text{zhvendosja}) \bmod 26 + a$

$$p) V_e = (112-97) - 4 \bmod 26 + 97 = (15-4) \bmod 26 + 97 = 11 \bmod 26 + 97 = 11 + 97 = 108 \Rightarrow l$$

$$i) V_e = (105-97) - 4 \bmod 26 + 97 - (8-4) \bmod 26 + 97 = 4 \bmod 26 + 97 = 4+97 = 101 \Rightarrow e$$

$$s) V_e = (115-97) - 4 \bmod 26 + 97 = (18-4) \bmod 26 + 97 - 14 \bmod 26 + 97 = 111 \Rightarrow o$$

$$r) V_e = (114-97) - 4 \bmod 26 + 97 = (17-4) \bmod 26 + 97 = 13 \bmod 26 + 97 = 110 \rightarrow n$$

$$s) V_e = (115-97) - 4 \bmod 26 + 97 = (18-4) \bmod 26 + 97 = 14 \bmod 26 + 97 = 111 \Rightarrow o$$

$$v) V_e = (118-97) - 4 \bmod 26 + 97 = (21-4) \bmod 26 + 97 - 17 \bmod 26 + 97 = 114 \Rightarrow r$$

$$e) V_e = (101-97) - 4 \bmod 26 + 97 - 0 \bmod 26 + 97 = 97 \rightarrow a$$

# ASCII TABLE

Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char
0	0	[NULL]	32	20	[SPACE]	64	40	@	96	60	a
1	1	[START OF HEADING]	33	21	!	65	41	A	97	61	ⓐ
2	2	[START OF TEXT]	34	22	"	66	42	B	98	62	b
3	3	[END OF TEXT]	35	23	#	67	43	C	99	63	c
4	4	[END OF TRANSMISSION]	36	24	\$	68	44	D	100	64	d
5	5	[ENQUIRY]	37	25	%	69	45	E	101	65	e
6	6	[ACKNOWLEDGE]	38	26	&	70	46	F	102	66	f
7	7	[BELL]	39	27	'	71	47	G	103	67	g
8	8	[BACKSPACE]	40	28	(	72	48	H	104	68	h
9	9	[HORIZONTAL TAB]	41	29	)	73	49	I	105	69	ⓑ
10	A	[LINE FEED]	42	2A	*	74	4A	J	106	6A	i
11	B	[VERTICAL TAB]	43	2B	+	75	4B	K	107	6B	j
12	C	[FORM FEED]	44	2C	,	76	4C	L	108	6C	k
13	D	[CARRIAGE RETURN]	45	2D	.	77	4D	M	109	6D	l
14	E	[SHIFT OUT]	46	2E	:	78	4E	N	110	6E	m
15	F	[SHIFT IN]	47	2F	/	79	4F	O	111	6F	n
16	10	[DATA LINK ESCAPE]	48	30	0	80	50	P	112	70	o
17	11	[DEVICE CONTROL 1]	49	31	1	81	51	Q	113	71	p
18	12	[DEVICE CONTROL 2]	50	32	2	82	52	R	114	72	q
19	13	[DEVICE CONTROL 3]	51	33	3	83	53	S	115	73	ⓐ
20	14	[DEVICE CONTROL 4]	52	34	4	84	54	T	116	74	t
21	15	[NEGATIVE ACKNOWLEDGE]	53	35	5	85	55	U	117	75	u
22	16	[SYNCHRONOUS IDLE]	54	36	6	86	56	V	118	76	v
23	17	[END OF TRANS. BLOCK]	55	37	7	87	57	W	119	77	w
24	18	[CANCEL]	56	38	8	88	58	X	120	78	x
25	19	[END OF MEDIUM]	57	39	9	89	59	Y	121	79	y
26	1A	[SUBSTITUTE]	58	3A	:	90	5A	Z	122	7A	z
27	1B	[ESCAPE]	59	3B	;	91	5B	[	123	7B	ⓑ
28	1C	[FILE SEPARATOR]	60	3C	<	92	5C	\	124	7C	{
29	1D	[GROUP SEPARATOR]	61	3D	=	93	5D	]	125	7D	
30	1E	[RECORD SEPARATOR]	62	3E	>	94	5E	^	126	7E	~
31	1F	[UNIT SEPARATOR]	63	3F	?	95	5F	_	127	7F	[DEL]