

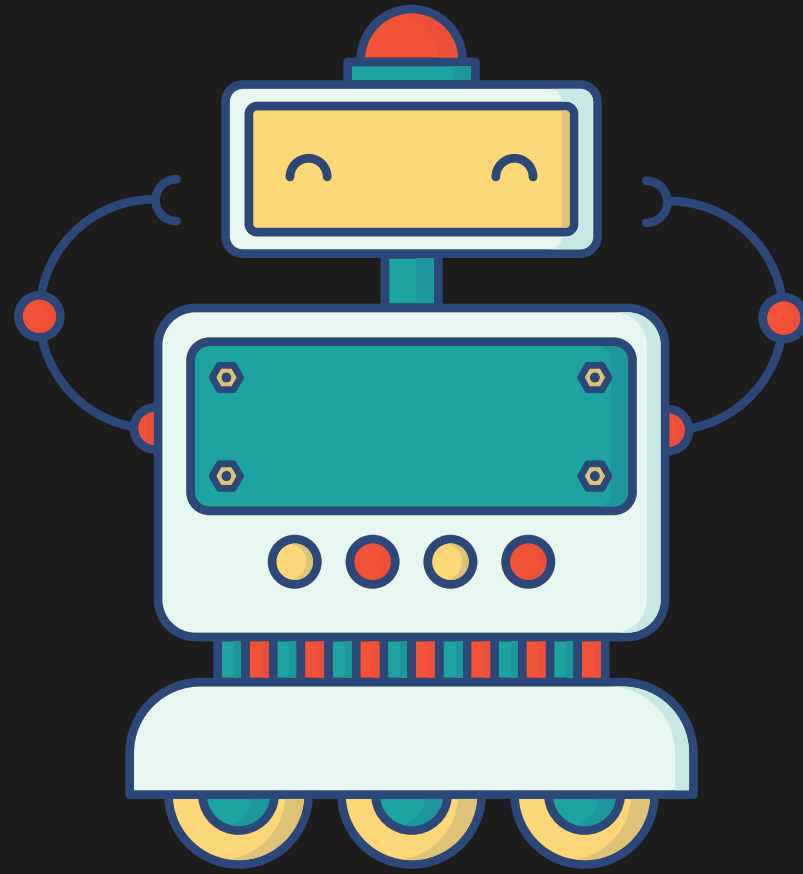
Coding Unplugged Let's Encrypt

V3

What is encryption?

Secret Letter

this is a secret you can't
tell anybody



Encrypt

Secret Letter

20 8 9 19 . 9 19 . 1 . 19 5 3
18 5 20 . can't tell anybody



Lookup Table

alphabet	Number	alphabet	Number	alphabet	Number	alphabet	Number	alphabet	Number
A	1	H	8	O	15	V	22	'	29
B	2	I	9	P	16	W	23	-	30
C	3	J	10	Q	17	X	24	_	31
D	4	K	11	R	18	Y	25	!	32
E	5	L	12	S	19	Z	26	@	33
F	6	M	13	T	20	Space	27		
G	7	N	14	U	21	.	28		

Encrypt : Letters to Numbers

A B C = 1 2 3

H A T = 8 1 20

S M O O T H = 19 13 15 15 20 8

Decrypt : Numbers to Letters

3 1 20 = CAT

4 15 7 = DOG

2 15 15 11 = BOOK

Encrypt : Secret Ticket

Ticket

Name: James Bond
From: BANGKOK
TO: AYUTTHAYA

Ticket

Name: 10 1 13 5 19 2 15 14 4
From: 2 1 14 7 11 15 11
TO: 1 25 21 20 20 8 1 25 1

The secret song

4 1 19 8 9 14 7
20 8 18 15 21 7 8
20 8 5
19 14 15 23
9 14
1 15 14 5 8 15 18 19 5
15 16 5 14 19 12 5 9 7 8

dashing
through
the
snow
in
a one horse
open sleigh

Encrypt: Your own Secret



0 1 2 3 4 5 6 7 8 9
b i n o c u l a r s

Encryption Key

Encrypt : Your phone number

0877764555

braaalcuuu

0 1 2 3 4 5 6 7 8 9
b i n o c u l a r s

Let develop your own cipher

Letter to number + Encryption Key

A	1	H	8	O	15	V	22	'	29
B	2	I	9	P	16	W	23	-	30
C	3	J	10	Q	17	X	24	_	31
D	4	K	11	R	18	Y	25	!	32
E	5	L	12	S	19	Z	26	@	33
F	6	M	13	T	20	Spa ce	27		
G	7	N	14	U	21	.	28		

0 1 2 3 4 5 6 7 8 9

b i n o c u l a r s

Let develop your own cipher

A = 1
B = 2

→

0	1	2	3	4	5	6	7	8	9
b	i	n	o	c	u	l	a	r	s

→

i
n

Encrypt : Letters to Numbers

A B C = 1 2 3 i n o

H A T = 8 1 20 r i n b

S M O O T H = 19 13 15 15 20 8 i s i o i u i u n b r

0 1 2 3 4 5 6 7 8 9

b i n o c u l a r s



Workshop

Develop your own Encryption key

0 1 2 3 4 5 6 7 8 9
b i n o c u l a r s
s t r a w b e r r y
e1 v3 e5 r6 y7 t8 h7 8i n9 g0
m o t i v a t i o n
t e l e v i s i o n

Encrypt the song below

oh jingle bells jingle bells jingle all the way
oh what fun it is to ride In a one horse open sleigh hey



Example

oh jingle bells jingle bells jingle all the way
oh what fun it is to ride In a one horse open sleigh hey

15 8
10 9 14 7 12 5
2 5 12 12 19
10 9 14 7 12 5