Assignment 3

LAM IOK HOI DC326834

a, b. encode each linguistic unit of the spy's message:

r	e	b	D	ng		w	D	q		l	D	gh	j	D	p
17	4	1	3	12		23	3	15		9	3	5	8	3	14

c. the determination of inverse done by the naïve method:

let w be the inverse of 15. Given it is a mod 26 space.

We assign w with the value from 0 to 25 *(n-1).* To find the value that makes (w * 15) mod 26 = 1.

Which is **7.**

d. decryption of the table:

Plaintext	a	b	ch	D	e	gh	H	I	j	l	m	n	ng
Coded (a)	00	01	02	03	04	05	06	07	08	09	10	11	12
Moved	3	18	7	22	11	0	15	4	19	8	23	12	1
Ciphertext	D	S	I	v	n	a	q	e	t	j	w	ng	b

Plaintext	o	p	q	Q	r	S	t	tlh	u	v	w	y	’
Code(a)	13	14	15	16	17	18	19	20	21	22	23	24	25
Moved	16	5	20	9	24	13	2	17	6	21	10	25	14
Ciphertext	Q	gh	tlh	l	y	o	ch	r	H	u	m	’	p

e. decoding the spy's message:

Ciphertext	r	e	b	D	ng		w	D	q		l	D	gh	j	D	p
Moved	17	4	1	3	12		23	3	15		9	3	5	8	3	14
Plaintext	tlh	I	ng	a	n		m	a	H		Q	a	p	l	a	’

f. the message is tlhIngan maH Qapla', in english "We are Klingon! Success!".
the spy is from the Star Trek and speaks Klingon.