The Lor Cipher

Named after a student who was prompted to make a random cipher, the Lor Cipher is an encryption system that similarly combines both the Caesar Cipher and Vigenère Cipher. The system works by sending both a message and a numerical keycode. The numerical keycode will be used as a map to shift the message ‘x’ amounts to the right. If the keycode is shorter than the message, the keycode will continue to repeat until it meets the length of the message. Then the encryption algorithm works by shifting each letter within the message by its corresponding keycode index.

Example:
The message “helloworld” is sent with a keycode of ‘13329’.

Message: helloworld
Keycode: 13329

Similar to the Vigenère Cipher, the algorithm will first repeat the keycode until it is matched with the length of the message. Then it will iteratively shift each letter with its corresponding keycode value, like the Caesar Cipher.

First Letter: h
First Keycode Value: 1

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
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

Encrypted Value: i

Second Letter: e
Second Keycode Value: 3

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
X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W

Encrypted Value: b

This process will repeat until the entire message is encrypted, leaving with the message:

Encrypted Message: ihonxxrunm

Decryption works in reverse where the keycode will instead shift the encrypted message left by its corresponding value.