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Exercise

1. Enkripsikan **GOPHER** dengan $K = 20$
2. Ubah **ZGXEIDZJN** menjadi plaintext dengan $K = 15$
3. Deskripsikan **uvznngys** dengan ROT 13

Jawaban

1.

G	O	P	H	E	R
6	14	15	7	4	17

$$E(6) = (6 + 20) \bmod 26 = 26 \bmod 26 = 0 \rightarrow A$$

$$E(14) = (14 + 20) \bmod 26 = 34 \bmod 26 = 8 \rightarrow I$$

$$E(15) = (15 + 20) \bmod 26 = 35 \bmod 26 = 9 \rightarrow J$$

$$E(7) = (7 + 20) \bmod 26 = 27 \bmod 26 = 1 \rightarrow B$$

$$E(4) = (4 + 20) \bmod 26 = 24 \bmod 26 = 24 \rightarrow Y$$

$$E(17) = (17 + 20) \bmod 26 = 37 \bmod 26 = 11 \rightarrow L$$

GOPHER \rightarrow AIJBYL

2.

Z	G	X	E	I	D	Z	J	N
25	6	23	4	8	3	25	9	13

$$D(25) = (25 - 15) \bmod 26 = 10 \bmod 26 = 10 \rightarrow K$$

$$D(6) = (6 - 15) \bmod 26 = -9 \bmod 26 = 17 \rightarrow R$$

$$D(23) = (23 - 15) \bmod 26 = 8 \bmod 26 = 8 \rightarrow I$$

$$D(4) = (4 - 15) \bmod 26 = -11 \bmod 26 = 15 \rightarrow P$$

$$D(8) = (8 - 15) \bmod 26 = -7 \bmod 26 = 19 \rightarrow T$$

$$D(3) = (3 - 15) \bmod 26 = -12 \bmod 26 = 14 \rightarrow O$$

$$D(25) = (25 - 15) \bmod 26 = 10 \bmod 26 = 10 \rightarrow K$$

$$D(9) = (9 - 15) \bmod 26 = -6 \bmod 26 = 20 \rightarrow U$$

$$D(13) = (13 - 15) \bmod 26 = -2 \bmod 26 = 24 \rightarrow Y$$

ZGXEIDZJN \rightarrow KRIPTOKUY

3.

u	v	z	n	g	v	s
↕	↕	↕	↕	↕	↕	↕
h	i	m	a	t	i	f

Jika merujuk pada tabel konversi dibawah

