EXERCISE 2

PRAKTIKUM KRIPTOGRAFI

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PROGRAM STUDI S-1 TEKNIK INFORMATIKA

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

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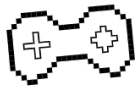
Exercise Shift Cipher



- Enkripsikan **HASKELL** dengan K = 20
- Ubah **ETURF** menjadi Plaintext dengan K = 12

Tulis setiap langkah langkahnya !

A	B	C	D	E	F	G	H	I	J	K	L	M
0	1	2	3	4	5	6	7	8	9	10	11	12

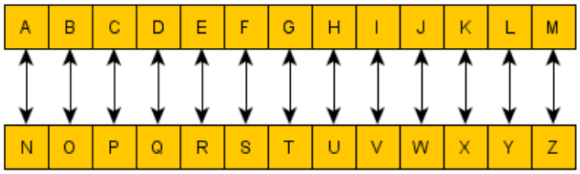
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
13	14	15	16	17	18	19	20	21	22	23	24	25

Soal 1
PlainText: HASKELL
Key: 20
[H, A, S, K, E, L, L] = [7, 0, 18, 10, 4, 11, 11]
Proses Enkripsi:
E(7) = (7 + 20) mod 26 = 27 mod 26 = 1 = B
E(0) = (0 + 20) mod 26 = 20 mod 26 = 20 = U
E(18) = (18 + 20) mod 26 = 38 mod 26 = 12 = M
E(10) = (10 + 20) mod 26 = 30 mod 26 = 4 = E
E(4) = (4 + 20) mod 26 = 24 mod 26 = 24 = Y
E(11) = (11 + 20) mod 26 = 31 mod 26 = 5 = F
E(11) = (11 + 20) mod 26 = 31 mod 26 = 5 = F
[1, 20, 12, 4, 24, 5, 6] = [B, U, M, E, Y, F, F]
Hasil E(x): **BUMEYFF**

Soal 2
CipherText: ETURF
Key: 12
[E, T, U, R, F] = [4, 19, 20, 17, 5]
Proses Dekripsi:
D(4) = (4 - 12) mod 26 = -8 mod 26 = 18 = S
D(19) = (19 - 12) mod 26 = 7 mod 26 = 7 = H
D(20) = (20 - 12) mod 26 = 8 mod 26 = 8 = I
D(17) = (17 - 12) mod 26 = 5 mod 26 = 5 = F
D(5) = (5 - 12) mod 26 = -7 mod 26 = 19 = T
[18, 7, 8, 5, 19] = [S, H, I, F, T]
Hasil D(x): **SHIFT**

Exercise

Dekripsikan **cenxgvxhz xevcgbtensv** dengan ROT 13



CipherText: CENXGVXHZ XEVCGBTENSV
Proses Dekripsi:
[C, E, N, X, G, V, X, H, Z] = [P, R, A, K, T, I, K, U, M]
[X, E, V, C, G, B, T, E, N, S, V] = [K, R, I, P, T, O, G, R, A, F, I]
Hasil D(x): **PRAKTIKUM KRIPTOGRAFI**