Tugas 5 Praktikum
Kriptografi
Kelas A Semester Ganjil 2021/2022

Oleh:
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PROGRAM STUDI S-1 TEKNIK INFORMATIKA
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
UNIVERSITAS PADJADJARAN
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Buat satu kalimat sederhana (min 3 kata & total min 15 huruf), enkripsikan dengan Vigenere

dan Autokey Cipher dan kembalikan menjadi plainteks.

Vigenere

SILIH ASAH ASIH ASUH   = 18 8 11 8 7   0 18 0 7   0 18 8 7   0 18 20 7
WAFI   = 22 0 5 8

ENKRIPSI Vigenere

S	I	L	I	H
W	A	F	I	W

A	S	A	H
A	F	I	W

A	S	I	H
A	F	I	W

A	S	U	H
A	F	I	W

$E(18) = (18+22) \bmod 26 = 14 \rightarrow O$

$E(8) = (8+0) \bmod 26 = 8 \rightarrow I$

$E(11) = (11+5) \bmod 26 = 16 \rightarrow Q$

$E(8) = (8+8) \bmod 26 = 16 \rightarrow Q$

$E(7) = (7+22) \bmod 26 = 3 \rightarrow D$

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

$E(18) = (18+5) \bmod 26 = 23 \rightarrow X$

$E(0) = (0+8) \bmod 26 = 8 \rightarrow I$

$E(7) = (7+22) \bmod 26 = 3 \rightarrow D$

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

$E(18) = (18+5) \bmod 26 = 23 \rightarrow X$

$E(8) = (8+8) \bmod 26 = 16 \rightarrow Q$

$E(7) = (7+22) \bmod 26 = 3 \rightarrow D$

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E(0)   = (0+0)mod26   = 0   → A

E(18)   = (18+5)mod26   = 23   → X

E(20)   = (20+8)mod26   = 2   → C

E(7)   = (7+22)mod26   = 3   → D

Hasil enkripsi = **OIQQD AXID AXQD AXCD**

DEKRIPSI Vigenere

O	I	Q	Q	D
W	A	F	I	W

A	X	I	D
A	F	I	W

A	X	Q	D
A	F	I	W

A	X	C	D
A	F	I	W

E(14)   = (14-22)mod26   = 18   → S

E(8)   = (8-0)mod26   = 8   → I

E(16)   = (16-5)mod26   = 11   → L

E(16)   = (16-8)mod26   = 8   → I

E(3)   = (3-22)mod26   = 7   → H

E(0)   = (0-0)mod26   = 0   → A

E(23)   = (23-5)mod26   = 18   → S

E(8)   = (8-8)mod26   = 0   → A

E(3)   = (3-22)mod26   = 7   → H

E(0)   = (0-0)mod26   = 0   → A

E(23)   = (23-5)mod26   = 18   → S

E(16)   = (16-8)mod26   = 8   → I

E(3)   = (3-22)mod26   = 7   → H

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E(0)   = (0-0)mod26   = 0   → A

E(23)   = (23-5)mod26   = 18   → S

E(2)   = (2-8)mod26   = 8   → U

E(3)   = (3-22)mod26   = 7   → H

Hasil dekripsi = **SILIH ASAH ASIH ASUH**

Autokey

SILIH ASAH ASIH ASUH   = 18 8 11 8 7   0 18 0 7   0 18 8 7   0 18 20 7
WAFI   = 22 0 5 8

ENKRIPSI Autokey

S	I	L	I	H
W	A	F	I	S

A	S	A	H
I	L	I	H

A	S	I	H
A	S	A	H

A	S	U	H
A	S	I	H

E(18)   = (18+22)mod26   = 14   → O

E(8)   = (8+0)mod26   = 8   → I

E(11)   = (11+5)mod26   = 16   → Q

E(8)   = (8+8)mod26   = 16   → Q

E(7)   = (7+18)mod26   = 25   → Z

E(0)   = (0+8)mod26   = 8   → I

E(18)   = (18+11)mod26   = 3   → D

E(0)   = (0+8)mod26   = 8   → I

E(7)   = (7+7)mod26   = 14   → O

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E(0)   = (0+0)mod26   = 0   → A

E(18)   = (18+18)mod26   = 10   → K

E(8)   = (8+0)mod26   = 8   → I

E(7)   = (7+7)mod26   = 14   → O

E(0)   = (0+0)mod26   = 0   → A

E(18)   = (18+18)mod26   = 10   → K

E(20)   = (20+8)mod26   = 2   → C

E(7)   = (7+7)mod26   = 14   → O

Hasil enkripsi = **OIQQZ   IDIO AKIO AKCO**

DEKRIPSI Autokey

O	I	Q	Q	Z
W	A	F	I	S

I	D	I	O
I	L	I	H

A	K	I	O
A	S	A	H

A	K	C	O
A	S	A	H

E(14)   = (14-22)mod26   = 18   → S

E(8)   = (8-0)mod26   = 8   → I

E(16)   = (16-5)mod26   = 11   → L

E(16)   = (16-8)mod26   = 8   → I

E(25)   = (3-18)mod26   = 7   → H

E(8)   = (0-8)mod26   = 0   → A

E(3)   = (23-11)mod26   = 18   → S

E(8)   = (8-8)mod26   = 0   → A

E(14)   = (3-7)mod26   = 7   → H

Nama : Wafi Fahruzzaman
NPM   : 140810200009

E(0)   = (0-0)mod26   = 0   → A

E(10)   = (23-18)mod26   = 18   → S

E(8)   = (16-0)mod26   = 8   → I

E(14)   = (3-7)mod26   = 7   → H

E(0)   = (0-0)mod26   = 0   → A

E(10)   = (23-18)mod26   = 18   → S

E(2)   = (2-8)mod26   = 8   → U

E(14)   = (3-7)mod26   = 7   → H

Hasil dekripsi = **SILIH ASAH ASIH ASUH**