LAPORAN PRAKTIKUM
KEAMANAN SISTEM INFORMASI DAN JARINGAN

Disusun Oleh :

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Universitas Respati Yogyakarta

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Kodingan dan hasil Running

```
from Crypto.Cipher import AES
from Crypto.Util.Padding import pad, unpad
from Crypto.Random import get_random_bytes

# Input string dan kunci
plaintext = "Sabbe Satta Bhavantu Sukhitatta"
key = b'SamathaBhavana12'  # Panjang key harus 16, 24, atau 32 byte

# Konversi plaintext ke bytes dan pad ke ukuran blok (16 byte)
data = plaintext.encode('utf-8')
data_padded = pad(data, AES.block_size)

# Enkripsi menggunakan AES mode ECB
cipher = AES.new(key, AES.MODE_ECB)
ciphertext = cipher.encrypt(data_padded)

# Dekripsi ciphertext
cipher_dec = AES.new(key, AES.MODE_ECB)
decrypted = unpad(cipher_dec.decrypt(ciphertext), AES.block_size)

# Output hasil
print("Plaintext asli  :", plaintext)
print("Ciphertext      :", ciphertext.hex())
print("Hasil dekripsi  :", decrypted.decode('utf-8'))
```

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Code

```python
from Crypto.Cipher import AES
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print("Ciphertext      :", ciphertext.hex())
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```

```
Plaintext asli  : Sabbe Satta Bhavantu Sukhitatta
Ciphertext      : bf8d544b55dd6e462f014b1a45bddee150a7ef7c7b3aa8c651658ef8710c049b
Hasil dekripsi  : Sabbe Satta Bhavantu Sukhitatta
```

8]:
```python
from Crypto.Cipher import AES
from Crypto.Util.Padding import pad, unpad

# Input string dan kunci
plaintext = "Fahmi Adi Setiawan"
key_string = "fahmi adi setiawan"[:16]  # Potong jadi 16 karakter
key = key_string.encode('utf-8')        # Ubah ke bytes

# Konversi plaintext ke bytes dan pad ke ukuran blok (16 byte)
data = plaintext.encode('utf-8')
data_padded = pad(data, AES.block_size)

# Enkripsi menggunakan AES mode ECB
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print("Plaintext asli  :", plaintext)
print("Ciphertext      :", ciphertext.hex())
print("Hasil dekripsi  :", decrypted.decode('utf-8'))
```

```
Plaintext asli  : Fahmi Adi Setiawan
Ciphertext      : 02e33c68dd67ed16175275a86d47fc397f25d1c33a8ec070ac2c2c5010e86406
Hasil dekripsi  : Fahmi Adi Setiawan
```

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