

LAPORAN PRAKTIKUM
PRAKTIK SISTEM KEAMANAN DATA
ALGORITMA VIGENERE CHIPER



Nama :

Nurul Qomariyah

V3921025

Dosen Pengampu :

Yusuf Fadlila Rachman, S. Kom., M. Kom

KELAS E
D-III TEKNIK INFORMATIKA PSDKU
SEKOLAH VOKASI
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Hasil Praktikum

Script :

```
def generateKey(string, key):
    key = list(key)
    if len(string) == len(key):
        return(key)
    else:
        for i in range(len(string) -len(key)):
            key.append(key[i % len(key)])
    return("".join(key))

def encryption(string, key):
    encrypt_text = []
    for i in range(len(string)):
        x = (ord(string[i]) +ord(key[i])) % 26
        x += ord('A')
        encrypt_text.append(chr(x))
    return("".join(encrypt_text))

def decryption(encrypt_text, key):
    orig_text = []
    for i in range(len(encrypt_text)):
        x = (ord(encrypt_text[i]) -ord(key[i]) + 26) % 26
        x += ord('A')
        orig_text.append(chr(x))
    return("".join(orig_text))

if __name__ == "__main__":
    string = input("Enter the message: ")
    keyword = input("Enter the keyword: ")
```

```

key = generateKey(string, keyword)

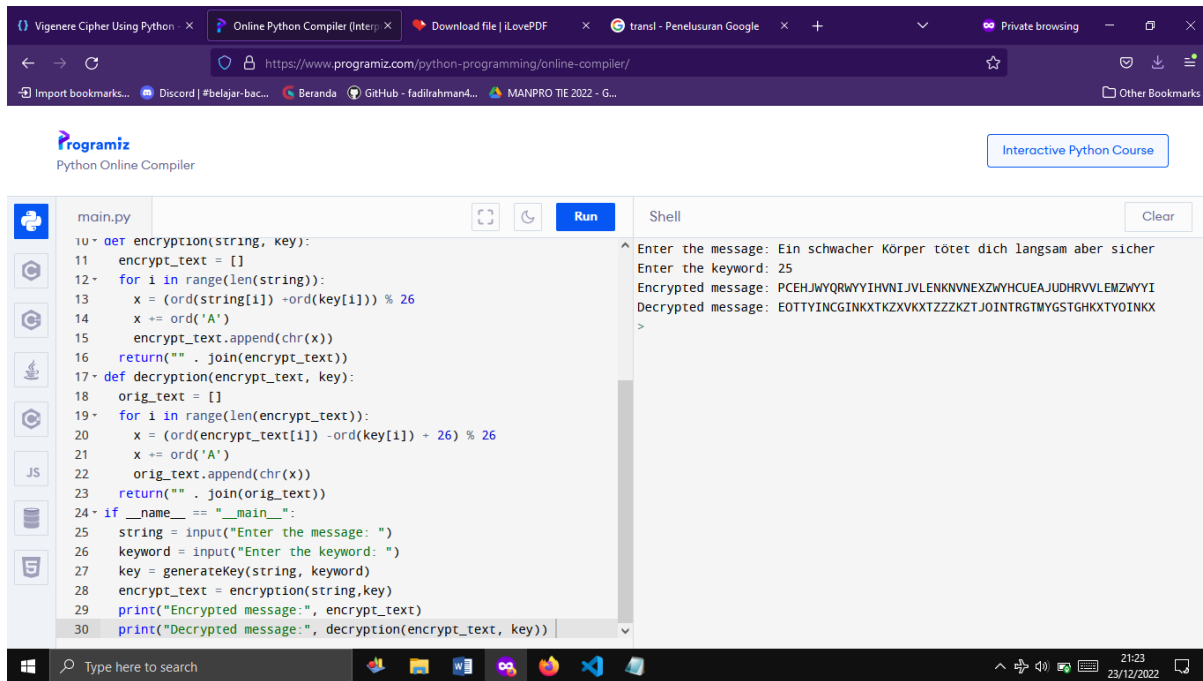
encrypt_text = encryption(string, key)

print("Encrypted message:", encrypt_text)

print("Decrypted message:", decryption(encrypt_text, key))

```

Output :



The screenshot shows a web browser with the URL <https://www.programiz.com/python-programming/online-compiler/>. The page title is "Programiz Python Online Compiler". A button for "Interactive Python Course" is visible in the top right.

The code editor shows the following Python code in `main.py`:

```

10 def encryption(string, key):
11     encrypt_text = []
12     for i in range(len(string)):
13         x = (ord(string[i]) + ord(key[i])) % 26
14         x = ord('A')
15         encrypt_text.append(chr(x))
16     return(" ".join(encrypt_text))
17 def decryption(encrypt_text, key):
18     orig_text = []
19     for i in range(len(encrypt_text)):
20         x = (ord(encrypt_text[i]) - ord(key[i]) + 26) % 26
21         x = ord('A')
22         orig_text.append(chr(x))
23     return(" ".join(orig_text))
24 if __name__ == "__main__":
25     string = input("Enter the message: ")
26     keyword = input("Enter the keyword: ")
27     key = generateKey(string, keyword)
28     encrypt_text = encryption(string, key)
29     print("Encrypted message:", encrypt_text)
30     print("Decrypted message:", decryption(encrypt_text, key))

```

The Shell window shows the following output:

```

Enter the message: Ein schwacher Körper tötet dich langsam aber sicher
Enter the keyword: 25
Encrypted message: PCEHJWYQRWYIHNVIJVLKNVNEZXWYHCUEAJUDHRVLEMZWYYI
Decrypted message: EOTTYINCINKXTKZXVKXTZZKZTJOINTRGTMYGSTGHKXTYOINKX
>

```