

# **KEAMANAN KOMPUTER KRIPTOGRAFI**

## **TUGAS 1**



**OLEH:**

Nama Mahasiswa : Musakkir Nompo

STB : 202232

Kelas : 5TKKO-H

Pindahan dari kelas 5TKKO-G

**PROGRAM STUDI TEKNIK INFORMATIKA**

# UNIVERSITAS DIPA MAKASSAR

2022

## LAPORAN TUGAS

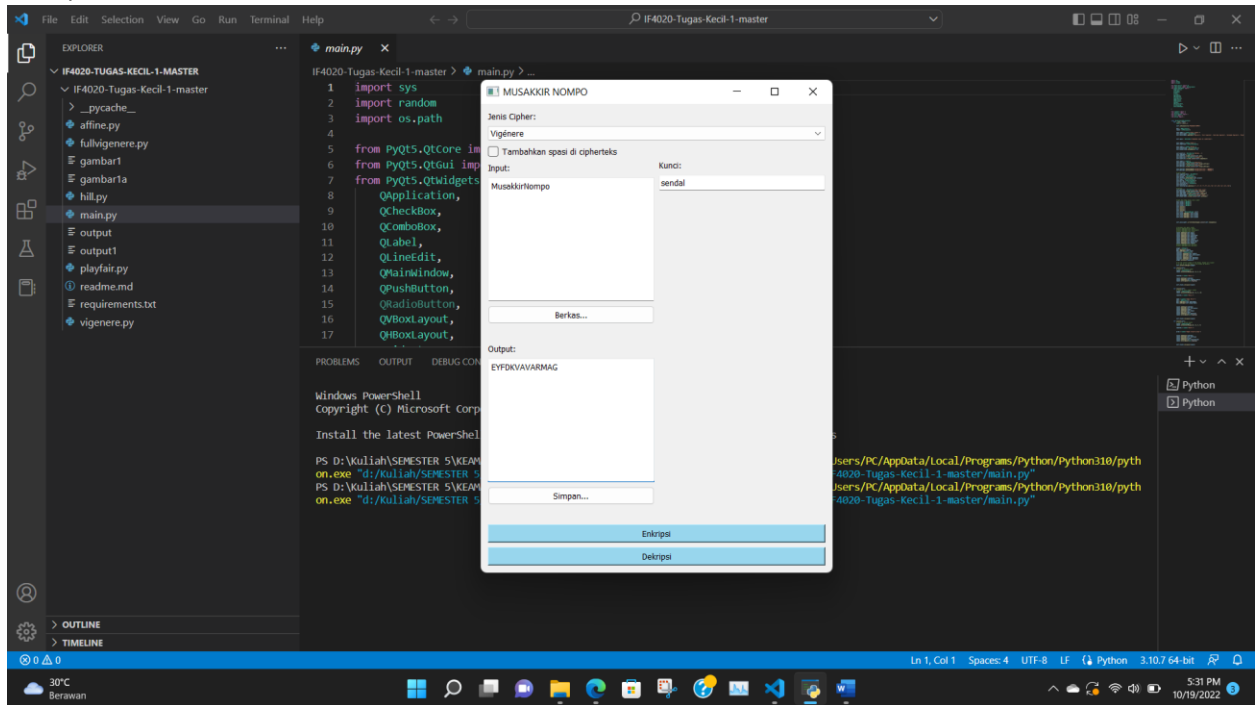
NO	SPESIFIKASI	BEHASIL (Y)	KURANG BERHASIL (Y)	KETERANGAN
1.	Vigenere Cipher	✓		Berhasil Enkripsi dan Dekripsi
2.	Extended Vigenere Cipher	✓		Berhasil Enkripsi dan Dekripsi
3.	Playfair Cipher	✓		Berhasil Enkripsi dan Dekripsi
4.	Enigma Cipher		✓	Kurang berhasil

**Link Untuk Source Code Program :** [sakkir31/my-project \(github.com\)](https://github.com/sakkir31/my-project)

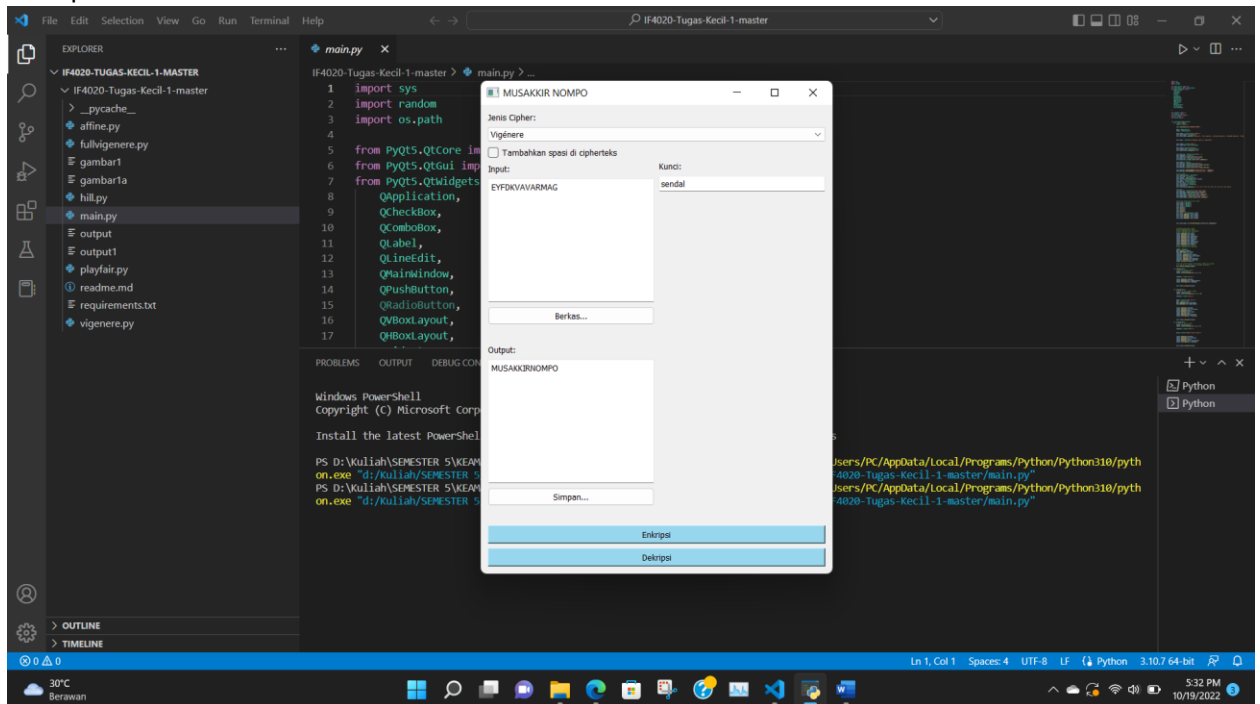
<https://github.com/sakkir31/my-project>

## Vigenere Cipher

- Enkripsi

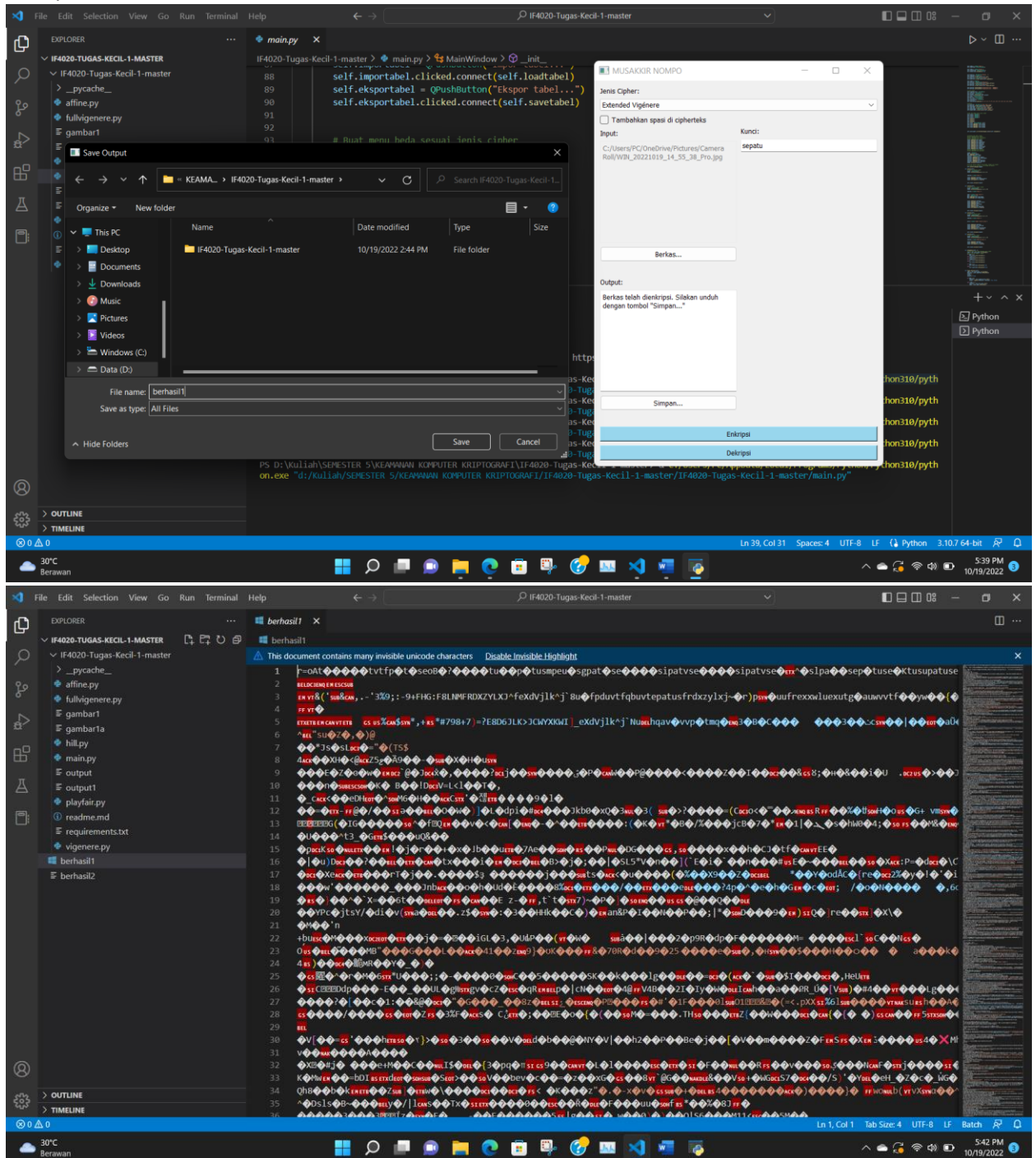


- Dekripsi

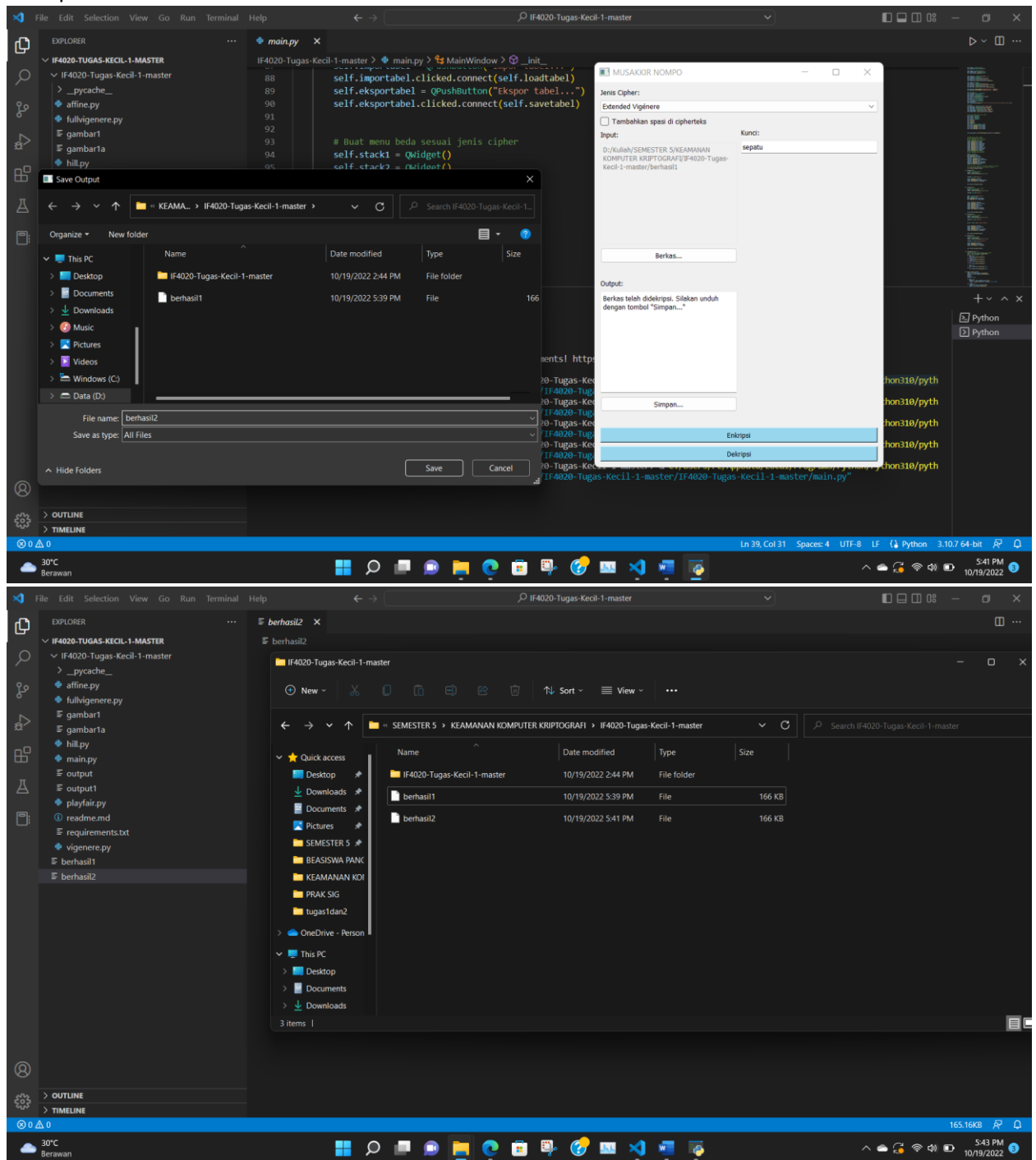


## Extended Vigenere Cipher

- Enkripsi

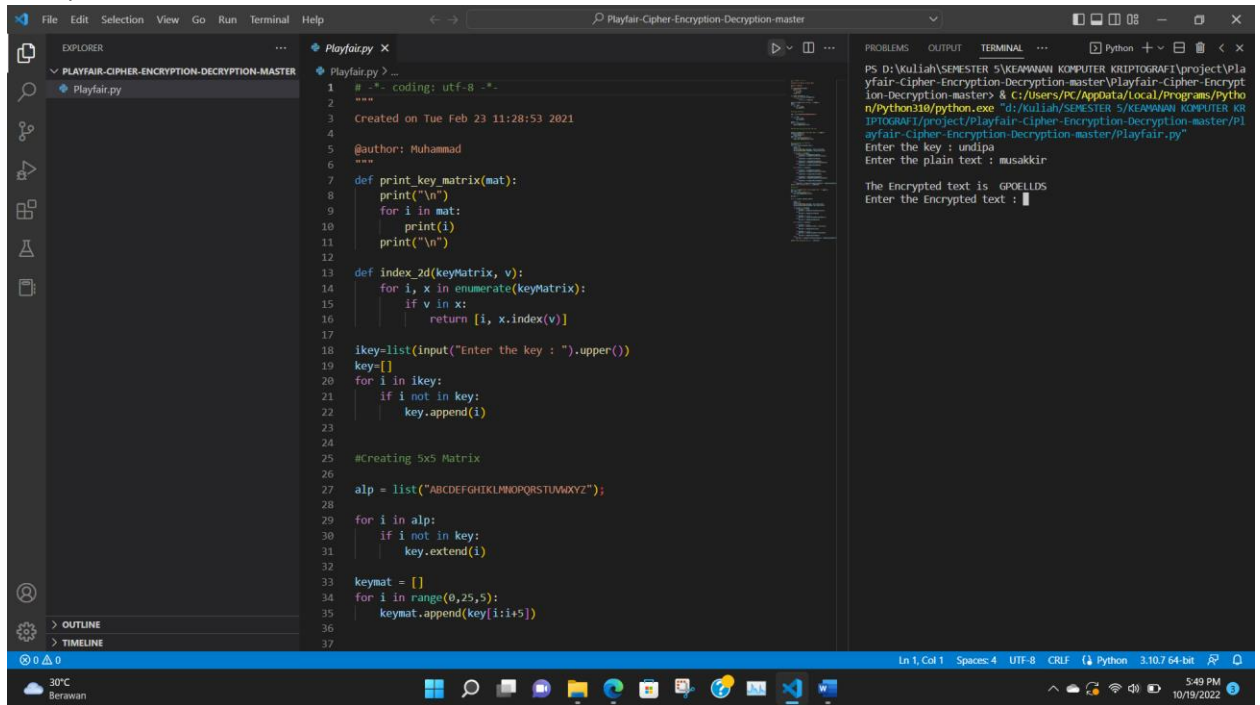


- Dekripsi



# Playfair Cipher

- Enkripsi



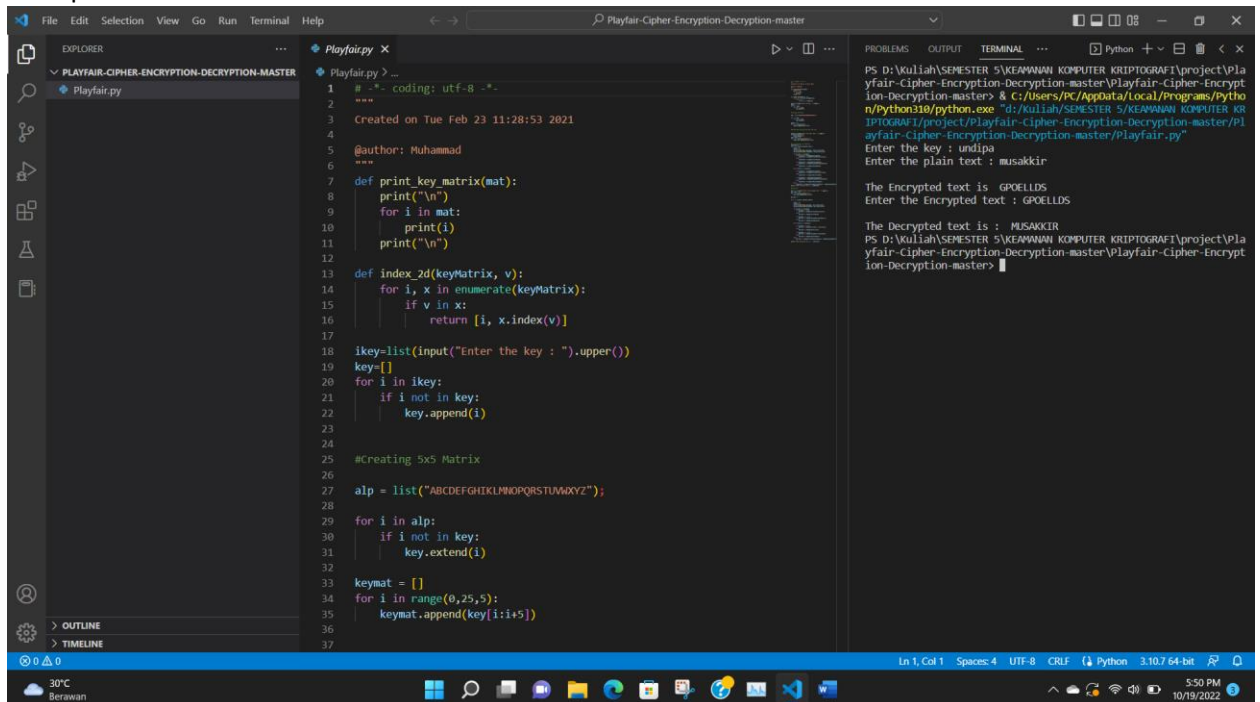
```
1 # -*- coding: utf-8 -*-
2 """
3 Created on Tue Feb 23 11:28:53 2021
4
5 @author: Muhammad
6 """
7 def print_key_matrix(mat):
8     print("\n")
9     for i in mat:
10         print(i)
11     print("\n")
12
13 def index_2d(keyMatrix, v):
14     for i, x in enumerate(keyMatrix):
15         if v in x:
16             return [i, x.index(v)]
17
18 ikey=list(input("Enter the key : ").upper())
19 key=[]
20 for i in ikey:
21     if i not in key:
22         key.append(i)
23
24 #Creating 5x5 Matrix
25 alp = list("ABCDEFGHIKLMNOPQRSTUVWXYZ");
26
27 for i in alp:
28     if i not in key:
29         key.extend(i)
30
31 keymat = []
32 for i in range(0,25,5):
33     keymat.append(key[i:i+5])
34
35
36
37
```

PS D:\kuliah\SEMESTER 5\KEAMAMAN KOMPUTER KRIPTOGRAFI\project\Playfair-Cipher-Encryption-Decryption-master> & C:\Users\PC\AppData\Local\Programs\Python\Python310/python.exe "d:\kuliah\SEMESTER 5\KEAMAMAN KOMPUTER KR IPTOGRAFI\project\Playfair-Cipher-Encryption-Decryption-master\Playfair.py"

Enter the key : undipa  
Enter the plain text : musakkir

The Encrypted text is GPOELLOS  
Enter the Encrypted text : █

- Dekripsi



```
1 # -*- coding: utf-8 -*-
2 """
3 Created on Tue Feb 23 11:28:53 2021
4
5 @author: Muhammad
6 """
7 def print_key_matrix(mat):
8     print("\n")
9     for i in mat:
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13 def index_2d(keyMatrix, v):
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32 for i in range(0,25,5):
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35
36
37
```

PS D:\kuliah\SEMESTER 5\KEAMAMAN KOMPUTER KRIPTOGRAFI\project\Playfair-Cipher-Encryption-Decryption-master> & C:\Users\PC\AppData\Local\Programs\Python\Python310/python.exe "d:\kuliah\SEMESTER 5\KEAMAMAN KOMPUTER KR IPTOGRAFI\project\Playfair-Cipher-Encryption-Decryption-master\Playfair.py"

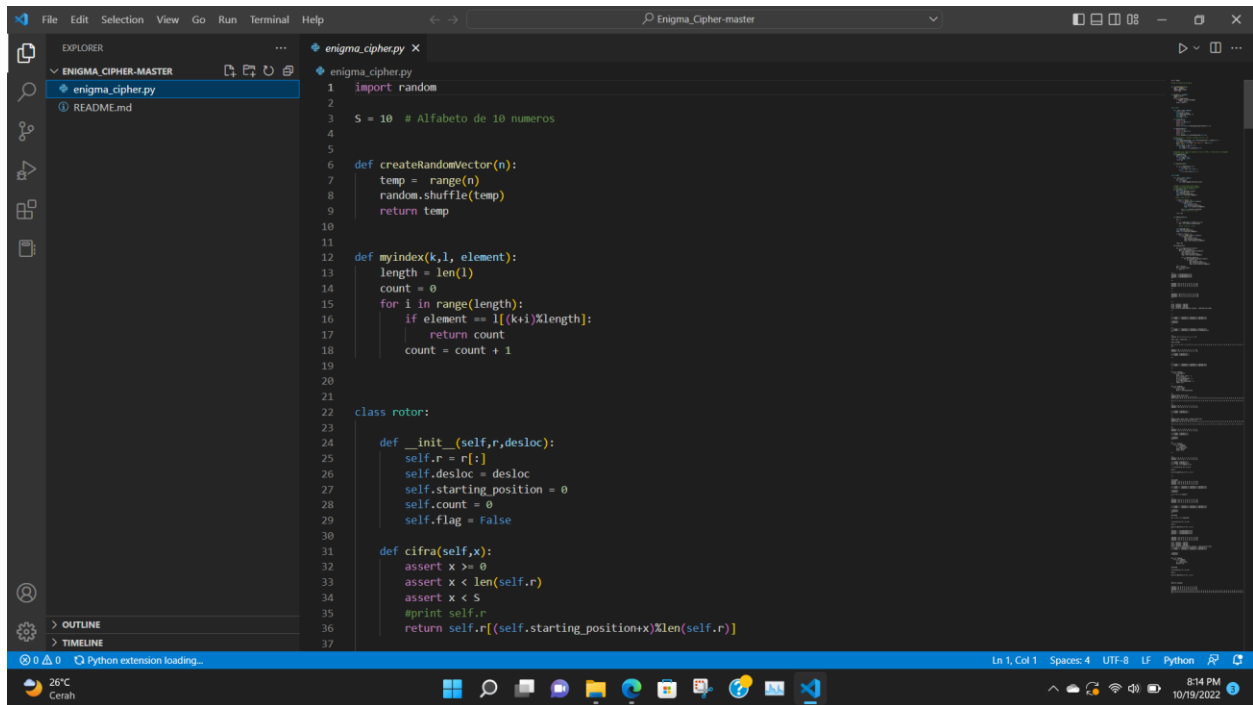
Enter the key : undipa  
Enter the plain text : musakkir

The Encrypted text is GPOELLOS  
Enter the Encrypted text : GPOELLOS

The Decrypted text is : MUSAKKIR

PS D:\kuliah\SEMESTER 5\KEAMAMAN KOMPUTER KRIPTOGRAFI\project\Playfair-Cipher-Encryption-Decryption-master> █

## Enigma Chiper



```
1 import random
2
3 S = 10 # Alfabeto de 10 numeros
4
5
6 def createRandomVector(n):
7     temp = range(n)
8     random.shuffle(temp)
9     return temp
10
11
12 def myindex(k,l, element):
13     length = len(l)
14     count = 0
15     for i in range(length):
16         if element == l[(k+i)%length]:
17             return count
18         count = count + 1
19
20
21
22 class rotor:
23
24     def __init__(self,r,desloc):
25         self.r = r[:]
26         self.desloc = desloc
27         self.starting_position = 0
28         self.count = 0
29         self.flag = False
30
31     def cifra(self,x):
32         assert x >= 0
33         assert x < len(self.r)
34         assert x < 5
35         #print self.r
36         return self.r[(self.starting_position+x)%len(self.r)]
37
```